

# 2015 Comprehensive Plan



Fluvanna County, Virginia

*A great place to live, learn, work, and play!*

September 2015

# **Fluvanna Comprehensive Plan Acknowledgments**

Sincere thanks are due to the many citizens, stakeholders, and appointed and elected officials (both past and present) who contributed to the development of Fluvanna County's 2015 Comprehensive Plan. It was the support and assistance of the participants that made the plan what it is—a reflection of the community's desires and hopes, with strategic steps to achieve that future. Thank you!

## **Board of Supervisors**

Mozell H. Booker, Chair  
Robert (Bob) Ullenbruch, Vice-Chair  
Anthony P. (Tony) O'Brien  
John M. (Mike) Sheridan  
Donald W. Weaver

## **Planning Commission**

Barry Bibb, Chair  
Edward Zimmer, Vice-Chair  
Patricia Eager  
Donald Gaines  
Lewis Johnson

Special thanks to Steven M. Nichols, County Administrator,  
and Frederick W. Payne, County Attorney

The 2015 Comprehensive Plan is available on CD-ROM and is online at [www.fluvannacounty.org](http://www.fluvannacounty.org).  
Hard copies are available at the public library and the County Administrative Building.

For more information on Fluvanna's Comprehensive Plan, please call (434) 591-1910.



# County of Fluvanna 2015 COMPREHENSIVE PLAN

## TABLE OF CONTENTS

Chapter	Topic	Page
--	<a href="#"><u>List of Figures</u></a>	2
--	<a href="#"><u>Executive Summary</u></a>	5
--	<a href="#"><u>Introduction</u></a>	9
--	<a href="#"><u>Vision 2035</u></a>	11
<b>1</b>	<a href="#"><u>Natural Environment</u></a>	13
<b>2</b>	<a href="#"><u>Land Use and Community Design</u></a>	25
<b>3</b>	<a href="#"><u>Infrastructure</u></a>	67
<b>4</b>	<a href="#"><u>Transportation</u></a>	79
<b>5</b>	<a href="#"><u>Economic Development</u></a>	91
<b>6</b>	<a href="#"><u>Historic Preservation</u></a>	101
<b>7</b>	<a href="#"><u>Parks and Recreation</u></a>	107
<b>8</b>	<a href="#"><u>Housing</u></a>	115
<b>9</b>	<a href="#"><u>Human Services</u></a>	123
<b>10</b>	<a href="#"><u>Education</u></a>	133
<b>11</b>	<a href="#"><u>Public Safety</u></a>	139
<b>12</b>	<a href="#"><u>Financial Sustainability</u></a>	147
--	<a href="#"><u>Implementation Goals and Strategies</u></a>	155

# LIST OF FIGURES

*Figure page numbers updated 12/28/2015*

<b>Figure</b>	<b>Subject</b>	<b>Page</b>
<b>Chap-1</b>	<b>NATURAL ENVIRONMENT</b>	
NE-1	Septic Field Restrictions	14
NE-2	Prime Farmland	15
NE-3	Native Vegetation	16
NE-4	Rivanna River	16
NE-5	James River	17
NE-6	Open Space	17
NE-7	Wheat Field	19
NE-8	Tenaska	20
NE-9	Fluvanna County Land Use District Totals	21
NE-10	Ag/Forestal Districts and Conservation Easements	22
<b>Chap-2</b>	<b>LAND USE AND COMMUNITY DESIGN</b>	
LU-1	Open Space	27
LU-2	Population Projections	28
LU-3	Residential Streetscape	34
LU-4	Neighborhood Street	35
LU-5	Community Element Matrix	39
LU-6	Mixed-Income Neighborhood	40
LU-7	Land-Use Relationships	42
LU-8	2029 Future Land Use Map	43
LU-9	Regional Center Element	44
LU-10	Roundabout	46
LU-11	Pedestrian Oriented Roadway Section	47
LU-12	Open Space	48
LU-13	Neighborhood Mixed Use around Lake Monticello	50
LU-14	Neighborhood Residential Element	51
LU-15	Median splitter islands and set-back crosswalks	52
LU-16	Several conceptual options for village-scaled infill development in the Turkeysag Gate shopping center	53
LU-17	Potential pedestrian network (left), and possible roundabout at entry (right) for capacity and safety	53
LU-18	Sign for Village of Palmyra	54
LU-19	Old Stone Jail	54
LU-20	Neighborhood Mixed Use Village	55
LU-21	Historic Courthouse	56
LU-22	Open Pasture near Fork Union	58
LU-23	Possible Bike Path in Fork Union	58
LU-24	Village Element	59
LU-25	Rural Cluster	61

<b>Figure</b>	<b>Subject</b>	<b>Page</b>
LU-26	Tree-lined Street	63
LU-27	Good Landscape Buffers	63
<b>Chap-3</b>	<b>INFRASTRUCTURE</b>	
I-1	Fluvanna Courthouse	68
I-2	James River Water Project	69
I-3	Transco Pipeline	71
I-4	Vertical Assets	74
I-5	Pre vs. Post Development Stormwater Runoff	75
I-6	Rooftop Disconnection	76
<b>Chap-4</b>	<b>TRANSPORTATION</b>	
T-1	Major Interstates	80
T-2	Regional Airports	86
T-3	Six Year Plan	87
<b>Chap-5</b>	<b>ECONOMIC DEVELOPMENT</b>	
ED-1	Eco-friendly Business	91
ED-2	Regional Tax Rates	94
ED-3	Economic Sector Statistics	94
ED-4	New Hires by Industry	85
ED-5	Ten Largest Employers	95
ED-6	Top Ten Taxpayers	96
ED-7	Employment by Industry	96
ED-8	Unemployment Rates	97
<b>Chap-6</b>	<b>HISTORIC PRESERVATION</b>	
HP-1	Upper Bremo	102
HP-2	Historic Courthouse	102
HP-3	Seven Islands	102
HP-4	Point of Fork Arsenal Site	103
HP-5	Bremo Slave Chapel	103
HP-6	Map of Sites on the State & National Register	105
<b>Chap-7</b>	<b>PARKS AND RECREATION</b>	
PR-1	Pleasant Grove Park	108
PR-2	Carysbrook Rec Complex	108
PR-3	Lake Monticello LMOA Park	109
PR-4	Lake Monticello Golf	109
PR-5	Pleasant Grove Eastern Trail Head	109
PR-6	Bremo Recreation Area	110
PR-7	Park Facilities	114
<b>Chap-8</b>	<b>HOUSING</b>	
H-1	Building Permits Issued for New Homes, 2001–2013	115
H-2	2013–2014 Median Sales Price (second quarter)	116
H-3	2014 Days on Market	116

<b>Figure</b>	<b>Subject</b>	<b>Page</b>
H-4	County Population and Projection	118
H-5	Subdivision Activity	119
<b>Chap-9</b>	<b>HUMAN SERVICES</b>	
HS-1	FY 2014 Service Program Total Cases	125
HS-2	FY 2014 Eligibility Program Total Cases	127
HS-3	FY 2006-2014 Eligibility Program Total Case Load Comparison	128
<b>Chap-10</b>	<b>EDUCATION</b>	
E-1	Spending and Revenue per Student	133
E-2	Expenditure per Pupil	134
<b>Chap-11</b>	<b>PUBLIC SAFETY</b>	
PS-1	Palmyra Fire Company 1	141
PS-2	Palmyra Fire Company 1	142
PS-3	E911 Center Standards	145
<b>Chap-12</b>	<b>FINANCIAL SUSTAINABILITY</b>	
FS-1	Typical General Revenue Resources	150
FS-2	Governmental Fund Structure	150
FS-3	Proprietary Fund Structure	152
FS-4	FY15 Total Revenues	152
FS-5	FY15 Operating Revenue	152
FS-6	Real Property Revenue	152
FS-7	FY15 Total Expenditures	153
FS-8	FY15 Operating Expenditures	153

# EXECUTIVE SUMMARY

The *Comprehensive Plan* is divided into twelve interconnected subjects. The plan sets forth a vision for each, describes the existing conditions regarding that issue, and recommends a course of action with specific goals and implementation strategies.

## **Chapter 1, *Natural Environment:***

The context for all land-based activity within the county is provided. This chapter details Fluvanna's physical characteristics and natural resources.

## **Chapter 2, *Land Use and Community Design:***

This section combines two closely related chapters from the 2009 plan. The new chapter focuses on where development is encouraged and discouraged. This chapter includes the Future Land Use Map, which shows the county's urban development area and recommended growth areas. Each community area is discussed, and this chapter is a primary land-use guide for the county. The primary emphasis is that development must be well planned, mixed-use, and mixed-income. It should efficiently utilize county resources, protect rural areas, and promote development areas as a place where land uses, facilities, and services exist and support the county's future growth goals and needs. The form and function of development within and outside the growth areas, called community planning areas, is also covered here.

## **Chapter 3, *Infrastructure:***

This is an integral component of development, and the use of water, sewer, stormwater, communications, and other infrastructure is highlighted. This chapter ties development to the natural environment and emphasizes the need for sustainable, energy-efficient, and fiscally responsible development.

## **Chapter 4, *Transportation:***

The roadways in Fluvanna County are an integral part of development and need to be routinely reevaluated as state funds for construction and maintenance diminish.

## **Chapter 5, *Economic Development:***

Economic development is essential to a sustainable Fluvanna County. The chapter reinforces the growth-area concept and sets forth the strategy for implementing the Zion Crossroads Urban Development Area and community planning areas.

## **Chapter 6, *Historic Preservation:***

Heritage, nature, and agricultural tourism are critical components of healthy community and economic development strategies. Chapter 7 explores the cultural amenities and heritage of the county.

**Chapter 7, Parks and Recreation:**

The county's recreational plans and facilities will define the degree to which Fluvanna is successful in becoming a more livable community.

**Chapter 8, Housing:**

To remain sustainable and livable, the community needs diverse and affordable housing. Affordable housing serves homes making 80 percent or less of the area median income (AMI). Rent or mortgage plus utilities also must not exceed 30 percent of monthly gross income. This chapter explores the challenges of providing a diversity of homes for everyone in order to achieve a sustainable community.

**Chapter 9, Human Services:**

Human service needs, particularly for low- and moderate-income families, are related to affordable housing, and demand for services in Fluvanna County continues to rise. This chapter explores the programs offered by the Department of Social Services and other critical agencies that provide complementary services.

**Chapter 10, Education:**

The chapter discusses the county's most important investment. Engagement and investment in the community, in terms of a viable workforce and productive citizenry, are vital to the future of Fluvanna. Continuing education and workforce preparedness are as critical as college degrees to the future success of the county's economic health.

**Chapter 11, Public Safety:**

This chapter discusses the importance of adequate human and capital resources for maintaining an effective public safety system. Efficient and effective communication, among agencies and mutual aid localities, is the top priority for improving the provision of emergency services.

**Chapter 12, Financial Sustainability:**

This chapter emphasizes the importance of managing the fiscal demands of a growing county. Expenditures and financial obligations are entered into only when it is in the citizens' best interest. The Capital Improvement Program, annual budget, and fiscal policies are explored.

**Implementation Goals and Strategies**

The concluding Implementation section discusses the steps necessary to let the Comprehensive Plan be amended as necessary to strengthen the Vision, and to implement the recommended goals and strategies. These strategies will be tracked and reassessed annually to determine the success of the plan's implementation. This section emphasizes accountability; every goal is given a timeline for completion and person, agency, or department to carry it out.



This plan prepares Fluvanna to accommodate anticipated growth while sustaining the county's rural character and livability. Land use and other government policy decisions must balance the desire to remain rural and "small town" while welcoming new people and businesses. Each chapter addresses important issues for Fluvanna over the next twenty years. The county's vision must be balanced and implemented according to the available financial resources anticipated over this period.

Blank Page

# INTRODUCTION

The *Comprehensive Plan* is a guide to the future growth and development of the county. It assesses current conditions and reflects the community's vision for its future. It describes, in general terms, proposed land uses, locations of utilities and public facilities, and potential capital investments. The *Comprehensive Plan* forms the basis on which zoning and subdivision ordinances, transportation plans, and the capital improvement program are based.

The *Comprehensive Plan* cannot bind the policies of the Board of Supervisors, but as a public policy document that reflects public input, it should guide the land use policies and fiscal decisions of Fluvanna.

Authority to develop a comprehensive plan is derived from chapter 15.2-2223 of the *Code of Virginia*, which requires the Planning Commission to prepare and recommend a comprehensive plan for the physical development of the territory within its jurisdiction, and the Board of Supervisors to adopt a comprehensive plan for the territory under its jurisdiction."

The Planning Commission is required to review and update the *Comprehensive Plan* at least once every five years. Fluvanna's most recent plan was written in 2009. The updated version is the result of the 2014-2015 five-year review process. This review included meetings with citizens to discuss their priorities and concerns for the community. Important data about the county has been updated and analyzed, and previously established goals have been revisited and reassessed.

A plan is only as effective as its implementation, and so this plan review greatly reduces the number of goals and objectives from the 2009 version. Some of the removed actions were redundant or contradicted remaining goals, some no longer reflected the county's desires, and some were simply not possible to implement through the means available to the county. What remains is a more concise plan, focused on:

- Maintaining Fluvanna's rural character;
- Diversifying the tax base through economic development; and
- Investing wisely in infrastructure which can facilitate desirable growth.

The updated version of the *Comprehensive Plan* emphasizes simplicity and clear language. This plan does not include a formal glossary of terms, but uses the definitions found in the county's subdivision and zoning ordinances, along with those found in two commonly used planning texts (*Latest Illustrated Book of Development Definitions* and *A Planner's Dictionary*).

Blank Page

# VISION 2035

## ***Mission:***

Fluvanna County is committed to providing an excellent quality of life for our citizens and businesses through the delivery of competitive public services and programs in an efficient and effective manner.

## ***Vision Statement:***

Fluvanna County...The heart of central Virginia and your gateway to the future. *A great place to live, learn, work, and play.*

Fluvanna County's vision is based on the following key principles, which are used as guides for future development, governance, and land use policies for the county:

- That our government should reflect the values and principles of the people,
- That solidarity and prosperity are the proper means of fostering communities,
- That people forge economies and communities,
- That our rural character and natural resources are part of Fluvanna's unique heritage, and should be preserved where practical,
- That a comprehensive, accessible, and quality system of education enabling a modern, highly skilled 21st century workforce is to be fostered,
- That future development be fiscally prudent while respecting individual property rights,
- That our infrastructure requirements are maintained and first-class,
- That our public safety personnel are properly equipped and compensated in a manner and means that respects their sacrifice,
- That Fluvanna's rich community heritage and our history be the cornerstones of our shared identity moving forward into the 21st century.

Blank Page

# Chapter 1

## NATURAL ENVIRONMENT

### *Fluvanna's Natural Resources*

Fluvanna conserves its natural resources and manages growth by directing development into specified growth areas called community planning areas, and by specifying how development can have a positive impact on the county. Well-managed forests and farms are still a primary land use, and a key component of the county's historic and rural character and economic viability.

The James, Rivanna, and Hardware rivers are critical to the history and ecology of the county. They are healthy, viable rivers with a diversity of aquatic life. Vegetative buffers along floodplains, sensitive development within the watersheds, and other development and preservation techniques protect these natural resources. Groundwater is protected and serves as the primary water source for the rural areas of the county.

Well-planned, compact development that efficiently utilizes green infrastructure to create interconnected, walkable, and fiscally sustainable communities that employ the latest in environmental controls is desirable. Fluvanna County's government strives for energy efficiency and the use of renewable technologies.

Conservation easements and lower land-use assessment taxes continue to be valuable tools for land preservation and conservation. Ag/forestral districts are also abundant in rural areas, and permanent open spaces including greenways, parks, and buffer areas are preserved as part of the development process. The growth areas and surrounding rural areas are connected through this open-space network.

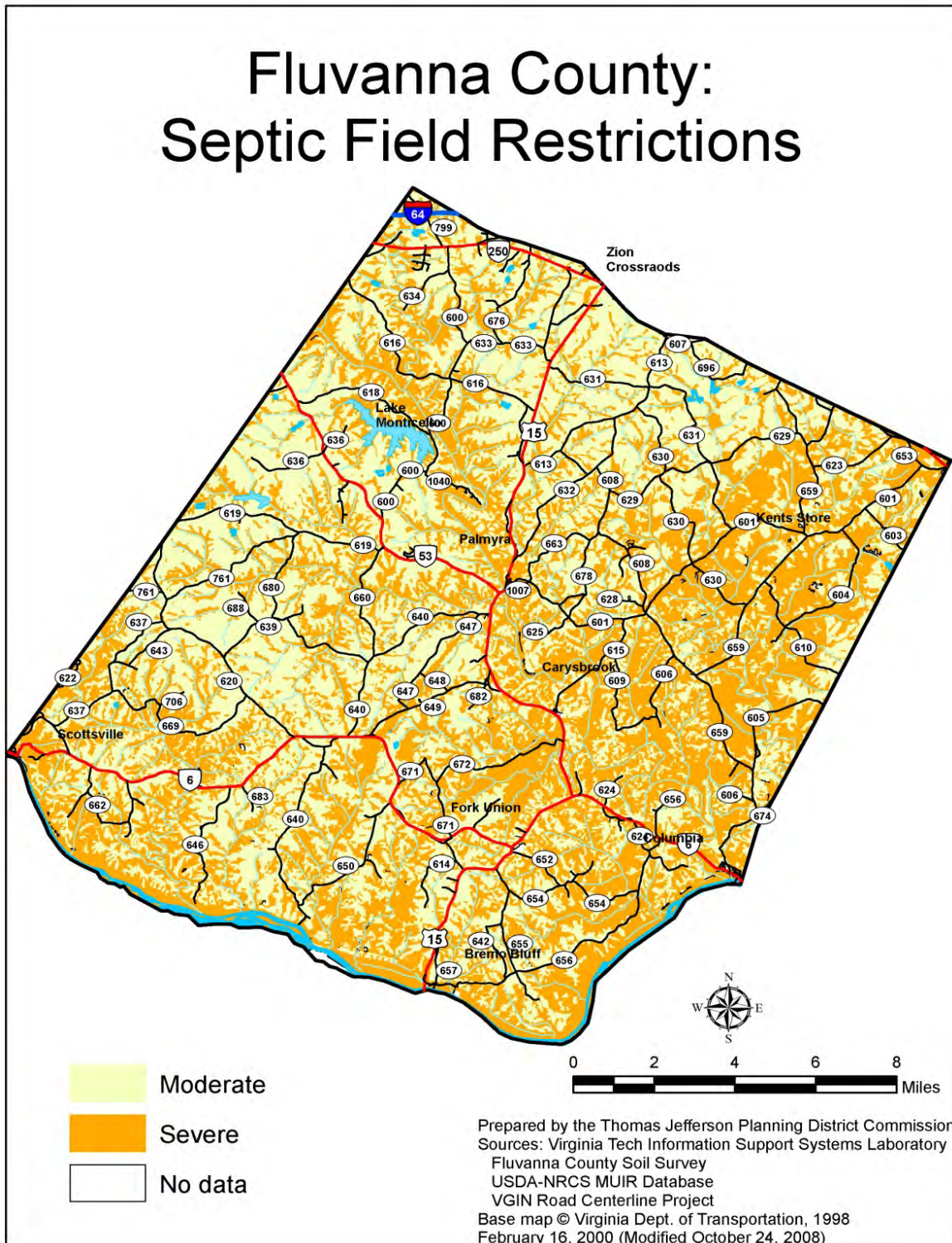
## **EXISTING CONDITIONS**

### *Geology*

Fluvanna County lies entirely within the Piedmont region, between the Blue Ridge to the west and Coastal Plain (Tidewater) to the east. Some of the bedrock of Fluvanna was formed locally, while some was transported here by natural events over time. As it broke down, this diverse bedrock left the numerous soil types found in the county.

Approximately 8,500 acres of soil in Fluvanna are underlain by subsoils with clays that become plastic to very plastic when wet, and are indicators of "shrink/swell" soils (USDA Soil Survey, ca. 1950). These soils should be evaluated by professionals to determine site-specific conditions if

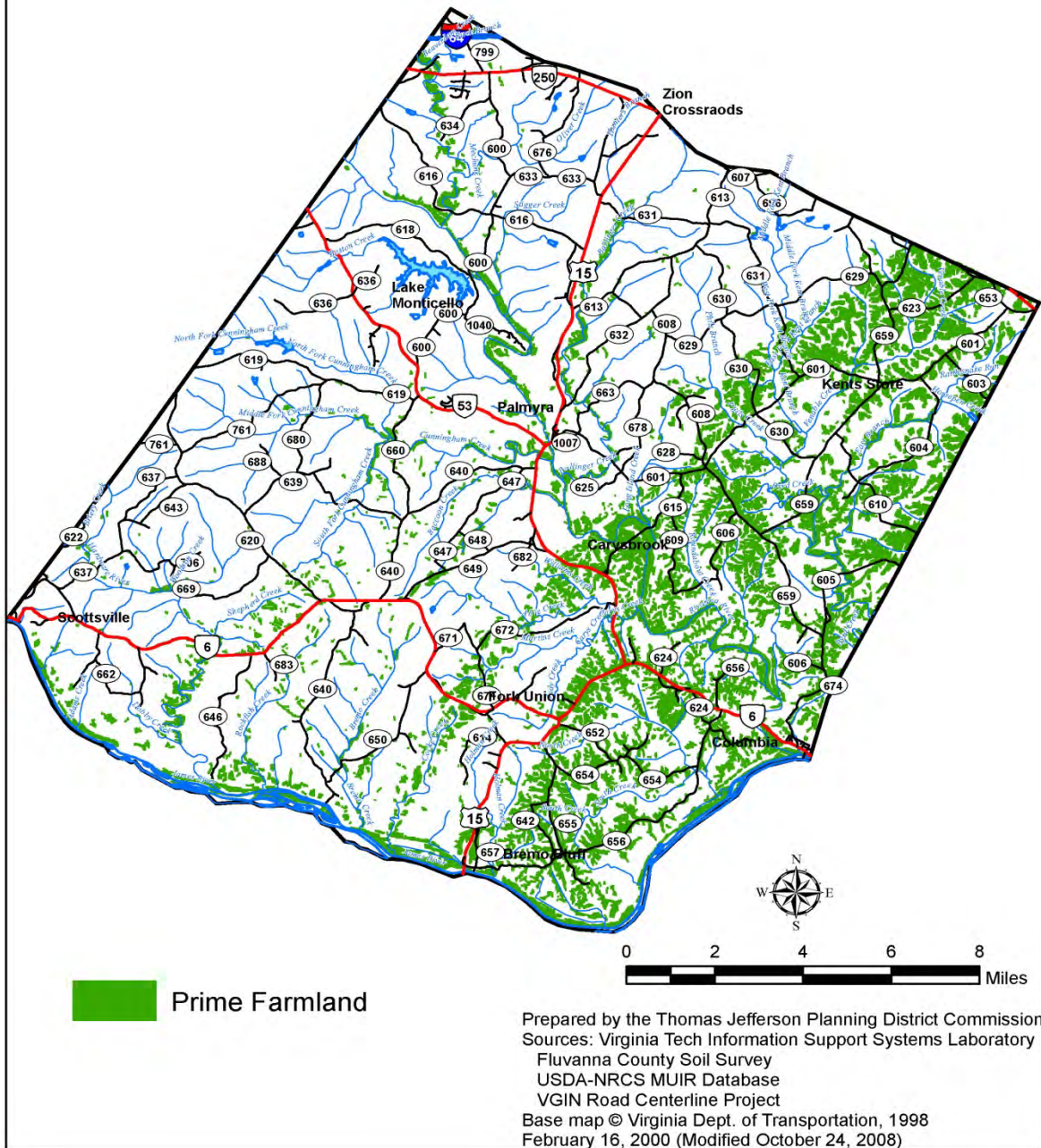
the construction of buildings or roads is contemplated. These soil types can also restrict the installation of traditional septic fields, which historically has limited development.



**Figure NE-1, Septic Field Restrictions**



# Fluvanna County: Prime Farmland



*Figure NE-2, Prime Farmland*

### *Present Conditions*

Fluvanna contains 180,480 acres, or 282 square miles of land. The upland areas of the county are no higher than 548 feet above sea level and slope gently toward the James and Rivanna rivers, which are approximately 200–275 feet above sea level. There are no mountains in Fluvanna County; the terrain is rolling Piedmont.



*Figure NE-3, Native Vegetation*

The 2013 rainfall was 50.31 inches, and the average growing season is 166 days. The growing season usually begins around April 27 and extends to October 10. Average temperatures range from 36.9 °F in January to 76.8°F in July.

### Forest Resources

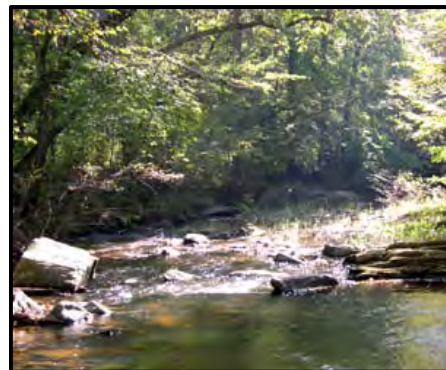
The predominant land cover in the county is forest, with 131,182 acres. The income from timber sales provides the incentive for landowners to grow timber. From 1986 through 2001, Fluvanna’s annual forest harvests averaged \$823,763. Over the last two decades, forest management has become less profitable due to rising costs and land values, so only 94,980 acres of Fluvanna’s forest are currently suitable for producing forest products on a large scale.

Cleaner air and water, and other ecoservices, are no-cost byproducts of responsible forest management. Aside from direct economic and aesthetic benefits, forests contribute services like stormwater management, wildlife habitat protection, reduced erosion, groundwater recharge, carbon sequestration, and insect pollination.

Fluvanna’s stream corridors are an important part of its overall environmental health. The Rivanna River bisects the county and is the Commonwealth’s first designated scenic river. The James River is Fluvanna’s southern border. Other significant rivers and streams are the Hardware River, Cunningham Creek, Byrd Creek, and Mechunk Creek.

### The Rivanna River

The Rivanna drains a 766-square-mile watershed that is home to approximately 140,000 people. The basin’s rivers and streams offer indispensable services in the form of water supply and waste treatment capability. About 72.2% of the basin is forested, and much of the aquatic system retains its exceptional natural assets, including some of the healthiest small Piedmont streams in the mid-Atlantic region.



*Figure NE-4, Rivanna River*

These waterways provide habitat to wildlife, including river otters, bald eagles, and over eighty species of fish. For some organisms, such as the globally threatened James River spiny mussel, the Rivanna basin is one of few places in the world suitable for survival and reproduction. The streams of the Rivanna also provide recreational opportunities to hikers, canoeists, kayakers, and fishermen.

### The James River

The 340 mile James River is Virginia's longest, flowing across the entire state to its mouth at the Chesapeake Bay. The James is Virginia's largest tributary to the Chesapeake Bay.

The James River watershed encompasses approximately 10,000 square miles, or almost 25 percent of the state. Home to one-third of all Virginians in thirty-nine counties and nineteen cities and towns, it touches the lives of more Virginians than any other feature on the landscape (James River Association).



*Figure NE-5, James River*

### *Open Space*

Open space in Fluvanna can be categorized in three primary ways:

1. Privately owned open space is associated with a farm or a home and is usually not open to public access.
2. Common open space is reserved for open space in a development and is intended solely for use by that development's residents.
3. Publicly owned open space is intended for use by the entire community.



*Figure NE-6. Open Space*

All three types of open space contribute to quality of life in the community. Open spaces also help to preserve and protect natural features such as groundwater recharge areas, steep slopes, and wildlife habitats. The protection of open spaces will play an important role in the county's future.

## Challenges

### Water Quality and Quantity

#### *Surface Water*

Surface water is tested by the Virginia Department of Environmental Quality (DEQ). The DEQ has tried to increase its monitoring capacity by encouraging local monitoring programs. StreamWatch engages the community to develop useful data. The organization is guided and funded by a formal partnership of local governments, resource management agencies, and nongovernmental organizations. StreamWatch coordinates volunteer water quality monitoring on the Rivanna. The Rivanna Conservation Society, which is a volunteer organization, is also active in conservation efforts related to the Rivanna.

In 2011, StreamWatch summarized the biological health of the Rivanna River at thirty-five sites. Of the ten sites in Fluvanna, seven sites received a rating of fair, two were rated good and one was very good. Fluvanna's stream quality appears to generally outperform the watershed as a whole. (StreamWatch, *2011 Stream Conditions Map*).

The General Assembly of Virginia approved the creation of the Rivanna River Basin Commission, an independent local entity representing Fluvanna, Albemarle, and Green Counties and the city of Charlottesville. The commission discusses issues affecting the basin's water quality and quantity, and provides guidance for the stewardship of the Rivanna River Basin.

In good weather, water quality in Fluvanna's streams is generally fair-to-good. In high flows from storms, phosphorus, suspended solids, and fecal coliform reduce water quality. Nitrogen, phosphorus, and sediment threaten aquatic life and fecal coliform is a health hazard. The Hardware River, Byrd Creek, and portions of the Rivanna River and the Middle Fork of Cunningham Creek are listed as impaired by the Virginia Department of Environmental Quality.

Flooding, drainage problems, erosion and sedimentation, groundwater pollution, failed septic systems, and construction problems are all possible if soil characteristics are not considered when developing land. Fluvanna's topography includes slopes greater than 7 percent, which are susceptible to soil erosion. These areas of high erosion potential are interspersed throughout the county. Groundwater availability and vulnerability to contamination is determined by factors related to soils, saprolite (weathered rock), and bedrock geology.

#### *Groundwater*

Fluvanna citizens have major concerns about groundwater availability. Development should be required to show its projected impact on surrounding groundwater supplies, particularly within the context of the diminishing and limited supply of water available. Mitigating this impact, along with others such as stormwater and traffic on surrounding property owners, is of utmost importance in any discretionary zoning action.

#### *Hydrogeological Testing*

Hydrogeologic investigation and testing is an evaluation of groundwater quantity and quality and the potential effects that a proposed land development may have on water resources in Fluvanna County. The evaluation consists of on-site hydrogeologic investigation and testing, as well as compilation of existing and readily available information.

Hydrogeologic investigations, testing and reports should be required and specifically defined for the two basic types of residential subdivisions:

- Residential subdivisions not served by a central water system (i.e. served by individual wells); and
- Residential subdivisions served by a newly proposed or expanded central water system not owned and/or operated by Fluvanna County, FUSD, or other public entity.

#### *Stormwater*

As of April 2014, the county has elected to “opt out” of administering new stormwater regulations. This does not mean that stormwater will not be regulated; for the near-future, the Department of Environmental Quality will administer stormwater management for the county. As the regulatory process becomes more established and county staff becomes more familiar with the new stormwater requirements, responsibility will shift to the county. Stormwater ordinances address quality and quantity of stormwater runoff and outline the use of low-impact development practices.

Riparian buffers, the forested areas along stream banks, are the best use of land near streams; however, many of the county’s rivers and streams do not have adequate riparian buffers, or the buffers are threatened by development. Riparian buffers filter nutrients, sediments, and other pollutants before they can enter a waterway. The U.S. Department of Agriculture (USDA) recommends that over 80 percent of nutrients and sediments be captured by a hundred-foot-deep forest buffer. Additionally, riparian buffers offer a great habitat for plants and wildlife.

#### *Flood Protection*

Fluvanna County has added a flood protection ordinance to its zoning code. The purpose of these provisions is to prevent the loss of life and property, health and safety hazards, the disruption of commerce and governmental services expenditure of public funds for flood protection and relief, and the impairment of the tax base.

The ordinance regulates uses, activities, and development that will increase flood heights, velocities, and frequencies; restricting certain uses, activities, and development within districts subject to flooding; requiring all those uses, activities, and developments in flood-prone districts to be protected and/or flood-proofed; and discouraging individuals from buying land and structures that are



*Figure NE-7, Wheat Field*

unsuitable because of flood hazards. These provisions apply to all lands within Fluvanna County identified as being in the hundred-year floodplain by the Federal Insurance & Mitigation Administration.

### *Erosion and Sedimentation*

The predominant soils in Fluvanna County are silt loams, many of which have high clay content. These soils support significant areas of marginal farmland, with some prime land in river bottoms, predominantly in the southern part of the county.

Fluvanna County has adopted an erosion and sediment control ordinance in compliance with state regulations. This ordinance promotes the health and welfare of the people of Fluvanna by establishing requirements and enforcement procedures for the control of erosion and sedimentation.

### **Air Quality and Energy**

Fluvanna's air quality is a major asset to the county. The Environmental Protection Agency (EPA) establishes standards monitored by the Department of Environmental Quality, which determine whether a region is an "air quality attainment area" or not. Fluvanna County lies within a region that achieves this designation.

Air pollutants come primarily from the combustion of fossil fuels from stationary and mobile sources, not only locally but also from other areas. Motor vehicle emissions are the major local source. Preserving or planting appropriate trees species throughout vehicular corridors is a good way to mitigate the effects of automobile emissions.

The best way to support air quality and conserve resources is to reduce energy use, thus decreasing fossil fuel combustion and air pollutant emissions. Transportation accounts for most of the energy consumed in the county. The county can improve its energy efficiency and reduce emissions with a compact development pattern, and by developing a greenway, bikeway, and walkway system. Infill, cluster, and mixed-use development reduce residents' transportation energy needs, while alternatives to driving reduce energy use and improve community health.

Energy consumed by buildings accounts for another portion of the county's energy consumption. Improving the efficiency of buildings is essential to increased energy efficiency, and resulting energy savings often translate into financial savings.

### **Conservation**

Efforts to conserve land are ongoing throughout the county. Some examples are Virginia's land-use taxation program, agricultural and forestal districts, conservation easements, and cluster development.



*Figure NE-8, Tenaska*

### Land-Use Taxation

In Virginia, localities may elect to reduce the real estate tax burden on land used for agriculture, horticulture, silviculture, viticulture, aquaculture, improved pasturage, and open space. The Commissioner of the Revenue determines if the land is suitable for such land-use valuation. When the locality accepts the application for the land-use valuation, the property tax reflects productivity rather than fair market value, resulting in lower real property taxes on the land. During years of general reassessments, the Commissioner of the Revenue reviews the recommendations of the State Land Evaluation Advisory Council (SLEAC) and then establishes rates for the productive value of the land when calculating the real property tax obligation of the landowner. Land-use values are determined for agriculture, horticulture, forestry, and open space.

The locality may take an individual property out of land-use assessment when a landowner changes the use. Examples include the owner harvesting timber with no provision to reforest, or a landowner causing pollution by not following accepted best management practices, or the property being developed. Landowners may elect at any time to remove the property from land use to take advantage of demand for development property. Although this taxation program does not offer long-term conservation, it removes some of the financial pressure for sale and development of land. The open-space class of lands, such as scenic rivers and Virginia byways, makes properties automatically eligible for the special land-use tax program (*Virginia Outdoors Plan, 2007, Ch. 3*).

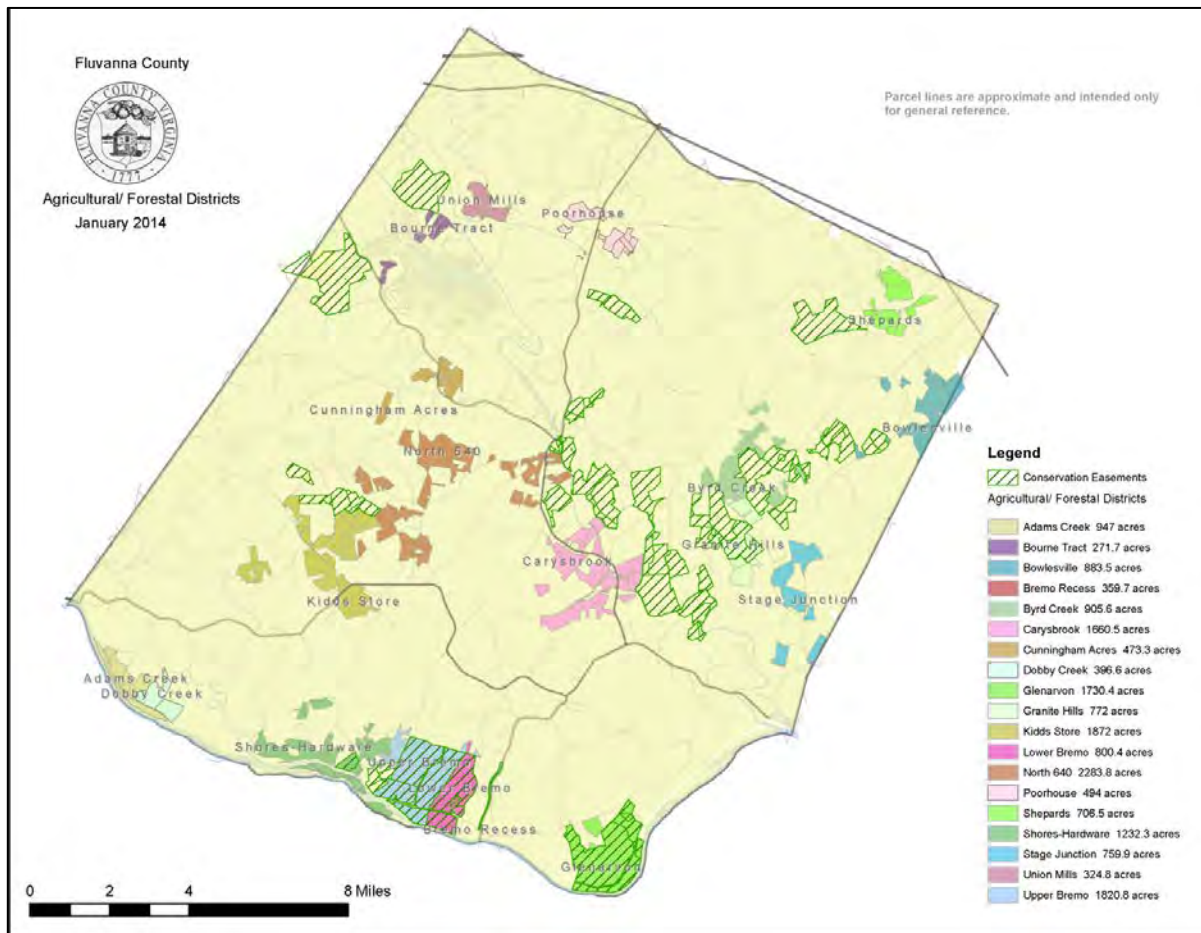
### Ag/Forestal Districts

Agricultural lands provide economic value and contribute to the unique character of the county. A challenge in preserving this valuable land use is the fact that land suitable for agricultural use is also suitable for development.

2013 Land Use District Totals for Fluvanna County									
Magisterial District	Number of Parcels	Change Since 2006	Ag Acres	Change Since 2006	Forest Acres	Change Since 2006	Open Space Acres	Change Since 2006	Total Land Use
Palmyra	429	-40	5,513	-580	15,591	-1,171	0	0	21,104
Columbia	496	-3	5,161	-1,248	21,320	-1,620	21	21	26,502
Cunningham	403	5	5,930	-1,019	16,499	-2,884	54	-348	22,483
Fork Union	733	31	9,498	102	25,966	-730	9	-31	35,473
Lake Monticello	2	2	1,084	1,084	42	42	0	0	42
<b>Total</b>	<b>2,063</b>	<b>-5</b>	<b>27,186</b>	<b>-1,661</b>	<b>79,418</b>	<b>6,273</b>	<b>84</b>	<b>-379</b>	<b>105,604</b>
Source: Fluvanna County Office of the Commissioner of the Revenue									

Figure NE-9, Fluvanna County Land Use District Totals

Agricultural and forestal districts were established to conserve, protect, and encourage the development of agricultural and forestal lands for food and other agricultural and forestal products. The districts conserve and protect agricultural and forestal lands as valued natural and ecological resources that provide open space for watershed protection, wildlife habitat, and aesthetic purposes. As of 2013, 331 parcels, totaling almost 18,695 acres, were within Fluvanna’s 19 Agricultural/Forestal Districts. The majority of these districts are roughly located throughout the midsection of the county (see figure NE-13).



**Figure NE-10, Ag/Forestal Districts and Conservation Easements**

**Conservation Easements**

The Board of Supervisors created an easement program whereby the jurisdiction may hold and protect easements and, in 2007, Fluvanna County accepted the first easement under its conservation easement program. There are currently 34 conservation and historic easements in the county, totaling 13,266 acres (figure NE-13). Most of the easements are owned by the Virginia Outdoors Foundation.



### *Cluster Development*

The county adopted cluster development zoning in 2004 to help conserve open space. Cluster developments in the residential (R-1) zoning district require 50 percent open space, while in the agricultural (A-1) zoning district they require 75 percent open space. Environmentally, this development scenario will help to reduce the impacts of erosion, sedimentation, and quantity of stormwater runoff.

### *Low-Impact Development (LID)*

LID is an approach to site development and stormwater management designed to mitigate development impacts to land, water, and air. The approach emphasizes site design and planning techniques that conserve natural systems and hydrologic functions on a site. The practice has been integrated into municipal development codes and stormwater management ordinances throughout the country. LID begins with the site planning process, and is more sustainable than traditional development practices.

LID:

- Preserves open space and minimizes land disturbance;
- Protects natural systems (drainage ways, vegetation, soils, sensitive areas);
- Reexamines the use and sizing of traditional site infrastructure (lots, streets, curbs, gutters, sidewalks);
- Customizes site design to each site;
- Incorporates natural site elements (wetlands, stream corridors, mature forests) as design elements; and
- Decentralizes and manages stormwater at its source.

## **Economic Development**

The county's natural resources deserve consideration as economic development tools – forestry and agriculture are essential parts of the local economy, and Fluvanna's trails, rivers, and wildlife attract people from other communities for recreation. At the same time, preserving the county's natural resources depends on the continuing health of the local economy. The more economic activity our natural resources can support, the safer those resources will remain. Future discussions about economic development should include natural resources, and economic development efforts should include protecting, enhancing, and promoting these resources.

Blank Page

## Chapter 2

# LAND USE AND COMMUNITY DESIGN

### *Mapping Fluvanna's Future Form*

The county wants a balance between individual property rights and the community's development goals. Private choices affect public policy concerning land uses, providing public facilities and services, anticipating transportation needs, and safeguarding the environment. Public policy affects housing location and costs through the provision of utilities, zoning, subdivision regulations, and building codes. Growth should be guided to ensure that adequate public services are provided and proper transitions exist between land uses.

This approach encourages development that diversifies the tax base, allows the population to increase at sustainable levels, minimizes the impact on existing infrastructure, and accounts for impacts including stormwater runoff, traffic, public safety, schools, and water and sewer capacity. The way a community chooses to grow, or not grow, directly impacts the tax base and the taxes paid by existing citizens. Responsible land-use policies result in fiscally self-sustaining development that will have a positive impact on taxpayers. Growth models should show a healthy, balanced mix of business and residential uses that provide a net gain to the community.

In Central Virginia, the debate is not about whether to grow or not to grow—the area is too attractive to newcomers, both economically and environmentally—but rather how we should grow. Fluvanna chooses to manage its growth in a way that strengthens the community and protects areas identified for preservation. Change is inevitable, but how a community changes depends on how closely it adheres to its vision, goals, and strategies for making the vision a reality.

## EXISTING CONDITIONS

The location of development has long-reaching impacts on the community. This chapter discusses how to balance economic growth with quality of life, and should reflect the community's goals for the location and character of growth. As importantly, it should reflect the areas to be preserved. Challenges include determining where growth is appropriate (given the rural nature of the county), existing and future traffic patterns, and the relationship to current and future infrastructure.

This chapter can be used to:

- Assist in identifying where to locate infrastructure and public facilities;
- Serve as a guide for evaluating proposed developments;

- Establish the framework to develop policies that will promote the desired land-use development patterns;
- Assist federal, state, and local agencies in coordinating their work, such as planning for future road and infrastructure needs; and
- Reflect the land-use opportunities and needs identified in other Comprehensive Plan chapters.
- Explain the desired elements for successful community design.

### **Land-Use Patterns**

Fluvanna County is a rural community with a few small manufacturing firms and a desire for a sustainable and agriculturally friendly economy. Development has generally occurred close to primary road networks and community services. The county has retained its rural character despite continued growth. Development has been dispersed throughout the county and in the communities of Fork Union, Bremono Bluff, Palmyra, and Lake Monticello, along with the towns of Columbia (its citizens voted to dissolve the town in January 2015) and Scottsville. Other smaller communities are associated with rural stores that existed throughout the county.

Lake Monticello, established in the early 1970s, was the county's primary residential growth area through the end of the twentieth century. While Lake Monticello houses approximately 40 percent of the county's population, no traditional urban center has developed there.

Commercial and industrial development has seen changes as well. As the county's population has grown, so has the demand for goods and services. Commercial and industrial growth has centered around Lake Monticello and Zion Crossroads. These areas are ideally situated to attract more development.

Development around Lake Monticello has primarily been strip commercial development that serves the needs of the local population. Zion Crossroads is poised to become the new center of industry and commerce for the county. Its location in relation to existing and proposed infrastructure, an interstate interchange, and the intersection of Routes 250 and 15 makes it a logical choice for business development. Additionally, rapid commercial development on the Louisa County side of Zion Crossroads will likely bring even more development to Fluvanna County. The Northwest Fluvanna / Southwest Louisa Multimodal Corridor Study, developed in conjunction with the Thomas Jefferson Planning District Commission, projects that there will be 28,000 additional jobs in the area by 2050.

To further enhance development opportunities in the Zion Crossroads area, the counties of Fluvanna and Louisa have joined together to ensure that the infrastructure needs of the area are met. A joint pipeline from the James River is in the planning stages.

### **Recent Trends**

Increased growth has brought pressure to develop agricultural and forested lands. In 2013, 61 percent, or 112,262 acres, of the county was in land-use assessment status. While this was

down from 66 percent in 2007, it was a 1,122 acre increase from 2012. Of the total land use acres, farmland accounted for 24.2 percent of that total, 76 percent was forested, and less than 1 percent was open space.<sup>1</sup>

In response to requests from landowners, the Board of Supervisors approved fifteen agricultural and forestal districts in 1999 and 2000. As of 2013, 19 districts, totaling 18,694.8 acres, had been established in Fluvanna County. Two of the districts were renewed in 2007 through 2015, with eleven more coming up for renewal within the next two years.

District Name	Planning Area	Approval Date	Review Period	Review Date	Total Acreage
Adams Creek	Rural Residential	5/16/2001	10 Years	05/01/11	947.26
Bourne Tract	Rural Preservation	8/4/1999	8 Years	03/01/15	271.66
Bowlesville	Rural Preservation	3/17/1999	8 Years	03/01/15	883.54
Bremo Recess	Rural Preservation	1/17/2001	10 Years	01/01/11	359.67
Byrd Creek	Rural Preservation	7/21/1999	10 Years	07/01/09	905.57
Carysbrook	Rural Preservation	7/21/1999	10 Years	07/01/09	1,660.45
Cunningham Acres	Rural Preservation & Residential	11/17/1999	10 Years	11/01/09	473.25
Dobby Creek	Rural Residential	1/17/2001	10 Years	01/01/11	396.55
Glenarvon Farm	Rural Preservation	11/17/1999	10 Years	11/01/09	1,730.36
Granite Hills	Rural Preservation	8/4/1999	10 Years	08/01/09	771.98
Kidds Store	Rural Preservation	12/15/1999	10 Years	12/01/09	1,872.08
Lower Bremo	Rural Preservation	1/17/2001	10 Years	01/01/11	800.38
North 640	Rural Preservation	11/17/1999	10 Years	11/01/09	2,283.78
Poorhouse	Rural Residential	1/19/2000	10 Years	01/01/10	494.04
Sheperds	Rural Preservation	11/15/2000	10 Years	11/01/10	706.54
Shores-Hardware	Rural Preservation	1/17/2001	10 Years	01/01/11	1,232.27
Stage Junction	Rural Preservation	6/7/2000	10 Years	06/01/10	759.93
Union Mills	Rural Preservation	5/15/2002	10 Years	05/01/12	324.75
Upper Bremo	Rural Preservation	9/20/2000	10 Years	09/01/10	1,820.78
<b>Total Acreage</b>					<b>18,694.82</b>
<b>% of Total County Acreage within Agricultural &amp; Forestal Districts</b>					<b>10.18%</b>

*Figure LU-1, Open Space*

<sup>1</sup> Fluvanna County Commissioner of the Revenue.

In 2006 the Board adopted a county conservation easement program. As of January 1, 2014, there are 33 conservation and historic easements in Fluvanna County. These easements protect 13,266 acres, or approximately 7.2% of the County. The Virginia Department of Forestry (VDOF), Virginia Department of Historic Resources, Virginia Outdoors Foundation, and Fluvanna County itself hold easements countywide.

## Future Trends

### *Population*

According to US Census data, Fluvanna’s population grew from 20,047 in 2000 to 25,691 in 2010, a 28 percent increase. By 2014, the population was 25,970 (1.1% growth from 2010-2014). By 2020, Fluvanna’s population is projected to reach 29,009.

Year	Population
2020	29,009
2030	31,839
2040	34,537

Source: Weldon Cooper Center

**Figure LU-2, Population Projections**

### *Pattern of Development*

Fluvanna’s rate of growth and pattern of development create challenges to maintaining the rural character of the county. With Lake Monticello nearing build-out, an increasing number of homes have been built elsewhere in the county. Between 2001 and 2013, 37 percent of new homes built in the county were within Lake Monticello proper. From 2009 through 2013, however, only 8 percent of Fluvanna homes were built in the Lake.<sup>2</sup>

A primary cause of sprawl is the sporadic rezoning of properties throughout a locality. Spot zoning is the reclassifying of one or more tracts of land primarily for the private interests of one or more landowners instead of furthering the welfare of the entire community as part of an overall zoning plan. There must be valid reasons for any zoning amendment that are substantially related to the public welfare and necessity. **It is not sufficient that an applicant merely show that there is no neighborhood objection to the requested amendment.**

### **Three questions may be asked as a litmus test for spot zoning:**

- (1) Is the proposed change contrary to the established land-use pattern?
- (2) Is the proposed land-use change in conformance with the Comprehensive Plan?
- (3) Would the proposal create an isolated zoning district unrelated to similar districts?

---

<sup>2</sup> Fluvanna County Building Inspections Dept.

Zoning applications should be well planned and complementary to the vision for that area. Critical items include buffers and screening between incompatible uses, connectivity and walkability, adequate infrastructure, sustainable and attractive design, and other factors that will mitigate any adverse impacts.

Rezoning applications that do not compliment the community's vision and address all anticipated adverse impacts from the project are not approved. Successful applicants will meet with the community and county officials in advance of application submittal. This process benefits the project, and results in development that improves the overall quality of the community.

**It is not sufficient for an applicant to receive approval for a rezoning simply because a property is within a community planning area.** Each application is considered by the county to see if the proposed development is well planned within the context of the surrounding community.

**Applications that do not address a project's external costs to the community and provide a clear fiscal benefit to the county will not be favorably received.** This decision is subjective, and completely within the purview of the Board of Supervisors; however, the Comprehensive Plan will be used as a reference in evaluating all such discretionary projects.

#### *Future Land-Use Tools*

**Utilities, specifically sewerage systems, need to be carefully controlled and regulated.** Both centralized and decentralized systems have serious long-term maintenance challenges that need to be proactively addressed by the county in coordination with the Virginia Department of Health. These regulations and controls are designed not to control land use but rather to assist the prescribed land-use plan in a sustainable and environmentally responsible manner.

## **Design Approaches**

The 2000 Comprehensive Plan established three land-use designations to further guide development—community planning, rural residential, and rural preservation. The community planning areas, designated growth areas established pursuant to the Code of Virginia, section §15.2-2223.1, direct new development to communities which have infrastructure to support population growth and sustainable development. The growth-area plan allows conservation of the rural preservation areas by slowing and controlling development in these areas.

Six areas—Lake Monticello (Rivanna), Palmyra, Zion Crossroads, Scottsville, Fork Union, and Columbia—are designated growth areas established pursuant to the Code of Virginia, section §15.2-2223.1. These areas are also referred to as Community Planning Areas, or CPAs. Areas outside the community planning areas—the rural residential and rural preservation areas—complete the continuum from the more dense community areas to the more rural and natural

areas. Since 2000, Lake Monticello (Rivanna), Palmyra, Zion Crossroads, and Fork Union have had community plans developed to further refine how those areas should grow.

The preference for the dispersion of new development within these land use classifications is:

- 70 percent in community planning areas;
- 20 percent in rural residential areas; and
- 10 percent in rural preservation area.

To date, a review of actual building permits issued in 2014 shows that 38.6 percent of these permits were issued in the community planning areas. 61.4% percent were in rural areas. This balance is the reverse of the desired development pattern, with the most development occurring in the areas intended for the lowest density and most preservation of open space. The future development of approved subdivisions could provide significant challenges to the preservation of rural character.

The 2009 Comprehensive Plan retained the same goals for development distribution among the land use designations. These changes are intended to strengthen the land-use vision of the county, more effectively implement the community planning areas established pursuant to the Code of Virginia, section §15.2-2223.1, and better buffer the rural residential and rural preservation areas.

## **Design Elements and Standards**

The design elements and standards described in this section detail how development should occur and what type of development should be permitted.

### **Community Elements**

- Most new growth occurs at Zion Crossroads, which develops into a regional mixed-use center featuring employment centers and a diverse mix of retail opportunities and housing options. The Zion Crossroads Community Planning Area will serve as the county's Urban Development Area, established pursuant to the Code of Virginia, section §15.2-2223.1.
- The current retail centers surrounding Lake Monticello, in the Rivanna community planning area, develop into neighborhood mixed-use centers with smaller-scale retail opportunities and housing options.
- Growth in the courthouse area of Palmyra should be scaled to match that of the surrounding village.
- Fork Union should continue to develop as a village in the core area near Fork Union Military Academy, surrounded by residential neighborhoods.
- Developments in rural areas should be limited to rural housing clusters and limited residential development with a large open-space component.



### **Regional Center**

The regional center is comprised of regional mixed-use and regional employment. These two elements are similar, and may overlap at some points. As the county's Urban Development Area (established pursuant to the Code of Virginia, section §15.2-2223.1), Zion Crossroads remains the ideal location for such uses.

### **Regional Mixed-Use**

The regional mixed-use center is a focal point for the region; it reinforces this through its scale of development and rich range of land uses. Regional mixed-use development is characterized by a higher intensity and mixture of land uses than surrounding areas. Larger-scale commercial uses, such as big-box stores, are situated along the main arterial roadway, with slower-speed streets and smaller block sizes off of the busy arterial.

### **Regional Employment**

The regional employment center is predominantly devoted to employment, but maintains a mixed-use component to serve employees and surrounding residents. Employment uses may include professional office space, research facilities, storefront offices, and warehouse and light industrial uses.

Office uses are recommended at the core, while warehousing and light industry are appropriate at the periphery. It is important to link single-use areas with adjacent mixed-use development. Live-work units are recommended to maximize the residential capacity of regional employment centers. Although some uses may require large blocks, smaller block sizes should be maintained wherever possible.

Compact blocks around a mixed-use main street define the core of the regional center. The main street must provide a comfortable pedestrian environment between small shops, stores, and offices. Higher-density residential areas are encouraged within close walking distance to the main street.

#### *Street Types*

The regional employment center's main street provides wide sidewalks, shade trees, and safe crosswalks. When larger-scale commercial roads pass through regional mixed-use and employment centers, the cross section should be scaled to balance vehicular traffic with the presence of pedestrians. Large commercial uses may front onto the commercial street, with smaller retail uses lining the main street and surrounding streets set back from the higher-speed commercial street.

#### *Connectivity and Block Size*

Because of building density and desire for walkability, small block sizes are appropriate in the regional center. Block sizes may be expanded to accommodate larger retail stores, or office and light industrial campuses, without disrupting the overall block network. Buildings should line the perimeter of blocks, with the center of the block used for surface parking and courtyards.

The tight street network provides many routes for pedestrians, connects parking lots, and joins the residential and mixed-use areas.

#### *Building Height and Frontage*

The tallest buildings along the main street should provide a sense of enclosure, creating an “urban room” for pedestrians. Setbacks should be minimized, with no setback along primary streets, particularly those with retail uses. Residential uses toward the edge may have lower building heights and small setbacks.

#### *Parking*

On-street parking is encouraged along both commercial and residential streets. Surface parking should be placed to the rear of buildings, shielded from the sidewalk and main street setting. As density increases over time, structured parking may become an option.

#### *Mix of Uses*

The regional mixed-use center has the largest diversity of uses, combining retail and office in close connection to residential and other varied uses. This mixed-use quality is important for creating a vibrant Main Street core and an energized streetscape for residents, patrons, and workers.

The regional employment center is primarily composed of office uses and related services. Despite this focus, the employment center should incorporate mixed-use elements, including restaurants, retail, and some multifamily residential. This mixed-use quality is important for the establishment of a desirable workplace, and its relationship to surrounding development.

#### *Density*

The regional center is a high-density community element. Large parking areas should be minimized in order to optimize the potential density of the center. Residential uses are primarily multifamily, taking form as apartments and townhouses. Larger uses, such as large-footprint commercial, office, and light industrial, should be placed toward the edge of the development area.

#### *Integration of Open Spaces*

With its intense style of development, the regional center has limited opportunities for open space. A town square is the most appropriate type of open space for the mixed-use center, and can serve as a public civic space at the core of the downtown area. Pocket parks are the most appropriate open space in employment centers, and can be distributed throughout the area. Greenways may provide connections to downtown and from surrounding areas.

#### **Neighborhood Mixed-Use**

The neighborhood mixed-use community element incorporates multiple uses in a walkable, pedestrian-friendly environment with compact block sizes. Neighborhood mixed-use areas include a mix of retail and office uses at the center, with connected residential uses at the edge. A centralized public space is encouraged as a focal point and civic space for the community.

### *Street Types*

Commercial areas within neighborhood mixed-use elements should incorporate Main Street standards. As land use transitions to residential, neighborhood streets should be used. Where larger, high-speed roads enter the pedestrian-oriented core of a neighborhood mixed-use element, the cross section should feature commercial streets, to balance vehicular and pedestrian needs.

### *Connectivity and Block Size*

Small block sizes are appropriate for the neighborhood mixed-use element. Block sizes for commercial uses must expand to accommodate large retail stores without disrupting the overall block network. Where there are smaller-scale storefronts, office uses, and residential, block sizes should be minimized.

### *Building Height and Frontage*

The tallest buildings making up the neighborhood mixed-use element should be concentrated around the main street to provide a sense of enclosure, creating an “urban room” for pedestrians. Setbacks should be minimized, with no setback along areas serving as the main street.

### *Parking*

On-street parking is encouraged along commercial and residential streets. Surface parking should be placed to the rear of buildings, shielded from the sidewalk and main street setting. Large surface parking lots should be placed within the interior of blocks and arranged to maximize sharing between uses.

### *Mix of Uses*

Although the neighborhood mixed-use element favors retail, other uses, including storefront retail, office, civic, and residential, are recommended. This mix of uses is important to the vibrancy of the center, creating an energized streetscape for residents, customers, and workers.

### *Density*

The neighborhood mixed-use element combines higher-density retail and residential uses. Large parking areas should be minimized in order to optimize density. Most residential uses should be multi-family, with single-family residences only appropriate as a transition into neighborhood residential areas.

### *Integration of Open Spaces*

Due to its development intensity, the neighborhood mixed-use element allows limited opportunities for open space. A town square or pocket park is the most appropriate type of open space at the core. Greenways may connect the center and peripheral areas. Recreational parks may be integrated at the edge of the commercial area to serve the community.

## Neighborhood Residential

Neighborhood residential areas should provide a range of residential housing types and lot sizes. Generally, this includes a balance of single-family residences and multifamily housing. A central neighborhood park is an excellent asset for a neighborhood center, and is strongly encouraged.

Connections should be made to surrounding neighborhoods and commercial centers where possible. Neighborhood residential centers typically border higher-density neighborhood mixed-use areas. In some cases, small commercial and institutional uses may be incorporated into the neighborhood residential community element.

### *Street Types*

Neighborhood streets are the primary street type within the neighborhood residential element. Because of the residential character of these centers, commercial streets are limited.

### *Connectivity and Block Size*

Block size should relate to lot size and density. Higher-density blocks allow for smaller block sizes, where lower-density areas may have larger-scale blocks. Connectivity with adjacent land uses, primarily nearby neighborhoods, is encouraged. Where street connections are not feasible, greenways are recommended.

### *Building Height and Frontage*

The majority of buildings in neighborhood residential areas are residences. Buildings have a reduced scale and greater setbacks in comparison to regional centers and neighborhood mixed use. Shorter setbacks are recommended for higher-density residential blocks.



*Figure LU-3, Residential Streetscape*

### *Parking*

On-street parking is suggested in higher-density residential areas. Where block sizes are bigger, on-street parking may give way to residential driveways and garages. Where garages are present, it is important to set them to the side or rear of the residence, so they do not dominate the residential frontage.

### *Mix of Uses*

While predominantly single-family residential, neighborhood residential areas should incorporate some degree of mixed use, primarily multifamily residential. Storefront retail and office may be integrated at a residential scale.

### *Density*

The neighborhood residential element is primarily composed of single-family residences. Residential development should strive to maintain a reasonable density (e.g., less than quarter-acre lots), freeing green space as a shared amenity.

### *Integration of Open Spaces*

The neighborhood residential element can incorporate a shared green space at its core. Neighborhood parks vary in scale, but serve local residents as recreational and gathering space. If possible, greenway trails should be integrated to link the neighborhood to surrounding neighborhoods and open spaces.

### **Village**

Villages are characterized by a small, mixed-use core surrounded by residential uses and a connection to natural features and open spaces. Despite their limited scale and density, villages typically favor mixed use; often a major civic use. Outside of a small mixed-use center, villages are characterized by single-family residential uses. A green buffer may be created at the perimeter of the village to integrate open spaces with the developed area.

### *Street Types*

Main streets and neighborhood streets are the primary street types within villages. When higher-speed roads approach the walkable core of a village, the street should better balance vehicular and pedestrian needs.

### *Connectivity and Block Size*

The mixed-use village core should have small blocks to accommodate a limited but dense collection of small retail uses. Residential block size should relate to the lot size and density of residences. Higher-density blocks allow for smaller block sizes, where lower-density areas may have larger-scale blocks.



*Figure LU-4, Neighborhood Street*

### *Building Height and Frontage*

The majority of buildings in villages are residential. Buildings have a reduced scale and greater setbacks in comparison to downtown and commercial centers. Due to the varying rural quality of villages, setback requirements should remain flexible.

### *Parking*

On-street parking is suggested in higher-density residential areas. Where block sizes are bigger, on-street parking may give way to residential driveways and garages. Where garages are present, it is important to set them to the side or rear of the residence, so that they do not dominate the residential frontage.

### *Mix of Uses*

While predominantly single-family residential, villages should incorporate mixed use at their core, including small-scale storefront retail and office. Multifamily residential may also be integrated at the core and within surrounding blocks.

### *Density*

The village element combines a range of uses and densities. In general, development should strive to maintain a reasonably high density, in turn freeing green space for community use or for use as a natural buffer.

### *Integration of Open Spaces*

Villages provide a great opportunity for open-space preservation, typically at the periphery surrounding the developed area. Neighborhood parks are recommended at the core. If possible, greenway trails may be integrated to link villages with surrounding neighborhoods and open spaces.

### **Rural Clusters**

Rural clusters are small-scale residential areas surrounded by farmland, preservation zones, or otherwise environmentally sensitive land. Although they are small in scale, clusters should strive to maintain density similar to that of the neighborhood residential community element. This will maximize preserved land by clustering homes on small lots. Rural cluster planning must be sensitive to existing natural features, agricultural land, and viewsheds when positioning development. Rural clusters are predominantly single-family residential, but may incorporate limited multifamily residential, small-scale retail, and farm uses.

### *Street Types*

Within their developed area, rural clusters primarily use neighborhood streets and are connected to other places in the region by rural roads. Because of the rural character of these centers, streets do not require curbs and gutters or fixed sidewalks. Off-road paths are often a more appropriate pedestrian facility than formal sidewalks.

### *Connectivity and Block Size*

When a rural cluster takes a compact form, block sizes should remain relatively small. However, some situations do not allow for typical defined blocks, in which case no maximum block size is applicable. In such situations, it is still important to maintain a connected street network.

### *Building Height and Frontage*

Most buildings in rural clusters are residential and have a reduced scale and greater setbacks in comparison to those in neighborhood settings. Setback requirements should remain flexible, due to the varying rural quality of rural areas.

### *Parking*

In a rural setting, formal on-street parking is rarely required or appropriate. For residential parking, it is important to set garages to the side or rear of the residence, so that they do not dominate the residential frontage.

### *Mix of Uses*

While predominantly single-family residential, rural clusters may incorporate a limited multifamily residential component. This is typically found at the center of the developed area.

### *Density*

The rural cluster element concentrates development in a compact area, leaving the remaining land for preservation and common use. In general, development should strive to maintain a reasonable net density (i.e., within the non-open-space portion of a development), to maximize preservation.

### *Integration of Open Spaces*

Rural clusters provide an opportunity for open-space preservation, typically at the periphery surrounding the developed area. Open space should be clustered to maximize large areas of open space whenever possible. Neighborhood parks are recommended at the core. If possible, greenway trails may be integrated to link rural neighborhoods with surrounding neighborhoods and open spaces.

### **Rural Preservation**

Development in the rural preservation areas should consist of farmland, preservation zones, or otherwise environmentally sensitive land with scattered housing.

### *Street Types*

This area is characterized by rural roads that connect farmland to markets. Because of the rural character of this area, curbs and gutters or fixed sidewalks are not appropriate. Where stormwater management is needed, it should be managed with grass swales.

### *Connectivity and Block Size*

Farms and scattered housing are connected to main roads by informal private drives. Because the housing is dispersed, there is no block size requirement.

### *Building Height and Frontage*

The majorities of buildings in the preservation area are residential and farm use. Building types should be limited to single-family residential and agricultural uses, with the height of structures varying with use. Setback requirements should remain flexible, due to the varying rural quality of this area.

### *Parking*

In a rural setting, formal on-street parking is rarely required or appropriate.

### *Mix of Uses*

The rural preservation area consists primarily of open space and agricultural and forestry uses with scattered single-family residential.

### *Density*

In general, development should strive to maintain a very low density in order to maximize the opportunity for continued preservation of farms and open space.

### *Integration of Open Spaces*

Development in the rural preservation area should maximize open space. Open space should be clustered to maximize large areas of open space whenever possible. If possible, greenway trails may be integrated to link rural neighborhoods with surrounding neighborhoods and open spaces.

### **Community Element Standards**

Figure LU-21 provides a development matrix on the seven community elements that provide suggested development standards. These standards should be used as a general guide for development proposals such as planned unit development projects, but it should be recognized that each project will have unique characteristics, and will not always adhere to the standards recommended in the matrix.



COMMUNITY ELEMENT MATRIX						
urban ←					→ rural	
<b>Regional Center</b>				<b>Rural Areas</b>		
<b>Regional Mixed Use</b>	<b>Regional Employment</b>	<b>Neighborhood Mixed Use</b>	<b>Neighborhood Residential</b>	<b>Village</b>	<b>Rural Cluster</b>	<b>Rural Preservation</b>
<b>Street Types</b>						
Commercial street Main street Neighborhood street	Commercial street Main street Neighborhood street	Commercial street Main street Neighborhood street	Neighborhood street	Commercial street Neighborhood street Rural road	Neighborhood street Rural road	Rural road
<b>Block Size</b>						
400–800 ft.	400–800 ft.	300–600 ft.	200–600 ft.	200–600 ft.	200 ft.–varies	Varies
<b>Building Height</b>						
2–6 stories	2–6 stories	2–4 stories	1–3 stories	1–3 stories	1–2 stories	1–2 stories
<b>Frontage</b>						
Commercial storefront	Commercial storefront	Storefront Porch	Storefront Porch Residential yard	Storefront Porch Residential yard	Porch Residential yard	Porch Residential yard Open space
<b>Parking</b>						
Structured On-street Surface	On-street Surface	On-street Surface Residential	On-street Surface Residential	On-street Surface Residential	Residential	Residential Unstructured
<b>Mix of Uses</b>						
Large commercial (25–40%) Storefront retail (25–40%) Civic (10–25%) Office (10–25%) Restaurant (10–25%) Multifamily residential (5–20%)	Office (25–75%) Health/medical (10–25%) Light industrial (10–25%) Storefront retail (5–20%) Multifamily residential (5–20%)	Storefront retail (25–75%) Civic (10–25%) Office (10–25%) Restaurant (10–25%) Multifamily residential (10–35%) Single-family residential (5–20%)	Single-family residential (50–75%) Multifamily residential (10–25%) Limited retail (10–25%)	Storefront retail (10–25%) Civic (10–25%) Office (10–25%) Restaurant (5–20%) Multifamily residential (25–50%) Single-family residential (25–75%)	Single-family residential (50–100%) Multifamily residential (25–50%) Limited retail (10–25%)	Single-family residential (10%) Country stores (5%)
<b>Density</b>						
Commercial FAR: 2.0 Residential DUA: 10–15	Commercial FAR: 2.0 Residential DUA: 10–15	Commercial FAR: 1.0 Residential DUA: 8–10	Commercial FAR: 0.5 Residential DUA: 4–8	Commercial FAR: 0.75 Residential DUA: 4–6	Commercial FAR: 0.5 Residential DUA: 2–6 (net)	Commercial FAR: 0.1 Residential DUA: 0.5–0.1
<b>Open Space</b>						
Town square Pocket park	Pocket park	Town square Pocket park Neighborhood park	Neighborhood park Recreational park	Neighborhood park Recreational park Passive open space	Neighborhood park Recreational park Passive open space	Recreational park Agriculture and forest land Passive open space

**Figure LU-5, Community Element Matrix**

## Residential Areas

Residential development within the community planning areas should respect the rural design theme, particularly at the periphery of the growth area and the rural fringe. A variety of housing types should be included as part of neighborhood mixed-use communities. Neighborhood residential that is primarily single-family should not be the only housing within the growth areas. Due to the limited amount of developable land within community planning areas, single-family subdivisions are inefficient. Within single-family residential developments, a variety of housing sizes and styles should be available.

Affordable housing and workforce housing are vital to the community. Many affordable homes will be single-family attached, townhouse, duplex, condominium, or other multifamily structures. Some smaller single-family detached homes are affordable to median-income families and should be part of a neighborhood's design.

Workforce housing is generally price-constrained and marketed toward middle-class homeowners. Market-rate housing is not price-constrained and is available to any buyer at any income level.



*Figure LU-6, Mixed-Income Neighborhood*

## Commercial Areas

The county's designated growth areas, established pursuant to the Code of Virginia, section §15.2-2223.1, are places where, because of existing populations, established villages, commercial services, employment, and infrastructure such as highway access, growth has occurred and should continue to grow. Zion Crossroads, with an interstate interchange and the intersection of Routes 250 and 15, and its existing and planned infrastructure, is an ideal location for a regional employment and mixed-use center. Rapid commercial development on the Louisa County side of Zion Crossroads will likely bring more development to Fluvanna County.

Fluvanna and Louisa County are working together to ensure that the infrastructure needs of the area are met. A joint water pipeline from the James River is in the final planning stages. Additionally, Louisa County may be able to extend waste treatment lines into the area for some capacity, along with the development of future wastewater capacity for the area as part of major mixed-use development. This infrastructure will be supplemented by sewer and water provided by the Fluvanna Correctional Center for Women on Route 250.

Palmyra is the county seat and Fluvanna's historic center of development. The Rivanna planning area is centered around Lake Monticello, which was the county's primary development area since the early 1970s until recently, when the Lake began to approach its build-out capacity. These two areas will continue to grow, but should do so in an integrated,

sustainable way that compliments existing development and the history of each area. Much of this growth will fill the role of traditional infill development.

Mixing commercial uses on the ground floor with residential uses on upper floors enhances street-level vitality attracting both pedestrians and “downtown” residents along Main Street. Additionally, the concept of “eyes on the street” argues that crime is reduced when people use a street or other public area for a greater period of time than during normal business hours. In order to create a more functional and appealing pedestrian environment, parking lots should be less visible from the street. This means parking should be relegated to the back or sides of building, or within structures. This approach engages and attracts pedestrians and “walk-in” customers.

### **Walkable Community**

The primary functions of streets include providing thoroughfares for pedestrians and traffic, access for emergency vehicles, and accommodating parking. Streets are important open-space features. The streetscape—building facades, sidewalks, benches, lighting, trees, and other characteristics—influences the character of the surrounding environment. Well-designed streetscapes are pedestrian-friendly environments. Pedestrian promenades create areas for people to gather and walk.

### **Phasing**

Another important element in designing a sustainable project is the phasing of a project. Rarely will a project be developed all at once. Larger projects, in particular, will need to be phased, which should be discussed during the rezoning/master plan phase of the project.

Plans can be proffered in a certain order, during certain time frames, or in contingency on the provision of certain infrastructure. For instance, a developer could proffer that a project’s residential component would not commence until an adequate public water supply was in place. Such a proffer assures the community that this infrastructure will be in place prior to additional demand being placed on the existing community’s resources. The wording of proffers made during a rezoning process should be clear and concise, so that those commitments can be met if the project is approved.

### **Architecture**

The design, style, and material quality of building impact the aesthetics and sustainability of the community. Low-maintenance, sturdy, but attractive products should be used as a standard in lieu of lower-grade materials like vinyl or metal siding, asphalt shingles, or flat tarpaper roofing. State-of-the-art materials are more energy-efficient and require less upkeep. Current products vary widely but include HardiePlank siding, composite decking, nontoxic cellulose wall insulation, low-VOC caulks, adhesives, and paints, low-E argon-filled windows, and Energy Star light fixtures. Recycled or renewable products such as bamboo floors reduce the environmental footprint of development. Brick, block, standing seam metal roofing, green roofs, higher-grade asphalt shingles, and other traditional materials are also encouraged.

Architectural styles can and should vary among developments, but should remain consistent within a project. Quality of material and sustainability should not vary widely, and should not be compromised by low-quality, high-maintenance materials. While it is not desirable to regulate specific materials, it is reasonable and feasible for a developer to commit to specific material types and styles as part of a project’s approval, preferably through legally binding proffers.

**The Relationship between Community Elements and the Community Planning Areas**

Each community element correlates to a community planning area (or land use designation) and the urban development area. The community elements may be appropriate in different configurations within each community planning area as shown below and discussed previously.

Community Element	Community Planning Area
Regional mixed use	Zion Crossroads
Regional employment	
Neighborhood mixed use	Columbia, Fork Union, Palmyra, Rivanna, Scottsville, Zion Crossroads
Neighborhood residential	Columbia, Fork Union, Palmyra, Rivanna, Scottsville, Zion Crossroads
Village	Columbia, Fork Union, Palmyra, Scottsville
Rural cluster	Rural residential Rural preservation
Rural preservation	Rural preservation

*Figure LU-7, Land-Use Relationships*

In practice, the specific recommendations for each type of community element should guide the design of a development depending on its location, both in terms of the specific community planning area as well as the precise location within a planning area. The Comprehensive Plan lays out the framework and basic parameters of each land-use designation, including the community planning areas and urban development area (established pursuant to the Code of Virginia, section §15.2-2223.1), in the context of the various community elements.

## Community Plans

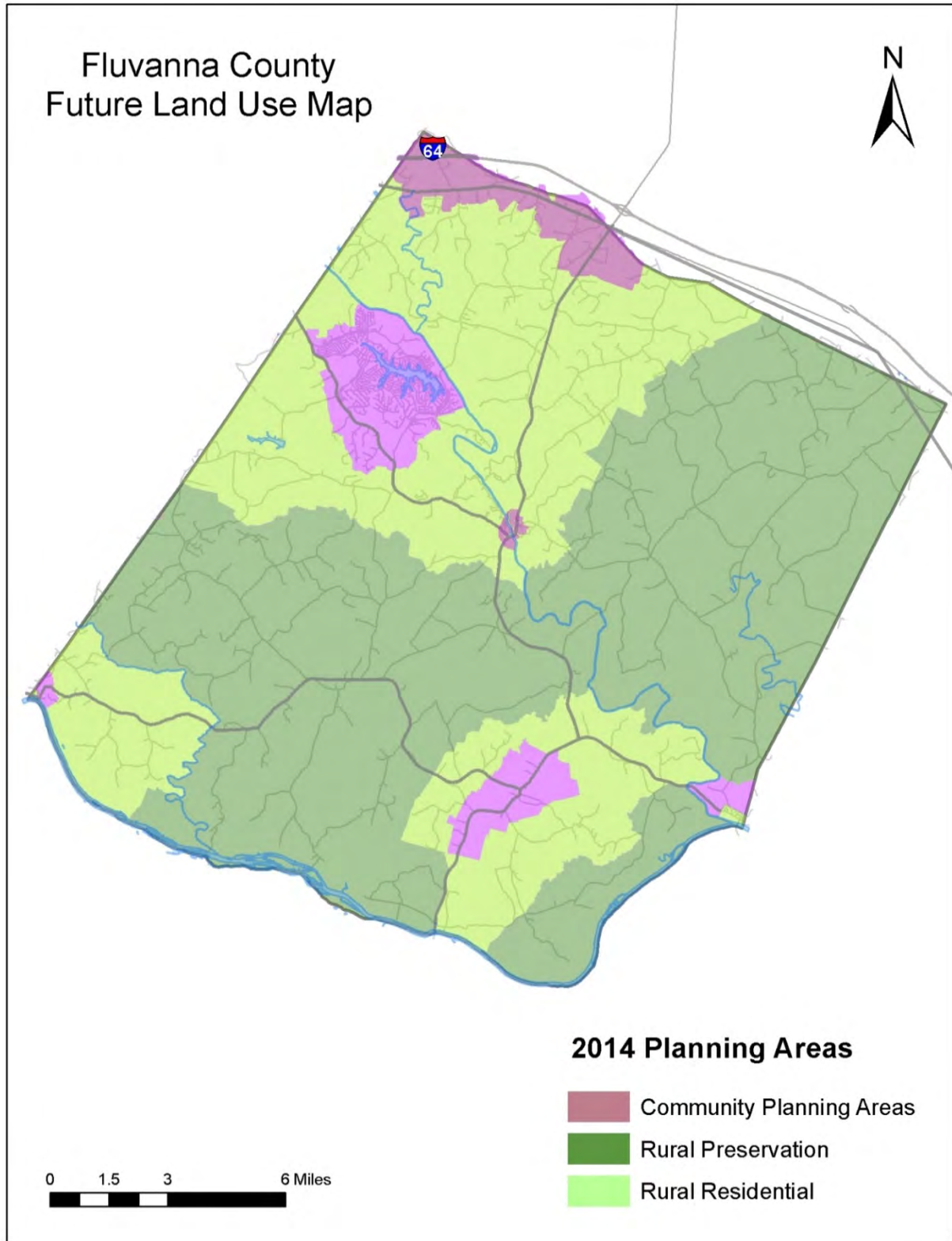


Figure LU-8, 2029 Future Land Use Map

## Zion Crossroads Community Plan

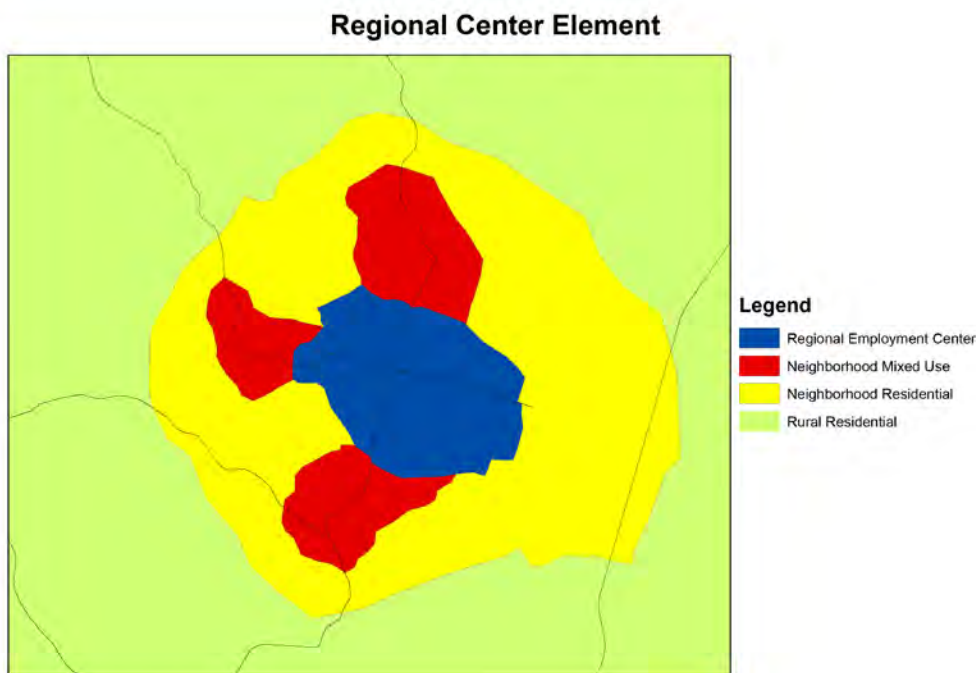
### Overview

Located at the crossroads that connect Charlottesville, Richmond, and destinations to the north and south, Zion Crossroads is situated to contribute to Fluvanna County's goals for the future. The county seeks to expand the services, recreation, restaurant, and retail options available to its residents, while at the same time retaining the area's rural character.

Zion Crossroads is the primary gateway to Fluvanna County, and should be enhanced to provide a scenic welcome to residents and tourists. It should develop as an employment, retail, commercial, and recreation destination for county residents and travelers along Routes 64, 15, and 250.

As the county's Urban Development Area established pursuant to the Code of Virginia, section §15.2-2223.1, Zion Crossroads is envisioned to be the most intensely developed part of the county, consisting of regional mixed-use, regional employment, and neighborhood mixed-use developments. This area is the county's primary regional economic development area and is targeted as a regional employment center with primarily mixed-use, mixed-income development.

Commercial and neighborhood streets make up the primary transportation network, along with sidewalks, trails, and bicycle lanes. Other open space consists of green infrastructure such as streams, storm channels, and small pocket parks or town squares.



*Figure LU-9, Regional Center Element*

Large, medium, and small commercial businesses, along with office, civic, and multifamily residential uses, combine to form a neotraditional development or series of interconnected developments. Commercial and office structures do not exceed six stories, and residential density is up to ten dwelling units per acre (10 du/ac). Density may be increased with incentives such as open space, affordable housing, or transfer of development rights, depending on the zoning district standards.

Zion Crossroads lacks an adequate transportation system, especially to serve new development. Sidewalks, bicycle lanes, and transit service are nonexistent. Moreover, Zion Crossroads lacks a center of commerce and has no clear identity beyond the through-traffic amenities such as service stations and fast food chains.

## **Recommendations**

The following recommendations focus on the potential of Zion Crossroads as a center of commerce, employment, and higher-density residential uses. This includes creating an identity for Zion Crossroads, improving transportation for pedestrians, bicyclists and vehicles, protecting the natural features of Zion Crossroads through compact, efficient development, and enhancing economic and employment options.

**Create an identity by constructing gateways to Zion Crossroads.** Through street design and road enhancements, a Zion Crossroads gateway can be formally established. The Route 250 and Route 15 intersection presents an opportunity to introduce travelers to the rural character of Fluvanna County. Wide lanes, the absence of sidewalks and bicycle lanes, and a flat median contribute to the auto-oriented nature of this roadway. At high speeds, motorists barely notice the rural surroundings or local businesses. The traffic signal, overhead utility lines, and cluttered signage contribute to the poor visual quality of this gateway to Zion Crossroads. Addressing these functional and visual issues will greatly improve people’s first impression of Fluvanna County.

**Define a village-scaled center.** At the heart of this recommendation are two village-scaled complexes: one as a center for residential, neighborhood-scaled commercial and recreation, and the second as a higher-intensity commercial area, anchored by a major retail establishment.

A village-scaled center concentrates growth within clearly defined boundaries. Within these boundaries there is a mix of uses—residential, recreational, small-scale and more intensive commercial—as well as a clearly defined Main Street and recreation amenities. Much of the Fluvanna County portion of Zion Crossroads is rural. In order to retain this rural character, new growth should occur in specific areas that are clearly defined.

Zion Crossroads lacks a distinct town center, without which Zion could grow in a conventional strip development pattern. Higher-density, village-scaled development would distinguish Zion Crossroads as a regional center. Village-scaled development provides the necessary framework

for economic activity and community-oriented services while protecting the environment beyond the edge of the village center.

**Support mixed-use development.** Mixed-use development appropriate for Zion Crossroads should include multifamily housing, small, locally owned shops, larger retail development, and light industry. Zion Crossroads is also favored for more intensive uses that stimulate the county economy, provide jobs, offer a range of retail stores, and provide for leisure activity through parks and playing fields within the defined growth area. It may be appropriate to introduce a more flexible zoning classification to the area, in order to make economic development easier.

In any area, development needs to be paired with the availability of appropriate infrastructure (e.g., water, sewer). Intensive mixed-use development in Zion Crossroads must be appropriately phased with enhancements to the supporting infrastructure. As the county moves towards acquiring such infrastructure, economic development will become more feasible.

**Improve the safety and efficiency of the transportation system.** Coordinate safety improvements for Routes 250 and 15. Route 15 southbound from Interstate 64 is of particular concern, as many through travelers stop for fuel and food. The new diamond interchange alters existing traffic patterns, and these impacts should be studied. Traffic drops off significantly on Route 15 after its intersection with Route 250. Much of the traffic on Route 250 now uses Interstate 64. The Route 250/Route 15 intersection is an ideal roundabout location. A roundabout would improve the flow of traffic, provide safer pedestrian and bicycle access, and facilitate the creation of an attractive gateway from each of the four approaches. Roundabouts make intersections more attractive and safe for motorists, bicyclists, and pedestrians.



*Figure LU-10. Roundabout*

Other improvements can be implemented in the Zion Crossroads area for safety, overall attractiveness, and accessibility for all modes of travel. Crosswalks and sidewalks will further improve pedestrian safety and encourage activity along the corridor. Financial impacts and quantities of impervious surfaces (which contribute to stormwater runoff) can be reduced by installing sidewalks only on one side of the street.

The Northwest Fluvanna / Southeast Louisa Multimodal Corridor Study, which focuses on Route 15, Route 64, and Route 250 throughout the northwest Fluvanna, southwest Louisa, and eastern Albemarle corridor to create a transportation plan for the area, provides excellent descriptions and illustrations of the types of improvements desired along the corridor. Despite the time elapsed since the study was published, most of the elements discussed remain desirable and should continue to influence development in Zion Crossroads.





*Figure LU-11, Pedestrian Oriented Roadway Section*

**Increase alternative transportation options.** RideShare provides a free service to match travelers who are going to similar areas at similar times, and provide a car or vanpool service. RideShare participants are also enrolled in the Guaranteed Ride Home program, which provides free rides home in an emergency to users of alternative transportation. RideShare can work with employers in the Zion Crossroads area to develop and implement traffic-reduction programs that target the specific needs of the area's travelers. RideShare also maintains park-and-ride lots. Currently, there is only one park-and-ride lot in the Zion Crossroads area. New mixed-use development may also create new opportunities for park-and-ride lots, and for pairing park-and-ride lots with JAUNT transit service.

JAUNT has an eighty-vehicle fleet which provides transportation service throughout the region (City of Charlottesville, Fluvanna, Albemarle, Louisa, and Nelson counties). JAUNT is funded by local governments in the area, and uses federal, state, and local funding to supplement the fares its users pay.

**Protect the rural features of the Zion Crossroads area.** The development of Zion Crossroads need not come at the expense of its rural and environmental features. Two techniques serve to enhance both the rural and environmental features and the village-scaled development recommended in this plan. Siting development in areas that do not compromise natural features will preserve prominent rural and environmental features. If development is so sited, residents, shoppers, and employees will be in close proximity to these natural features, making the development areas more attractive and appropriate.

**Mitigate runoff through green street techniques, bio-swales, and reduced impervious surface in all new and remodeled development.** The county should encourage development that leaves natural features as intact as possible. Site disturbances such as excessive grading, unnecessary removal of helpful plants and trees, and large quantities of impervious surfaces all contribute to stormwater runoff and sedimentation (degrading the county's rivers and streams), reduces groundwater recharge, and generally results in a more attractive site. This low-impact approach to development often reduces a developer's costs, and allows the county to meet its stormwater management obligations. Best of all, it frequently requires little more than creative site planning.

Green street solutions help control stormwater while enriching the character of neighborhoods. Pedestrian-oriented street facilities can be designed to achieve water management and pedestrian goals. In particular, the same landscaping components of a street that add to pedestrian comfort can also perform stormwater retention and treatment functions, contributing to better flood control and water quality. Planting strips, planted medians, tree wells, and other planted areas can reduce urban runoff by retaining stormwater. The soils in these planted areas also remove pollutants, providing natural water treatment. Paved areas, such as parking lots and vehicle and bike lanes, sidewalks, and ball courts, if designed with porous surfaces and ample reservoir or infiltration capabilities beneath, can be used to improve water management. Considering these ideas will ensure that environmental sustainability and quality-of-life objectives are incorporated into the planning and engineering analyses of collection system improvements.

**Protect existing open, forested, and agricultural areas by clustering growth into defined areas.** As described above, new development should be clustered in carefully defined growth areas and sensitively placed in the context of rural and environmental features.



*Figure LU-12, Open Space*

**Employ conservation and open-space easements.** Conservation and open-space easements are designed to hold land in perpetuity. Nonprofit corporations, local governments, individual landowners, and subdivision landowners may set aside such an easement as defined by a homeowners association.

**Support economic development and community-based services.** Since much of what constitutes Zion Crossroads is in Louisa County, the main opportunities in Fluvanna County lie south of the Route 15 and Route 250 intersection. The current industrial park on Route 250 just east of this intersection is in both Fluvanna and Louisa counties and may have the potential for additional development. Encourage cross-county cooperation on economic development.

At present there is the potential for three centers or nodes in Zion Crossroads. First, north of Interstate 64 interchange in Louisa County; second, along the Route 15 strip between Interstate 64 and the Route 250 and Route 15 intersection, also in Louisa County; and third, south of the Route 250 and Route 15 intersection in Fluvanna County. This third center is undeveloped but has the potential for a mix of uses such as residential development of varying densities, large and small-scale commercial development, and light industry.

**Develop a marketing strategy and marketing plan.** Identify the community’s strengths in appealing to businesses and set goals that build on the identified strengths. These goals can then be used to prepare a marketing plan. A marketing plan identifies the specific actions to be taken to achieve the goals.

**Expand and diversify local tax revenue.** An expanded and diversified tax base can result from a diversity of uses as recommended in this plan. Higher-intensity commercial, locally based businesses and retail establishments, a workplace center, and light industry all contribute to an expanded and diverse tax base.

**Develop higher-intensity commercial use.** Zion Crossroads offers the greatest potential for higher-intensity commercial development. An “anchor” store with smaller retail establishments can serve as a regional center for shoppers.

**Encourage locally based businesses and retail establishments.** Care must be taken to avoid too many conventional, nationally based retail shops at the expense of local businesses. Locally based business and retail help distinguish the unique character of Zion Crossroads and tend to have a greater impact on the local economy.

**Site an integrated workplace development center in Zion Crossroads.** An integrated workplace center offers opportunities for offices and businesses, integrated into a walkable, mixed-use center. A campus-style complex offers an attractive workplace and, with sufficient infrastructure, could become a site for a corporate headquarters.

**Support development of additional light industry.** Light industry is usually less capital-intensive than heavy industry, and is more consumer- than business-oriented (light industry products are produced for end users—consumers—rather than as components for use by other industries). Light industry has less environmental impact than heavy industry and is more compatible with residential areas, albeit with an appropriate buffer. Increasing the flexibility of zoning in Zion Crossroads could help support industrial growth.

**Enhance tourism and related recreation.** Fluvanna County has many sites and facilities of interest to tourists. With its proximity to Interstate 64, Zion Crossroads is an excellent location for a tourism / visitors’ center.

**Improve the quality of employment opportunities.** Good pay, upward mobility, and employee benefits are all important to improving the quality of employment opportunities. A workplace center/office park, as opposed to retail establishments, offers more opportunities for full-time employment with benefits and opportunities for advancement. Efforts and incentives to recruit employers should make this priority apparent.

**Study the feasibility of Zion Crossroads as a satellite location for Piedmont Virginia Community College.** An adult distant learning campus, with classes for professional advancement, can contribute to improvements in the quality of employment. Educational

facilities also draw additional people and businesses to the area, which directly helps the economy. If the satellite location focuses on career development, it can act as an anchor for further economic development. For example, a nursing program could attract urgent care or geriatric facilities to Zion Crossroads.

**Support the vocational and technical job demands of the current and future job market.** The Virginia Workforce Network offers employment services, with key services based in Charlottesville. Zion Crossroads could be a future site for a satellite center or, at a minimum, a location for a workforce information booth.

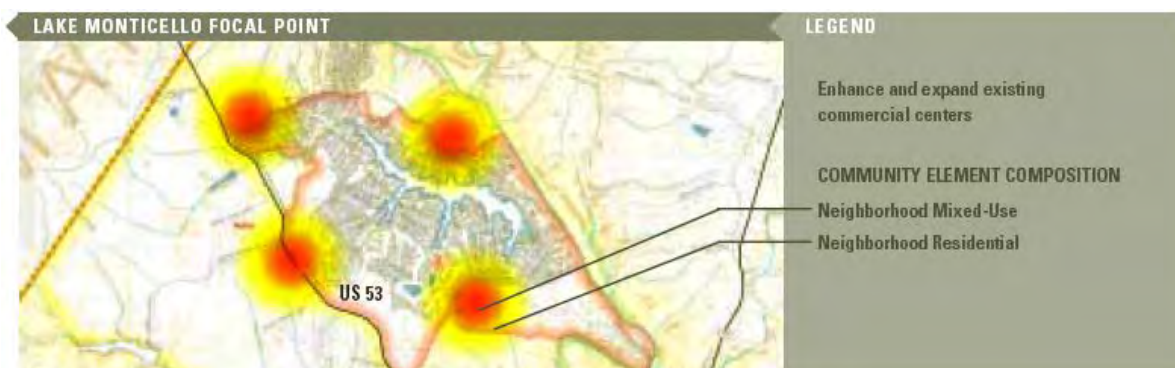
## Rivanna (Lake Monticello) Community Plan

### Overview

The Lake Monticello area of Fluvanna County has grown rapidly in recent years. As the Lake approaches build-out, its proportion of the county's growth has diminished, although the area surrounding the Lake still sees robust growth. The private Lake Monticello community has a dominant presence in this part of the county, and a significant number of residents live close by. Lake Monticello and the surrounding area make up most of the Rivanna District and a portion of the Cunningham and Palmyra Districts of Fluvanna County.

The private community of Lake Monticello encompasses approximately 3,500 acres, containing 4,625 lots, 418 of which remain vacant. The lake itself is 350 acres. Residents include retirees, young families, and commuters to Charlottesville and Richmond. Residents pay dues to the Lake Monticello Owners' Association (LMOA), which is responsible for community services and general maintenance of community infrastructure, including sixty-two miles of private roads. Water and sewer service is provided through a private source.

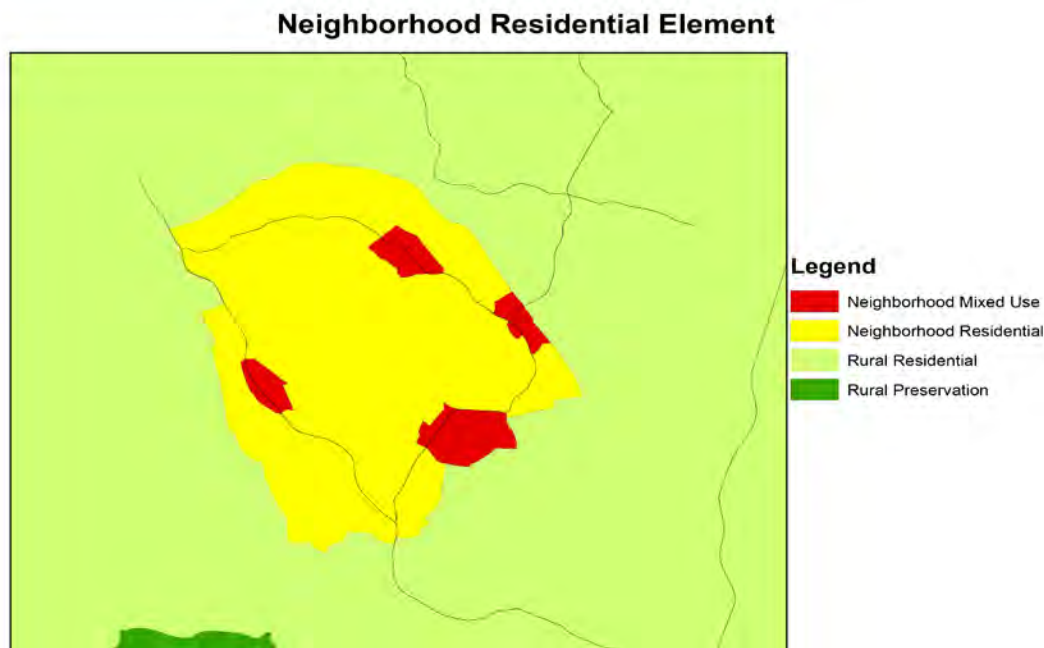
While there are a range of opinions on the extent and type of growth desired, most residents agree that it is important to take steps to maintain the rural character of the surrounding area, enhance the "country suburban" character of the community, promote a vibrant quality of life for residents, and plan for the future.



*Figure LU-13, Neighborhood Mixed Use around Lake Monticello*

The Lake proper is nearing build-out, but there is significant growth outside of the Lake. The desirable form of growth at the “Lake gates” is neighborhood mixed-use. Beyond the gates, growth should be neighborhood residential development.

Home to approximately half of the county’s residents, largely in the Lake Monticello community, this community planning area (established pursuant to the Code of Virginia, section §15.2-2223.1) lies adjacent to the municipal services of the Palmyra area, but also has the significant private infrastructure of the Lake community. The area is traditionally neighborhood residential, with primarily single-family detached dwellings. Surrounding growth should be a mixture of uses and residential dwelling types that serve a variety of incomes. Neighborhood



*Figure LU-14, Neighborhood Residential Element*

mixed-use is needed to help offset the volume of single-family residential development in this community. Additional services and infrastructure are needed to accommodate more growth. Commercial and neighborhood streets, along with rural roads, make up the transportation network, along with sidewalks, trails, and bicycle lanes in the newly developed areas. Open space includes access to Pleasant Grove, neighborhood parks, and greenways.

Medium and small commercial uses, along with office, civic, and residential uses, combine to form a series of neotraditional developments that are interconnected with surrounding development. Commercial and office structures do not exceed four stories, and residential density is up to six dwelling units per acre (6 du/ac). Density may be increased with incentives such as open space, affordable housing, or transfer of development rights, depending on the zoning district standards.

## Summary of Community Plan

In previous studies, residents identified key strategies and projects to improve the quality of life for residents inside and outside of Lake Monticello. Participants agreed upon several priorities, including:

- To increase traffic safety and improve flow at key intersections.
- To enhance existing commercial centers in appearance, design, and available services, focusing on “village center” concepts.
- To provide housing choices for a variety of age groups and income levels, appropriate to the area.
- To preserve the rural character of the surrounding area and protect natural resources.

## Recommendations

**Improve traffic safety.** Large volumes of traffic on small country roads lead to safety problems. Improving intersections, paving shoulders, and adding features for pedestrians and bicycles can alleviate traffic and promote safety. This becomes essential as the county’s population grows. Roundabouts can improve pedestrian access and safety over typical intersections.

**Create walking and biking trails.** Biking and walking trails provide safe access for residents to commercial areas, decrease traffic for short trips, and provide recreational facilities. There are dirt footpaths in many areas, showing where people walk from the gates to commercial areas.

**Enhance commercial areas as village-scaled communities.** There are existing commercial areas just outside of the Lake Monticello gates, including Piedmont Village, Crofton Plaza, and Jefferson Centre. Clustering development around existing centers preserves rural areas.



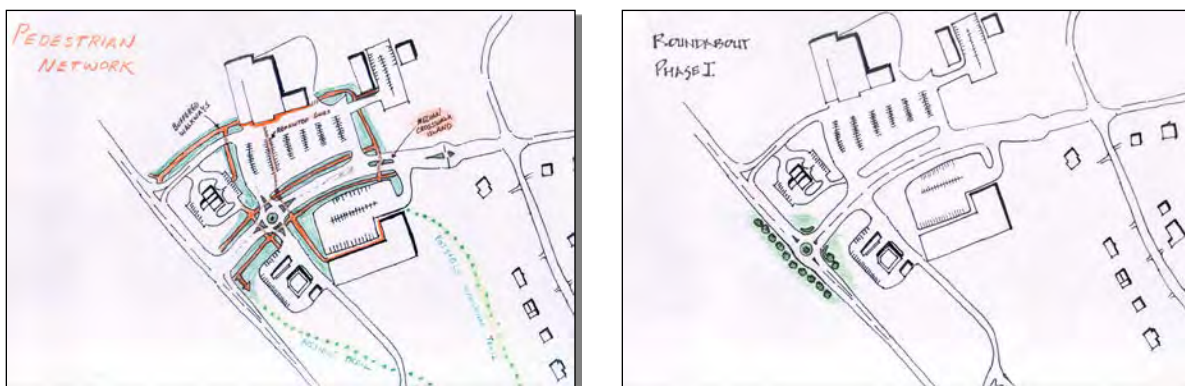
*Figure LU-15, Median splitter islands and set-back crosswalks*



*Figure LU-16, Several conceptual options for village-scaled infill development in the Turkeysag Gate shopping center*

**Preserve natural resources and rural character.** The health of the Lake and surrounding land and waterways is important to the health and vitality of the environment and economy of Lake Monticello.

**Provide community services and amenities.** Cultivating community services and amenities improves the quality of life for residents of all ages, decreases traffic to and from Charlottesville, and connects neighbors. Suggestions for services include a post office, library, senior services and adult day care, hiking/biking trails, and a movie theater.



*Figure LU-17, Potential pedestrian network (left), and possible roundabout at entry (right) for capacity and safety*

**Encourage housing for seniors and a growing workforce.** Healthy communities include housing for people in a range of income levels and ages. Although housing is more affordable than in nearby urban areas, prices are rising steadily.

## Palmyra Community Plan

### Overview

Centrally located, Palmyra serves as the county seat and governmental center. The village has natural and social resources that form a village atmosphere. These include the historic courthouse, Old Stone Jail and Main Street residences and businesses, the county administrative offices and courthouse, and the businesses that front Routes 15 and 53. Palmyra is one of the county's designated growth areas (established pursuant to the Code of Virginia, section §15.2-2223.1).

The area to the immediate south and southwest of the village should develop as a neighborhood mixed-use area. The area directly to the north and east of the village acts as a transition to the county's more rural elements, and future development should reflect this.



*Figure LU-18, Sign for Village of Palmyra*



*Figure LU-19, Old Stone Jail*

Commercial and neighborhood streets, along with rural roads, make up the transportation network, along with sidewalks, trails, and bicycle lanes. Open space includes Pleasant Grove, neighborhood parks, and greenways, along with the town square.

A mix of medium and small commercial businesses combines with office, civic and residential uses to form a village-like neotraditional development or series of interconnected developments. Commercial and office structures do not exceed three stories, and residential density is up to four dwelling units per acre (4 du/ac). Density may be increased with incentives such as open space, affordable housing, or transfer of development rights, depending on the zoning district standards.

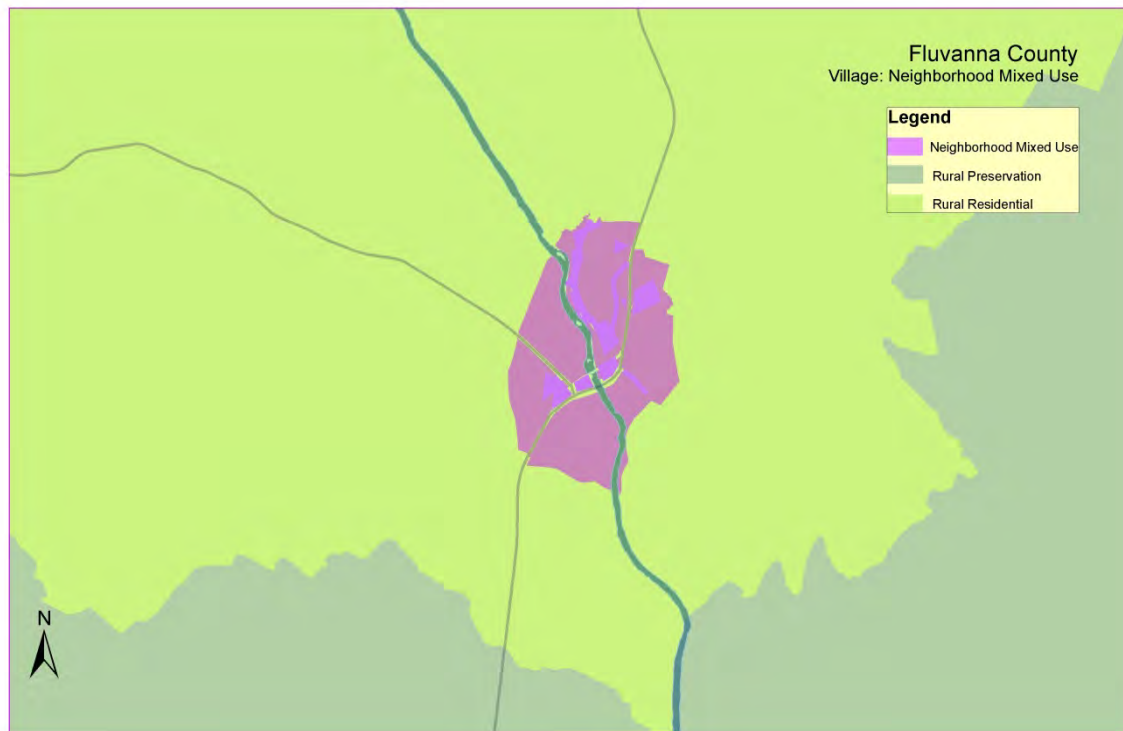


Growth in the Palmyra area should occur at the village scale described in the previous chapter (“Community Elements Standards”), with economic and residential development complementing the existing conditions and fostering street life. Existing and new development must be served by a safe, efficient, multimodal transportation system that respects pedestrians and cyclists. New development should not compromise the natural and social fabric unique to Palmyra.

New housing should complement existing historic resources and expand the population base for local businesses. Economic development is desired in this area, and opportunities for tourism, such as commercial uses that complement the historic aspects of Palmyra, should be promoted.

The Palmyra Community Plan aims to fulfill the following goals:

- To enhance and maintain the village-scale atmosphere of Palmyra.
- To improve the safety, efficiency, and diversity of the transportation system.
- To protect the social and environmental resources of the area.



**Figure LU-20, Neighborhood Mixed Use Village**

## Recommendations

### Enhance village character.

- Remove the rural edges of the Palmyra CPA.
- Consider additional zoning or regulations to preserve the rural character at the edges of the Palmyra CPA.
- Improve the streetscape by burying utility lines, completing the sidewalk network through the village, installing streetlamps, and constructing a centrally located town clock.
- Install a gateway median and welcome signs on Route 15.
- Consider design guidelines for development around the Route 15 gateway.

### Guide village-scaled development.

- Develop guidelines to foster village-scaled developments that include a mix of building types, commercial uses, local jobs, increased retail options such as shopping, cafés and restaurants, and affordable housing.
- Seek out commercial uses that complement historic features and integrate new development with existing assets.
- Explore expansion of the historic district to include the area south of Stoneleigh Road and east of Route 15.



*Figure LU-21, Historic Courthouse*

### Improve the safety and efficiency of the transportation system.

- Increase transportation choices by improving bus service, promoting participation in RideShare, and developing visible and accessible park-and-ride locations.
- Implement a plan to improve safety on Route 15 that includes roundabouts or other safety and capacity improvements, a median island, and curb and gutter enhancements for access management.
- Improve connectivity to Pleasant Grove.
- Enhance the pedestrian network by improving access and incorporating streetscape enhancements and traffic-calming measures.
- Ensure that pedestrian and bicycle facilities on Route 15 mirror those on the new Route 15 bridge.

### Protect social and environmental resources.

- Encourage development that fosters social interaction and takes advantage of the natural beauty of the area.
- Actively preserve open space and the rural character of the area by clustering new development on a village scale, partnering with local and regional agencies, and analyzing the size of the Palmyra community planning area.
- Support the county's efforts to develop a stormwater management ordinance and a dark-sky ordinance.

## Fork Union Community Plan

### Overview

Located in the southeastern center of Fluvanna County, the Fork Union CPA contains 3,366 residents. This includes the village of Fork Union as well as the surrounding areas such as West Bottom, Thessalonia, Cloverdale, Weber City, and Dixie. While certain areas of the county have experienced dramatic growth in recent years, others have struggled to maintain economic viability. According to the 2010 Census, 7.2 percent of the area's families were living below the poverty level. Fork Union is a designated growth area (established pursuant to the Code of Virginia, section §15.2-2223.1).

Most people who live in Fork Union commute out of the area to work. In 2010, the mean travel time to work for Fork Union residents was 35.4 minutes, compared to 32.2 for Fluvanna as a whole. This indicates that many people commute to Charlottesville or possibly to Richmond for work. With many of its residents commuting long distances to work, maintaining a sense of place and community can be difficult. With the advent of additional roadways easing traffic flow from Richmond, it is anticipated that more people who work in Richmond will move to the area, and more Fork Union residents will commute to Richmond for work.

The county has received several transportation enhancement grants for streetscape and traffic safety improvements in Fork Union. Design has begun on village signage, crosswalks, improved sidewalks, and street lighting in Fork Union Village.

This historic village area is home to the Fork Union Military Academy and has access to some of the academy's recreational amenities and open space. The area should remain a village, and surrounding growth should be a mixture of uses and residential dwelling types that serve a variety of incomes.

### Recommendations

**Enhance village character.** Areas along Route 6 and West River Road in Fork Union proper should continue to be developed as a village, and the areas to the northeast should develop as neighborhood residential areas. One of the major obstacles to achieving the development needed to revitalize Fork Union is the lack of an adequate sewer system. Securing an improved sewer and water system in Fork Union is a necessary step to redeveloping the village of Fork Union.

Fork Union would benefit from a stronger sense of community, making it a comfortable and desirable location for residents and visitors. This can be done by creating visual entrances to the village of Fork Union, beautifying buildings and landscaping, and encouraging compact growth in the downtown area, while preserving the rural nature of the surrounding areas.

**Create community support and activities.** Fork Union has many resources, including dedicated residents and business owners, natural beauty, a community center, and religious and education institutions. In order to build upon these resources, community members should consider establishing an organization to implement priority projects and organize community events.

**Improve the community transportation network.** Commercial and neighborhood streets, along with rural roads, make up the transportation network, along with sidewalks, trails, and bicycle lanes. Neighborhood parks and greenways are an integral part of new development. A mix of smaller-scale commercial businesses, along with office, civic, and residential uses, form a village-like neotraditional development or series of interconnected developments. Neighborhood residential development is also appropriate within the community planning area. Commercial and office structures do not exceed three stories, and residential density is up to four dwelling units per acre (4 du/ac). Density may be increased with incentives such as open space, affordable housing, or transfer of development rights, depending on the zoning district standards. Several transportation-related improvements, such as the streetscape enhancement project, will enhance the safety and appearance of Fork Union.



*Figure LU-22, Open Pasture near Fork Union*

**Foster a thriving economy with local conveniences.** Possible locations for economic development include downtown (Routes 6 and 15) and the Village Shopping Center. Encourage development in the existing commercial areas to preserve rural feel. Assess existing services and determine what demands are not met. Prioritize renovation over new construction.

**Provide affordable housing.** Healthy communities include housing for people of all income levels.



*Figure LU-23, Possible Bike Path in Fork Union*

**Preserve natural and historic resources.** The Fork Union District is full of natural and historic resources to be valued and protected.

**Ensure adequate infrastructure to support existing and future needs.** Chief among the obstacles to revitalizing Fork Union's downtown are the lack of an adequate sewer system and limited well capacity. Securing an improved sewer and water system is vital to developing the village of Fork Union.

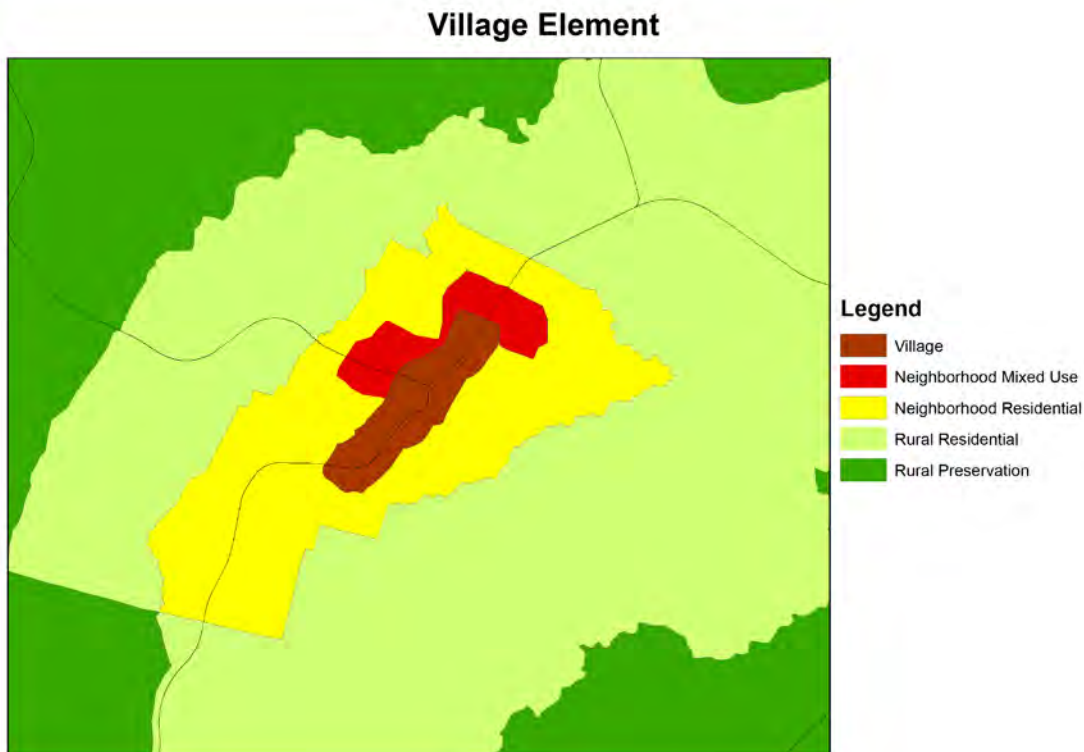
## Columbia Community Planning Area

### Overview

In March 2015, the citizens of the town of Columbia voted to annul and repeal the town charter and fully absorb into Fluvanna. Columbia was one of Virginia's smallest incorporated towns. The county will now be responsible for developing and implementing a plan that will enhance the area's natural and historic assets while ensuring that its residents are not unfairly displaced or deprived of necessary services.

This area lies mostly within a floodplain and needs to be comprehensively revitalized either as a village or neighborhood mixed-use project. There are potentially beautiful views of the Rivanna and James Rivers, but development is highly constrained by the existing floodplain and the presence of blighted buildings.

In the future, the existing rail line along the northern bank of the Rivanna and James Rivers could be used for commuter transportation to Richmond, as well as increased freight. This historic town once relied heavily on the confluence of the rivers for commerce, and this feature can still be an excellent heritage and ecotourism destination, with the rail line serving as a commerce and commuter lifeline.



*Figure LU-24, Village Element*

Neighborhood streets with a main street, along with rural roads such as Route 6, comprise the transportation network. Sidewalks, trails, and bicycle lanes are needed. The floodplain in this area, while unusable for residential and commercial structures, lends itself to an extensive park, greenway, and trail network.

Columbia's status is fluid – while its citizens made it clear in 2015 that Columbia's future is as an area of Fluvanna and not as a separate town, the change becomes official in 2016. As Fluvanna and Columbia face this change together, Fluvanna's leaders and staff will be responsible for making the transition a smooth one. Columbia needs effective zoning and subdivision regulations, a plan for future infrastructure, improved transportation, and the removal of current blight. These goals must be approached strategically – revitalization measures should complement one another and the rest of the Comprehensive Plan. Communication with residents will play an indispensable role in pursuing these goals for the area. Residents are the ultimate stakeholders, and their well-being and ability to have a voice in this process is essential.

### **Scottsville Community Planning Area**

The county's newest community planning area, Scottsville is also a historic town that lends itself to well-planned neighborhood mixed-use development with some limited neighborhood residential on the periphery. All development should enhance the character of the area and reinforce the village-like atmosphere of the town.

Neighborhood streets, along with rural roads such as Route 6, comprise the transportation network. Sidewalks, trails, and bicycle lanes are needed. The rail line also could be used for commuter transportation to Charlottesville and Richmond, as well as increased freight.

A mix of smaller-scale commercial businesses, and office and residential uses, forms a village-like neotraditional development or series of interconnected developments. Commercial and office structures do not exceed two stories, and residential density is up to four dwelling units per acre (4 du/ac). Density may be increased with incentives such as open space, affordable housing, or transfer of development rights, depending on the zoning district standards.

To most efficiently serve the Scottsville community, it is desirable that Fluvanna, Albemarle, and the town of Scottsville cooperate. This can occur through shared resources and collaborative planning.

### **Rural Areas**

Maintaining the rural character of the county is the principle vision that drives this plan (see Appendix A, "2006 Planning Issues Survey"). Two land-use designations with that goal in mind were identified in the 2000 Comprehensive Plan: rural residential and rural preservation.

## Rural Residential

Rural residential areas are linked to the rural cluster community element and generally surround the six community planning areas. Rural residential areas conserve open space by clustering development or developing on larger lots. Projects should achieve the goal of preserving as much open space, and thus rural character, as possible. The open space should be strategically located to preserve viewsheds from roads and existing developments, and to be used by the residents of the planned community. Open spaces in subdivisions should be available to the community for rural uses such as farming, wildlife, and recreation.

Streets are neighborhood streets within developments, or rural roads. Commercial and multifamily developments are limited, neighborhood-oriented, and smaller in scale. Multiuse trails should connect rural cluster developments wherever possible. Provisions should be made for future connections.

Some mixed-use development may be possible at a very small, rural neighborhood scale, but most development is single-family or two-family residential projects with limited commercial uses. Structures do not exceed two stories, and residential density is up to one unit every two acres gross (i.e., counting the acreage for the whole parcel), or six units per acre net (i.e., just the developable area, not including the permanent open space), whichever is most restrictive. There are no density incentives outside of the cluster development concept in the rural residential areas. Larger subdivisions should be located within identified community planning areas and discouraged in the rural residential areas.

## Rural Preservation

The rural preservation areas are intended to be the least developed areas of the county. Large parks, agricultural and forestal districts, working farms, and passive open spaces should comprise most of the land use, with very low-density residential development. The open space should be strategically located to preserve viewsheds from roads and existing developments, and to be used by the residents of the planned community. Open spaces in subdivisions should be available to the community, be available for rural uses such as farming, wildlife, and recreation, and minimize or exclude utilities such as wells and septic fields or reserve areas.

Large subdivisions in the rural preservation areas should be discouraged. Rural roads, two-story structures, single-family dwellings, home occupations, and country stores are examples of the most intense developments that should generally occur.

## Rural Design

Preserving the character of the rural preservation and rural residential areas presents a special challenge for the county, particularly with existing by-right development rights (one dwelling unit per two acres). These areas contain the majority of the county's land mass, and with the evolution



*Figure LU-25, Rural Cluster*

of alternative wastewater systems, will be subject to intense development pressures as Fluvanna's population continues to grow. Current zoning encourages a majority of developed land to remain as significant open space to maintain the county's rural atmosphere and to provide large contiguous expanses of green space.

Rural design means that clear boundaries exist between rural and development areas. This principle minimizes sprawl in the rural areas and supports the efficient development of growth areas. Historically, Fluvanna's villages had discrete boundaries with rural land surrounding the village. Rural design reinforces this historical trend.

In 2004, the Board of Supervisors adopted residential cluster development regulations. Cluster development became mandatory for the subdivision of more than 5 lots in the A-1 district and an alternative development style in other residential districts. For A-1 clusters a minimum of 75 percent open space is required, but this open space can be configured in a variety of ways and with a diverse number of uses. Cluster developments in the R-1, R-2, and R-4 zoning districts are required to preserve no less than 50 percent of the site as permanent open space, while the R-3 district requires 25 percent. Clustering single-family homes on small lots decreases infrastructure costs for the developer, and reduces long-term maintenance costs. Clustering has other advantages, such as preserving open space and agricultural land, protecting environmentally sensitive areas, helping to maintain viewsheds, and reducing pollution.

### *Open Space*

The common element among all rural development is open space. The utilization of green infrastructure in a project is the key to its long-term success or failure. Green infrastructure means efficiently using the land upon which a project is located. Greenways, parks, trails, and undisturbed areas all comprise a project's green infrastructure and allow it to fit into a rural environment. Open space can buffer residential development from surrounding agricultural uses, which is a benefit to both the residents and the farmers. Open space can separate different uses within a development, and is particularly effective within compact developments in growth areas.

Open space reaches its true potential when arranged contiguously (sharing boundaries). Contiguous open space provides vital habitat and corridors for plants and wildlife, resulting in healthier and more diverse natural areas. Contiguous open space is more effective at protecting streams and ponds from runoff pollution and at recharging groundwater. Contiguous open space provides larger recreational areas and contributes to a more natural, rural feeling community. Additional organization and coordination is required to arrange open space contiguously, but the associated advantages and efficiencies reward such efforts. When considering developments, the presence of contiguous space enhances a project's desirability.

## **Scenic Views and the Rural Landscape**

### *Preserve Rural Community and Landscape*

The small town and rural character of the community is a major asset, and depends on the



quietness of the area, its relative remoteness, the scattered village centers, farmhouses, isolated homes, open land scattered with forests and wildlife, and livestock. If Fluvanna is to remain rural, these qualities must be protected.

#### *Protect and Enhance Natural Features*

Natural features – streams and rivers, steep slopes, prime agricultural land – contribute to the ecological health and scenic quality of the county. Clustering of development in rural areas can protect these natural features and the systems they comprise. Through technical analysis of a site, natural resources can be identified. Once identified, they can be protected by clustering residences on areas without sensitive natural features. Not only are scenic vistas preserved; trails can be built to provide access to natural areas, to the benefit of residents.

#### *Protect Scenic Views*

Comments from the citizens focus on the need to preserve the scenic beauty of Fluvanna County. Threats to this resource include incompatible development, inconsistent or insufficient regulations, growth pressures, and pollution and litter. These scenic views are often located along important corridors, and can serve as “gateways” into the community. Special measures, such as “scenic corridor” regulations, could be taken to preserve these views.

### **Gateways and Corridors**

#### **Primary Gateways and Corridors**

- ◆ Route 250 (Richmond / Broad Street Rd)
- ◆ Route 15 (James Madison Highway)
- ◆ Route 53 (Thomas Jefferson Parkway)
- ◆ Route 6 (East and West River Road)

#### **Secondary Gateways and Corridors**

- ◆ Route 600 (North / South Boston Road)
- ◆ Route 601 (Courthouse / Venable Road)
- ◆ Route 610 (Community House Road)
- ◆ Route 659 (Stage Junction Road)
- ◆ Route 613 (Bybees Church Road)
- ◆ Route 616 (Union Mills Road)
- ◆ Route 619 (Ruritan Lake Road)
- ◆ Route 620 (Rolling Road South)
- ◆ Route 637 (Antioch Road)
- ◆ Route 640 (Haden Martin / Shores Road)
- ◆ Route 649 (Central Plains Road)
- ◆ Route 659 (Cedar Lane / Kents Store)

Features such as open space, signs, landscaping, and parking areas affect the visual quality of gateways and corridors. Informal and formal



*Figure LU-26, Tree-lined Street*



*Figure LU-27, Good Landscape Buffers*

measures are available to address the needs of these corridors. These methods include increased regulation of design within corridors, the Virginia Department of Transportation's Adopt-a-Highway program, community cleanup drives, and entrance-area landscaping.

Rural residential and rural preservation planning areas comprise the majority of the county. These areas are a mix of residential subdivisions, open space, and agricultural and forestal districts as well as farmland and historic resources. These areas have scattered housing and the least commercial and industrial development. It is the desire of county that these areas should remain primarily rural, with an appropriate mix of land uses.

### **Environment**

The rural residential and rural preservation planning areas encompass much of the county's prime forest and farmland. The largest ag/forestal districts are located there, as well as most conservation easements. These planning areas comprise a large portion of the county's watershed.

Development in these planning areas should be designed to manage erosion, stormwater, and nutrient loads into streams and rivers. To achieve this goal it is necessary to minimize site disturbances such as excess grading and removal of vegetation. Traditional developments are not appropriate for these areas but large-lot or rural cluster neighborhoods that employ sustainability and preservation development techniques could be very compatible with these rural areas.

Agricultural and forestry operations that institute best management practices to minimize soil loss and nutrient loading of streams ought to be encouraged.

The county should encourage wider use of conservation easements and expansion of ag/forestal districts as a means of protecting natural resources and open space.

### **Economic Development**

The rural residential and rural preservation planning areas currently offer very limited commercial and industrial uses. Some additional commercial services for the convenience of those living out in the country are appropriate and may be considered if these uses are designed and arranged to complement the rural character of the area and its surrounding uses. These uses are especially encouraged around existing communities from the county's past, including Kents Store, Kidds Store, and Cunningham. However, agricultural and forestal districts that will limit development opportunities surround many of these areas.

Landholders in these planning areas should be given the opportunity to pursue options that will supplement their income. This is particularly the case for landowners who may need to supplement their income in order to maintain rural land uses. Although these areas do not have the population base or location attributes to attract much commercial development, other types of development may be appropriate and should be reviewed on an individual basis.

For example, farmers or foresters could augment their income with a small cluster development of residences sheltered off the road and a farmhouse-style office building. In this manner, most of the land could be retained for farm or forestry use while also providing work and housing in a pastoral setting. To the maximum extent possible, nonagricultural land uses should complement agricultural lands and operations. When development occurs, appropriate buffering should also be required when differing uses adjoin each other.

### **Housing**

There is growing pressure for housing development in the rural residential and rural preservation areas. Until recently, they had the fewest number of subdivision lots approved in the county; however, with Lake Monticello nearing build-out, several large subdivisions have received preliminary approval. In order to preserve the rural nature of these planning areas, most housing development should be redirected to the community planning areas.

Current zoning encourages cluster development, but still allows for individual lots (i.e., strip development) along rural roads, which is contrary to the desired pattern of development in many ways. Housing developments should minimize access points and be adequately set back from roads. Housing developments of a significant magnitude should be clustered and incorporate open space or limited to large lots. Open-space provisions could enhance rural character and be used to buffer residential subdivisions from adjacent agricultural uses. Areas of farmland should be identified and preserved for future agricultural needs. Requirements for dry hydrants should be explored for all housing developments.

### **Infrastructure**

Private wells and septic systems serve the vast majority of this planning area. Large-lot subdivisions are typically dispersed enough to utilize traditional well and septic systems. However, due to environmental concerns regarding failing septic systems and recurring drought, newly approved major cluster subdivisions should have carefully designed water and sewer systems that ensure ongoing and proper maintenance.

The Fork Union Sanitary District provides water to portions of Carysbrook and its middle school; in order to limit development primarily to the community planning area, however, the expansion of this infrastructure is not recommended outside of the Fork Union planning area. As a whole, the extension of utilities and other growth-inducing public facilities should be discouraged in these areas, but may have limited availability for specific uses and locations.

### **Transportation**

Route 616 and Route 619 are two of the major secondary roads that traverse through rural residential and rural preservation planning areas. Route 616 is the most heavily traveled secondary road in the county and is quite scenic. Route 619 is part of the U.S. Bicycle Route 76.

Blank Page

## Chapter 3

# INFRASTRUCTURE

### *Building Blocks of the Community*

The term “infrastructure” can describe more than one thing:

- Water, sewer, transportation, and open space are integral to each community planning area. The county’s taxpayers benefit from a diverse mix of uses and incomes within projects, which is made possible through the provision of green and traditional infrastructure.
- Green infrastructure includes stormwater management and other development techniques that are sustainable, and are a fundamental component of development that respects the physical environment.

Infrastructure improvements require significant funding for initial development and continual maintenance and operation. Comprehensive planning is vital to ensure the highest benefit is provided to the citizens in exchange for the cost of these services.

Sustainable infrastructure is the result of careful planning, design, and implementation. The development community, with input and direction from the county and other government agencies, is essential to this process. Infrastructure should be designed in accordance with the best available technologies and environmental practices. Renewable sources of energy generation are encouraged and supported.

The county’s capital improvement program (CIP) guides development of large-scale projects for which costs exceed the amount normally available in the annual budgeting process, such as water and sewer, or government buildings. The CIP ensures that major projects, considered together, are within the fiscal reach of the county. The county continually reexamines the efficiency and cost savings in its operations.

The cost-effectiveness and efficiency of water and sewer infrastructure is critical to the county. These systems are carefully managed and require cooperation from the county and state, with particular attention to future operation and maintenance needs. Central systems are bonded if privately operated and maintained, and carefully regulated by state agencies.

Green infrastructure addresses stormwater issues by reducing quantities of stormwater runoff and associated pollutants. Stormwater controls throughout the county, placed with

cooperation from major developments and individual landowners, protect critical drainage areas. The county also enforces its own stormwater management ordinance.

Telecommunications infrastructure is now critical for daily life and economic development. The county will continue to seek ways to improve telecommunications infrastructure in a manner that minimizes the proliferation of towers and the impact to the county's viewshed.

## EXISTING CONDITIONS

Lake Monticello, Fluvanna's 4,200-home subdivision, has its own water and sewer infrastructure. As Lake Monticello nears its building capacity, the county's growth has slowed to what is comparable to the mid- to late 1970s. Fluvanna and Louisa counties are planning to provide water to the Zion Crossroads area and the Route 250 corridor. This new infrastructure will direct development to community planning areas (primarily Zion Crossroads - established pursuant to the Code of Virginia, section §15.2-2223.1), making it paramount to rural conservation.

### Local Government Facilities

The county must manage its own facilities well. This requires planning and budgeting for periodic renovations, major capital repairs, asset replacement (vehicles, HVAC systems, and so on), and new facilities. Many of these items can be planned for in advance, but maintaining existing infrastructure and facilities requires rapid response to unexpected needs such as premature equipment or structure failure.

Please see attached spreadsheet for an over-view of work which is known to be needed at County-owned buildings. The list is not complete since all buildings have not yet been fully inspected/studied. A comprehensive analysis is currently underway of the Administration Building. Results are forthcoming. A staff-level Space Study is also underway in an effort to identify needs and maximize efficient use of every building.

School, park, and public safety improvements are detailed in chapters 8, "Education," 11, "Parks and Recreation," and 12, "Public Safety."



*Figure I-1, Fluvanna Courthouse*

### Water Systems

The county has one large, private, central water system and several smaller systems. The largest water system serves the Lake Monticello community, where over 40 percent of Fluvanna's population resides. This private water system is owned by Aqua Virginia and draws from the Rivanna River. The maximum daily withdrawal rate for the plant is 2.5 million gallons per day (mgd) with an annual withdrawal of 400 million gallons (which equates to a 1.1 mgd average withdrawal rate). River flows in the Rivanna are usually adequate, but also highly variable and occasionally subject to periods of severe drought. During such low-water periods,

in-stream flow may be restricted by natural conditions and the demands of upstream localities and industrial users.

Other systems include the Fork Union Sanitary District, the Central Elementary system, the Fluvanna County High School system, and privately owned systems operating in Palmyra and Columbia. All of these systems draw from public wells. The county's other residents draw their water from private sources such as wells or springs.

The Fork Union Sanitary District provides water through twenty-six miles of pipe to roughly 425 customers, including residences, small businesses, Dominion's Bremono Bluff power plant, the Fork Union Military Academy, Carysbrook, and Fluvanna County Middle School. The district's service area includes Bremono Bluff, Fork Union, Thessalonia, Cloverdale, West Bottom, and portions of Carysbrook. In 2007, the system enhanced its volume and pressure by replacing two ground-level standpipe storage tanks with two elevated storage tanks. While this increased pressure was a positive step for the system, it highlighted the fact that the remaining infrastructure was aging.

The availability of water and sewer infrastructure can be considered the primary constraint on development in the county. The economic development of Zion Crossroads depends on the provision of water and sewer, and development in the rest of the county will be largely influenced by the location, availability, and capacity of new infrastructure. Infrastructure plans vary for different parts of the county. All of these options, and more, are the issues which require comprehensive analysis during the ongoing process of developing a County-wide Water & Sewer Master Plan.

### **Zion Crossroads**

The county is preparing to issue a request for proposals (RFP) for the water system's design. The initial source and capacity of water and sewer will come from the purchase of excess from the Department of Corrections, whose Women's Correctional Facility is located on Route 250, west of Zion Crossroads. Potential additional water sources include groundwater, an upgrade of DoC's Water Treatment Plant, and JRWA raw water, which could be treated by either Louisa County or the construction of a new treatment plant.

Potential additional sources of sewer capacity include an expansion of DoC's Wastewater Treatment Plant, a purchase of capacity from a neighboring municipality such as Louisa or Albemarle County, or the construction of a wastewater treatment plant with sub-surface disposal.

### **Fork Union**

The county is investigating two existing wells as potential additional water sources (Carysbrook & FUMA). A rate increase is being sought to fund system improvements. Major maintenance and repairs are needed for the Morris and Omohundro wells and water treatment plants.

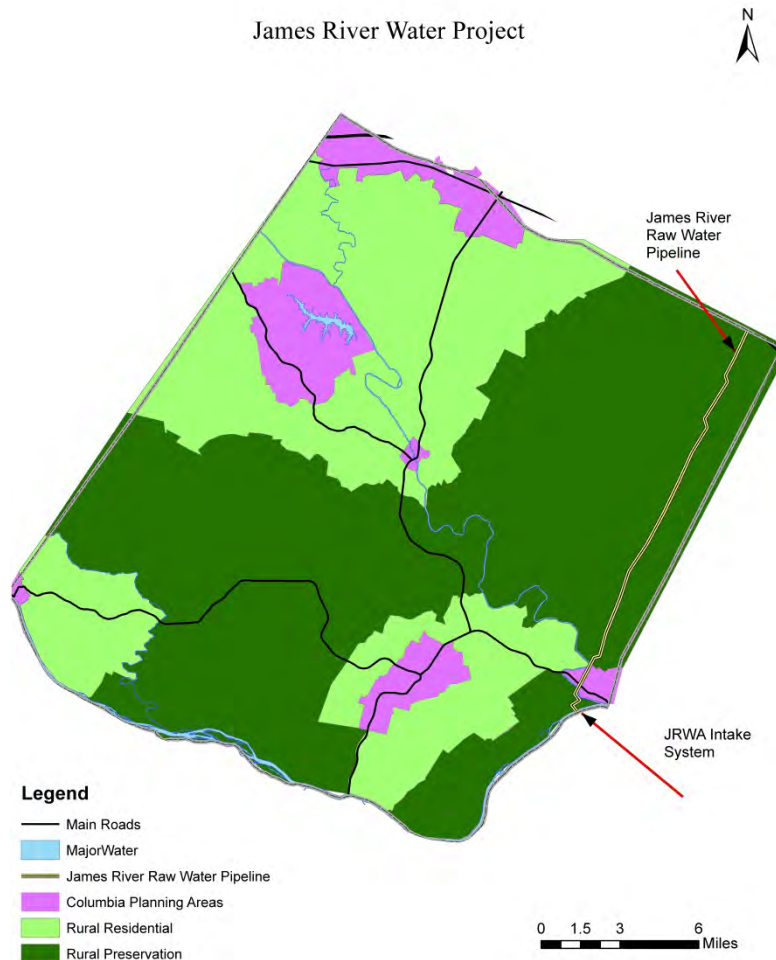
A hydrogeologic study is recommended when funding becomes available. Extending or expanding FUSD water system is not advisable until an additional water source is on-line and certain water line improvements/replacements have been completed. To date, it does not appear the provision of sewer service to the Fork Union area has been seriously investigated.

### Palmyra

There is an existing water system, owned by Aqua in Palmyra (formerly held by Sydnor) which must be accounted for when considering the provision of public water service to the area. Fluvanna County owns several wells at Pleasant Grove, which serve various portions of the park and the municipal buildings located there. Fluvanna County also owns a well which serves the Courts building with domestic water and fire control service.

Potential sources of water for a future public water system in Palmyra include existing and newly developed groundwater resources, a feeder line from Zion Crossroads or Fork Union/Carysbrook, a purchase of excess water from Lake Monticello, or the establishment of a water treatment plant (WTP) in or near Palmyra. The Palmyra WWTP has limited sewer capacity, and according to the DEQ's nutrient regulations, limited-to-no ability to expand.

**Figure I-2, James River Raw Water Project**





## Sewer Systems

The primary resources available to provide sewage collection and treatment in the area are the activated sludge treatment plants serving Lake Monticello and the package plant in the Palmyra area. Lake Monticello is presently permitted for 600,000 gallons per day (gpd) with space and preliminary designs to expand to at least 3.75 million gallons per day (mgd). According to the Department of Environmental Quality (DEQ), there are currently no permitting problems with the effluent amount discharged into the Rivanna River from the Lake Monticello treatment plant, as long as standards for industrial waste treatment are met.

The package plant in Palmyra has a potential permitted capacity of 150,000 gpd. It is currently constructed with a capacity to treat 40,000 gpd.

In support of economic development at the Zion Crossroads area, and with the James River water feed coming online, sewer is the logical next step. Additional sewerage capacity will be needed in this area for both Fluvanna and Louisa counties. Private, mixed-use development may offer the benefit of providing or significantly contributing to a package plant that may ultimately be publicly owned and operated. The location of this facility will depend on the exact nature of the proposed development for the Zion Crossroads area, as well as its location within the area.

A significant constraining factor in the expansion of sewer services is the fact that the Department of Environmental Quality (DEQ) requires permits for additional effluent discharge. This reality will have a continuing influence on the county's land use and infrastructure decisions.

## Pipelines

### *Natural Gas*

Williams operates several pipelines throughout the country, including the 10,500 miles of the Transco pipeline system that traverses the country from Houston to New York City, including its northern route through the western part of Fluvanna County. The Transco pipeline system is a major provider of natural gas to the northeastern and southeastern states. Its compressor stations help move gas from the Gulf Coast to twelve southeastern and Atlantic seaboard states, including major metropolitan areas in New York, New Jersey, and Pennsylvania ([http://www.williams.com/gas\\_pipeline](http://www.williams.com/gas_pipeline)).



*Figure I-3, Transco Pipeline*

### *Liquid Petroleum*

Colonial Pipeline Company is an interstate common carrier of refined petroleum products in over 5,500 miles of pipeline. Colonial has two lines—a 32-inch and a 36-inch line—that cross the southern and eastern parts of the country from Houston to New York City, including Virginia

destinations such as Roanoke and Norfolk. These lines carry multiple petroleum products, including diesel, gasoline, and kerosene, simultaneously and under pressure, flowing at the rate of 13 million gallons per day. The pipeline supplies 20 percent of the country's petroleum and 70 percent of the state's.

Aerial patrol is the only practical method of inspecting thousands of miles of right-of-way. This can succeed only if the surface of the rights-of-way can be observed from the air. Trees and large shrubs prevent effective inspection of the rights-of-way. Tree roots pose a danger to the

**Excavators and homeowners should use the one-call system before starting any digging project such as fences, landscaping, storage buildings, foundations, swimming pools, ground clearing, deep plowing, or laying underground pipe or wiring. By taking the time to call, contractors can prevent disruption of service, accidents, injuries, and possibly death. Call Miss Utility at 811 or 1-800-552-7001 (<http://www.missutilityofvirginia.com>) at least forty hours in advance of digging.**

**Colonial Pipeline recommends a minimum setback for all structures of seventy-five feet from the edge of its easement.**

coatings that protect pipelines from corrosion, and trees can hinder repair crew access to the pipelines. For these reasons, it is essential that Colonial regularly clear its rights-of-way corridors. The federal government requires that easements be inspected twenty-six times a year, but Colonial inspects its lines weekly, weather permitting (<http://www.colpipe.com>).

## **Solid Waste**

As a result of the state-madated closing of the county's landfill in 2007, alternative waste disposal methods have been implemented. These include a convenience center at the former landfill site for residential waste and an agreement with Allied Waste for collection of commercial trash from haulers at their site on Route 250. The county's Convenience Center, located in Fork Union on West River Road, opened in 2010. Recycling at the Convenience Center is free. Other options for waste disposal include Van der Linde Recycling, BFI Fluvanna Transcyclery, and Fluvanna Disposal.

The county conducts a comprehensive set of monitoring tests on groundwater to determine whether the former landfill is the source of any contamination deriving from the solid waste in the closed landfill. This testing will continue for at least the next thirty years. If any contamination is found to be leaving the site, an appropriate corrective action plan will be developed and implemented.

## **Communication Infrastructure**

### *Public Safety Communications*

The existing public safety communications system is in need of a substantial upgrade or replacement. A number of factors have contributed to this circumstance. The county is currently operating four frequencies (two for law enforcement and two for fire and rescue) on a wide-band VHF system. The system has an inadequate coverage area that appears to be degrading. There is a single transmitting site, and three receiver sites. In some areas at the farthest points from the transmit site, there is little or no communication capability (including wireless). This is an obviously dangerous situation that the county is committed to alleviating.

The county commissioned a study in 2000 that includes detailed propagation maps and demonstrated that the county's options are clear: (1) joining the Charlottesville/Albemarle 800 MHz system, (2) using a stand-alone 800 MHz system, (3) using a UHF simulcast trunked system, or (4) using a VHF simulcast trunked system.

The purpose of the communications master plan that deals with this aspect of communications is to detail and rate each upgrade option based on factors such as ability to meet or exceed system expectations, cost, and ongoing maintenance.

#### *Wireless Communication*

The purpose of the wireless communications portion of the plan, and associated ordinance amendments, is to establish general guidelines for the siting of wireless telecommunications towers, antenna, ground equipment, and related accessory structures. Policies and recommendations should minimize the impacts of wireless communication facilities on surrounding areas by establishing standards for location, structural integrity, and compatibility; encourage the location and colocation of wireless communication equipment on existing structures; accommodate the growing need and demand for wireless communication services; encourage coordination between communication providers; establish consistent and balanced legal language governing wireless communications facilities that take into consideration the Comprehensive Plan and communications master plan; and maintain compliance with applicable laws, including but not limited to the 1996 Telecommunications Act.

#### *Rural Broadband*

While investigating options that may lead to a greater investment in infrastructure for public safety and wireless communications, the county would like to have a plan in place for the provision of rural broadband throughout the underserved areas of the county. This service is intended to serve three functions:

- Provide high-speed internet service at a reasonable cost for Fluvanna County residents and businesses.
- Provide for county-wide use of law enforcement mobile data terminals through this system solely, or a combination of this system and the wireless or public safety communication system if feasible.

The Director of Public Works recommends that water and sewer lines be installed in their own trenches/excavations, and that the sharing of trenches between water/sewer lines and telecommunications lines be avoided wherever possible.

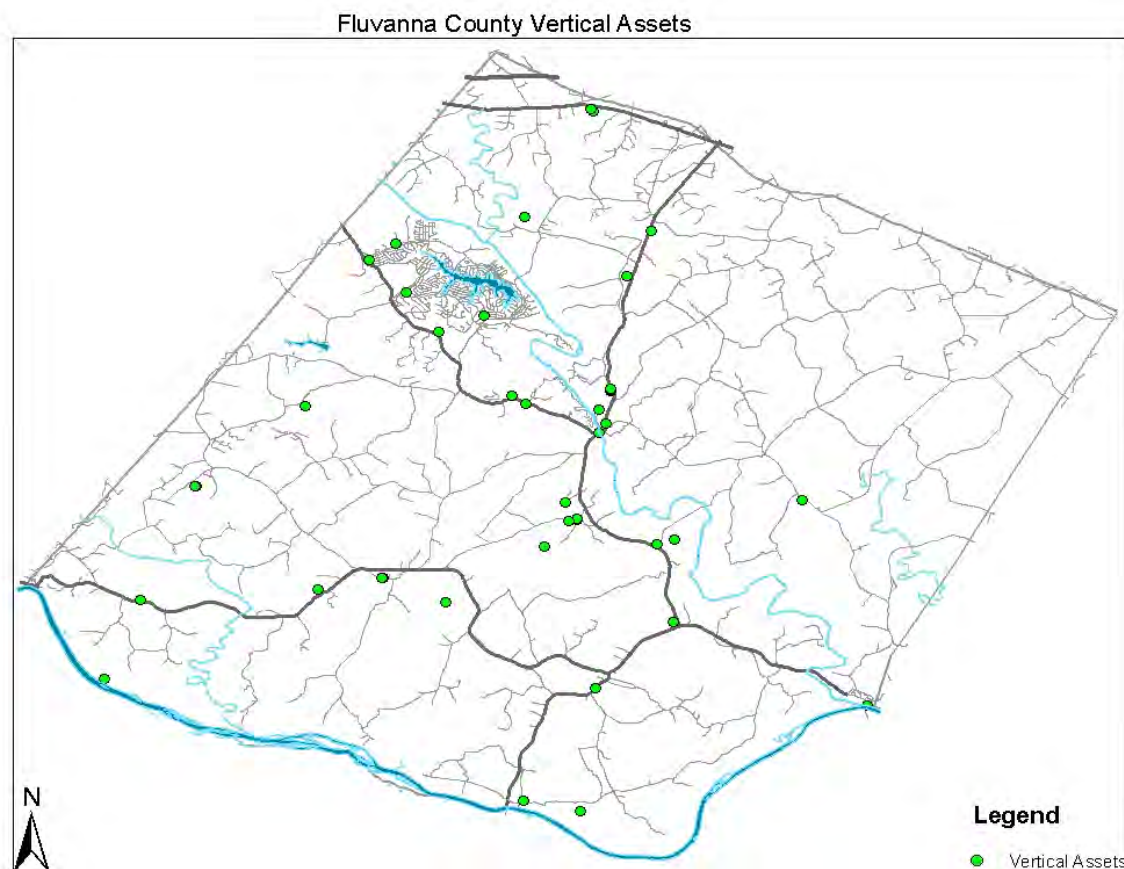
Typically, fiber-optic lines do not share ditch capacity with “wet utilities” unless there are spatial hindrances that require shared ditches. The Rt. 250 Corridor has no such restriction since the VDOT Right-of-way has ample area for both technological utilities and water and sewer.

There was a recent data capacity upgrade along the Rt. 250 corridor in 2013. Most fiber-optic lines are now put in place by boring technology and the need to use open ditch line occurs only at critical crossings of other utilities where there might be a depth conflict.

### *Television*

Cable television service is not available in most areas of the county, although satellite networks have narrowed the cable service gap over the past decade. Dish Network and DirectTV are the two satellite television providers in the area.

**Figure I-4, Vertical Assets**



## Green Infrastructure

Sensitive development of land is critical to the sustainability of a project and its value to the community. An important goal in development should be to retain as much of a site's natural hydrology (drainage) as possible. Issues to be avoided should include erosion and sedimentation, loss of vegetative cover and topsoil, and the flow of nutrients (nitrogen and phosphorous) into the watershed.

In the past, stormwater was channeled quickly from altered sites, allowing large quantities of water, full of sediment and nutrients, to enter streams and rivers. This method bypassed natural drainage, during which water infiltrates the soil, evaporates off of plants, and recharges groundwater supplies. This problem becomes apparent when it rains and the rivers turn brown from sediment. Through natural drainage and infiltration, the water that does finally enter streams and rivers is reduced in quantity and has lost much of the problematic nutrients and sediments. Addressing these issues is not just important for the county; it is now required by Virginia policy.

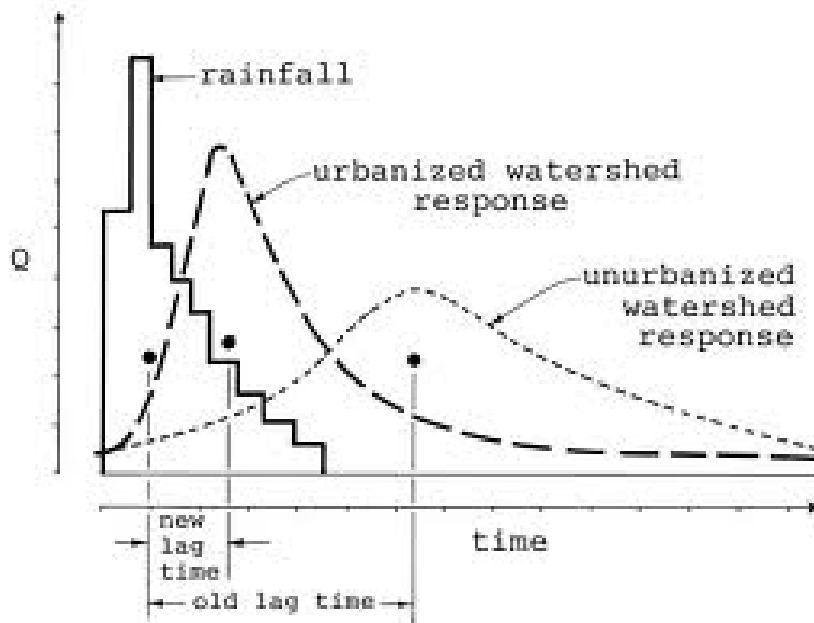
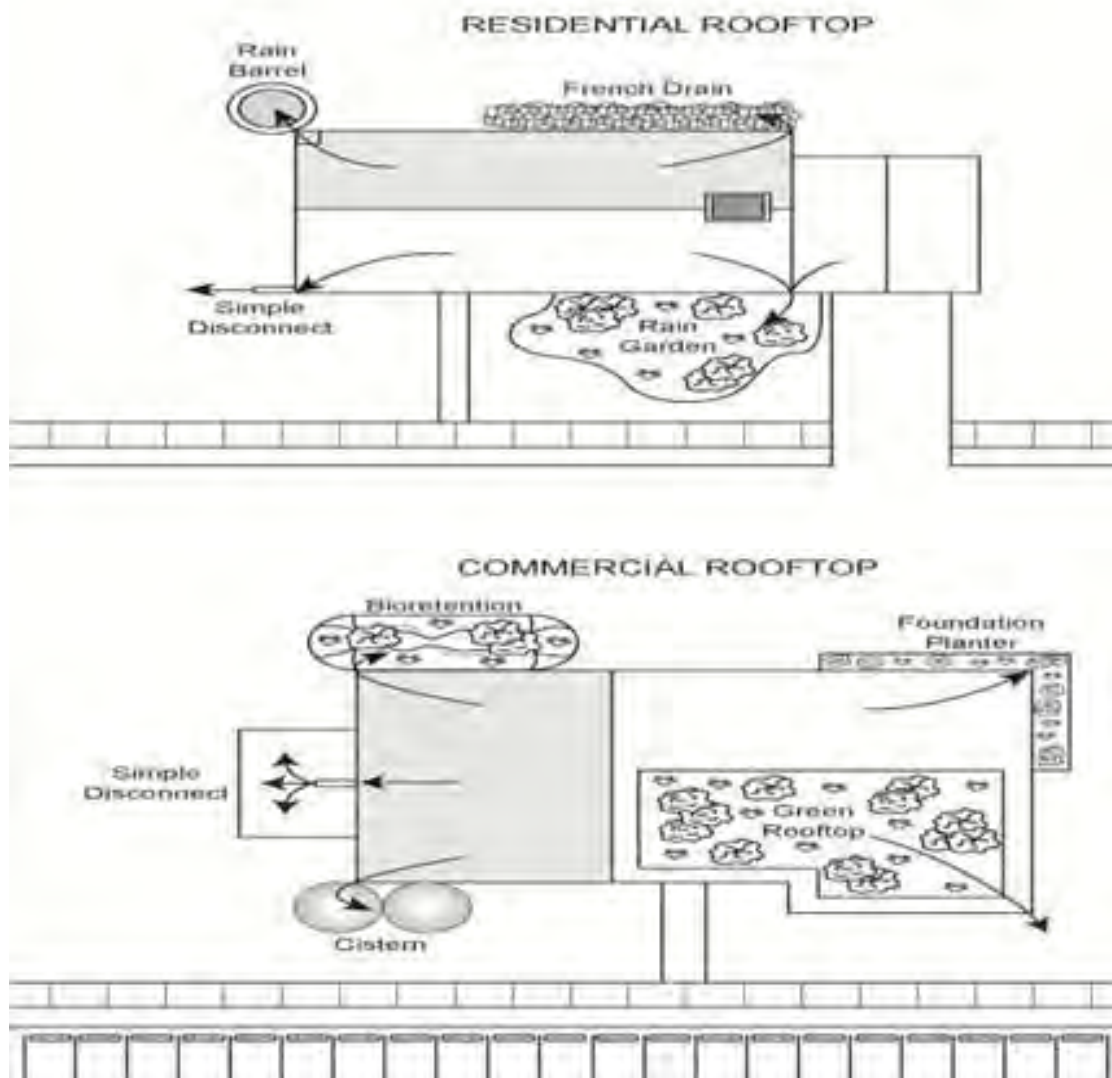


Figure I-6, Pre vs. Post Development Stormwater Runoff

The simplest and most powerful options available to developers involve “rooftop disconnection” – in which impervious surfaces, such as roofs and parking areas, are surrounded by permeable surfaces (vegetation, permeable pavers, etc) which allow water to infiltrate the ground instead of rushing towards streams. Rainwater captured on-site can be used for landscaping during dry spells while reducing total runoff. Combining stormwater practices is often especially effective. Additional management practices are available from the Department of Environmental Quality’s *Virginia Stormwater BMP Clearinghouse* (<http://vwrrc.vt.edu/swc/NonProprietaryBMPs.html>).



*Figure I-6, Rooftop Disconnection*

Preservation of wetlands, wildlife corridors, and other sensitive habitats lessens a project's environmental impact and improves the final product. Subdivisions with open spaces, such as greenways and parks, are more attractive and bring a higher market value. Green infrastructure creates integrated neighborhoods and communities as opposed to isolated developments and subdivisions.

All of these techniques can be used in residential and commercial/industrial development, and should either be strongly encouraged or required.

### **Energy Efficiency**

As much as 30 percent of the energy consumed in commercial buildings, including government, is wasted. By diversifying the economic base of the county and reducing direct energy costs,

energy efficiency can save taxpayer dollars, create jobs, and improve the overall health of the local economy.

Energy use in commercial and industrial facilities creates over 50 percent of all U.S. carbon emissions. Recycling and renewable resources conserve natural resources. Promoting growth in the community planning areas helps preserve farmland, wildlife habitats, and future recreational and environmental amenities.

Blank Page



## Chapter 4

# TRANSPORTATION

Transportation systems are closely correlated with land-use policies for a comprehensive and diverse network of roads and alternative transportation networks. Primary roads serve community planning areas with a well-maintained network of secondary and local roads that are connected to disperse traffic throughout each community.

### EXISTING CONDITIONS

Fluvanna's transportation system is comprised of local and regional roads, JAUNT transit service, and limited accommodations for pedestrians and bicyclists. Like most rural localities, Fluvanna's transportation system relies on automobiles. However, recent approaches to land-use planning—most notably community plans for Palmyra, Fork Union, and Lake Monticello—emphasize alternative transportation options, especially walking, biking, and transit, to reduce reliance on automobiles.

There are 53.65 miles of primary roads in Fluvanna County, including US 250, US 15, and Routes 53 and 6. US 15 bisects the County from north to south, and Route 6 runs east to west along the southern end of the County. These roads join in Fork Union. Route 53 enters the County from Albemarle County to intersect with US 15 in Palmyra. These roads, along with secondary Route 616, are heavily used by commuters from the northwest section of the County, including Lake Monticello. As with many rural areas, some secondary roads remain rustic. Increasing commuter and tourist traffic is noteworthy. Parts of US 250 are congested due to increasing traffic from Louisa and Richmond.

Fluvanna shares the Zion Crossroads area, which is anticipated to be a site for commercial and mixed-use development, with Louisa County. Other areas of expected growth include the Lake Monticello area on Routes 618 and 53.

### State Code Requirements

The *Code of Virginia*, section 15.2–2223, states specific requirements for the development of a transportation plan. This chapter addresses these *Code of Virginia* requirements and recognizes the integral link between transportation and land-use planning.

### Road Classifications

Roads are broken down into three basic categories: arterial, collector, and local. Arterials provide through-movement of traffic; they are classified as either principal or minor. Collector

roads provide both through-movement and access to property. Local roads primarily provide access to property.

Roadways are also classified as primary and secondary. Primary roads connect cities and towns with each other and with interstates. Secondary roads are a system of local connector or county roads that serve interregional and localized traffic.

## Interstate System

### Interstate 64

Interstate 64 crosses the county for 1.5 miles, but roughly parallels its northern boundary. All of I-64's exits are in adjacent localities. Commuters to Charlottesville and Richmond from the northern part of the county and elsewhere usually access I-64 at Boyd Tavern, Zion Crossroads, Ferncliff, or Shannon Hill.



*Figure T-1, Major Interstates*

Interstate 64 has an interchange at Zion Crossroads (in Louisa County) connecting to Route 15 and Route 250. Interstate 64 connects to Interstate 81 to the west and Interstate 95 to the east. In 2010, approximately 32,000 vehicles per day traveled Interstate 64 in Fluvanna County; in 2007 this number was 17,000. Interstate 64 offers access to Charlottesville/Albemarle and Richmond, providing a commuter route for residents of Fluvanna to get to work. Vanpooling is available from Zion Crossroads to Richmond, Virginia, to allow commuters to avoid driving. In addition, Interstate 64 connects economic growth in Zion Crossroads with neighboring populations.

## County Road System

### Primary Roads

Primary roads in the county include US Route 250 (Richmond Road west of Zion Crossroads, Broad Street Road in the northeast corner of the county), US Route 15 (James Madison Highway), State Route 6 (East River Road east of Route 15, West River Road west of Route 15), and State Route 53 (Thomas Jefferson Parkway).

US Route 250 roughly parallels I-64. It is a two-lane road spanning 6 miles in the county between Zion Crossroads and the Albemarle County line (Richmond Road), and 0.71 miles at the northeast end of the county (Broad Street Road). In 2010, approximately 5,500 vehicles per day traveled Interstate 64 in Fluvanna County. Route 250 is becoming more commercial and industrial from Zion Crossroads west, and VDOT plans to expand it to four lanes within the next twenty years.

US Route 15 is a two-lane highway that runs through the middle of the county from Zion Crossroads in the north, through Palmyra, Dixie, and Fork Union, to Bremono Bluff in the south. Segments from Wildwood through Palmyra to Cunningham Creek, and from Dixie through Fork Union to Weber City, could benefit from efforts to mitigate problems with tight curves, low shoulders, sight distance, and grading. The new bridge over the Rivanna River at Palmyra was completed in September 2007. Along with the construction of the new bridge, a portion of Route 15 was realigned, mitigating some of the tight curves through Palmyra.

Route 6 from Richmond to Afton Mountain is a state-designated Virginia Byway - a corridor of aesthetic or cultural value near areas of historic, natural, or recreational significance. Local use in the western part of the county is primarily for commuting to Scottsville and Charlottesville. Use in the east is primarily for commuting to Richmond and for trucks to join and exit US Route 15 at Dixie.

State Route 53 (Thomas Jefferson Parkway) runs from Palmyra northwestward through Cunningham and past Lake Monticello to the Albemarle County line. The road then continues past Monticello to the south side of Charlottesville. Route 53 stretches for roughly nine miles in Fluvanna and ends at Route 15 in Palmyra. As part of the Route 15 realignment, upgrades were made to Route 53 as it approaches Palmyra. Other intersection upgrades include the Route 618 (Lake Monticello Road) intersection with Route 53 and the Turkeysag intersection at Lake Monticello. US Bicycle Route 76 is located on the eastern portion of Route 53.

### **2035 Rural Long Range Transportation Plan**

The included map comes from Thomas Jefferson Planning District Commission and VDOT's 2035 Rural Long Range Transportation Plan. This project is designed to "create regional transportation plans in rural and small urban areas that complement those in Virginia's metropolitan areas." The regional planning process included a number of transportation recommendations for Fluvanna, to address the anticipated impacts of population and employment growth on the transportation system. These plans will be used as a basis to identify transportation funding priorities (*TJPDC 2035 Rural Long Range Transportation Plan*).

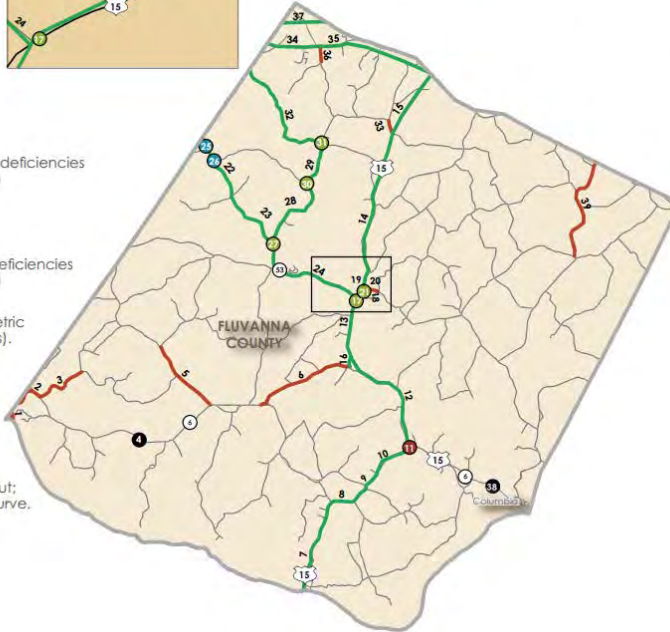
## FLUVANNA COUNTY RECOMMENDATIONS

- 12 US 15/VA 673 to VA 6 East**  
Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders). (Local Priority)
- 13 US 15/VA 632 to VA 637**  
Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders). (Local Priority)
- 14 US 15/VA 616 to VA 632**  
Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders). (Local Priority)
- 15 US 15/Louisa County Line to VA 616**  
Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders). (Local Priority)
- 17 VA 53/US 15**  
Long-term reconstruct a roundabout. (Local Priority)
- 22 VA 53/Albemarle County Line to VA 636**  
Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders). (Local Priority)
- 23 VA 53/VA 636 to VA 660**  
Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders). (Local Priority)
- 24 VA 53/VA 660 to US 15**  
Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders). (Local Priority)
- 26 VA 53 (Thomas Jefferson Pkwy.)/VA 618 (Lake Monticello Rd.)**  
Mid-term add turn lanes and consider a roundabout; Long-term reconstruct roadway to lower vertical curve. (Local Priority)
- 27 VA 600/VA 53**  
Long-term construct a roundabout. (Local Priority)
- 28 VA 600/US 53 to VA 618 (Lake Monticello Rd.)**  
Long-term widen to four lanes. (Local Priority)
- 29 VA 600/VA 618 (Lake Monticello Rd.) to VA 616**  
Long-term widen to four lanes. (Local Priority)
- 30 VA 600/VA 618**  
Mid-term add turn lanes and consider a roundabout; Long-term reconstruct roadway to lower vertical curve. (Local Priority)
- 31 VA 616 (Union Mills Rd.)/VA 600 (Boston Rd.)**  
Long-term consider roundabout or signalization and addition of turn lanes. (Local Priority)
- 32 VA 616/VA 600 to Albemarle County Line**  
Long-term widen to four lanes. (Local Priority)
- 34 VA 250/Albemarle County Line to VA 600**  
Long-term widen to four lanes with median. (Local Priority)
- 35 VA 250/VA 600 to Louisa County Line**  
Long-term widen to four lanes with median. (Local Priority)
- 1 VA 637/VA 6 to Scottsville City Limit**  
Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders).
- 2 VA 437 (Poplar Spring Rd.)/Albemarle County Line to VA 773 South**  
Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders).
- 3 VA 669/VA 773 to VA 669**  
Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders).
- 4 US 6 Over Hardware River**  
Short-term replace bridge.
- 5 VA 620/VA 6 to VA 639**  
Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders).
- 6 VA 649/VA 6 to VA 673**  
Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders).



### FLUVANNA COUNTY DEFICIENCIES

- Legend
- Segment Deficiency
    - Operation Deficiency
    - Safety Deficiency
    - Geometric Deficiency
    - Intersection Deficiency
  - Other Deficiency



- 7 US 15/Buckingham County Line to VA 695**  
Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders).
- 8 US 15/VA 695 to VA 652**  
Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders).
- 9 US 15/VA 652 to VA 702**  
Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders).
- 10 US 15/VA 702 to VA 6 East**  
Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders). Seek to reserve rights-of-way (through setbacks) in order to allow for potential widening to four lanes with a median. (Local Priority)
- 11 US 15/VA 6**  
Long-term reconstruct intersection as one-lane roundabout.
- 14 VA 649/VA 673 (Bethel Church Rd.) to US 15**  
Long-term widen road to increase capacity and accommodate existing and future travel demand.
- 18 VA 1001 (Main St.)/US 15 South to VA 1003**  
Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders).
- 19 VA 1003/VA 1001 to US 15**  
Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders).
- 20 VA 601 (Courthouse Rd.)/US 15 to VA 663 (Courthouse Rd.)**  
Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders).
- 21 US 15/VA 1003**  
Long-term construct a roundabout.
- 25 VA 53 (Thomas Jefferson Pkwy.)/VA 618 (Marlin Kings Rd.)**  
Short-term maintenance and replace signage.
- 33 VA 631 (Troy Rd.)/US 15 to VA 633**  
Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders).
- 36 VA 600/VA 634 to US 250**  
Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders).
- 37 I-64/Albemarle County Line to Louisa County Line**  
Long-term widen road to increase capacity and/or accommodate travel demand on alternative corridors or modes.

## **Secondary Roads**

Secondary roads are numbered 600 and above. There are 285 miles of roads in the secondary system, with 261 paved miles and 24 stabilized dirt (gravel) miles. Aside from funding, the most significant hindrance to improvement on many roads is inadequate right-of-way. Relatively few of the miles have the required fifty-foot right-of-way needed for adequate bank cut, shoulders, and drainage. Utilities, both above- and below ground, challenge the limits of the narrow rights-of-way. The secondary road system has thirty-six bridges and twenty-six major culverts of various designs and construction methods, with fifty-two being two-lane and ten being one-lane.

Former gravel roads, currently being paved, have eighteen feet of pavement, mitigated curves, and wide shoulders. New bridges and culverts installed as individual projects are wide enough to accommodate later road upgrades. Many secondary roads serve as heavily traveled commuter routes, commercial routes, and emergency detours during natural disasters.

An annual allocation of funds to the county from VDOT provides for improvements to the secondary road system. These funds are used as decided by the Board of Supervisors with advice of VDOT's Louisa Area Land Use Engineer and through input at annual public hearings.

## **Private Roads**

There are numerous private roads in the county, ranging from primitive logging roads to the fifty-eight-mile paved system of Lake Monticello. The Department of Game and Inland Fisheries and the Department of Conservation and Recreation have a limited road presence in the county. The county has some direct responsibility for roads such as those in the Carysbrook complex and the landfill access road.

## **Alternative Transportation**

### **Pedestrians**

Fluvanna County's rural setting and narrow roads constrain pedestrian mobility. Very few places in the county have designated walkways, and most pedestrians walk along the side of the road. There are few sidewalks in populous areas of the county, and many are in disrepair. Fork Union has sidewalks and the County's only crosswalks, but these sidewalks are often impeded by utility poles.

The state is now required to provide pedestrian accommodations for all VDOT construction projects. New subdivisions should provide for pedestrian access within the development and in conjunction with adjoining housing developments and businesses in order to reduce vehicle trips.

Previous County plans have called for improved pedestrian amenities. The 2000 Comprehensive Plan suggested the importance of these amenities in its *Vision for 2020*:

In designated growth areas, subdivisions and businesses are linked by hard surface paths so that bicycling and walking are a practical means of transportation . . . Pedestrian and bicycle access are also provided in other appropriate settings, such as across bridges and in rural subdivisions and towns . . . children are able to walk to a park or playground.

**Bicycles**

Fluvanna lacks many of the on-road facilities necessary to support bicycling in the County as anything more than a recreational activity. The US Bicycle Route 76 trail and numerous back roads allow cyclists to take short trips or longer recreational treks, but the lack of amenities and connectivity constrains the growth of bicycling as a viable way to get around the County. As the County grows, incorporation of bicycle infrastructure will become more important.

Bicyclists frequently ride Route 616 (Union Mills Road) and many other roads in the county without any special facilities or cautionary markings. There are no public facilities for off-road bicycle riding, but Pleasant Grove may be suitable for that purpose.

US Bicycle Route 76 was designated for cyclists during the National Bicentennial. The bike route enters the county from Albemarle on Route 620 (Rolling Road South) and continues to Route 619 (Ruritan Lake Road) and Route 53. From Route 53 it runs east to Route 15, north to the middle of Palmyra, and east on Route 601 (Courthouse Road / Venable Road) through Wilmington and Kents Store. Bike lanes have been added to Venable Road wherever stretches of the road have been resurfaced. It continues east on Route 603 (Tabscott Lane) to the Goochland County line, eventually ending in Yorktown, Virginia.

Segment	Role	Type	Signage	Level of Service	Recreational Value	Recommendations
Ruritan Lake Road	Bypasses Rte. 53; links Albemarle and Fluvanna	Rural Two-Lane	8 Rte. 76 signs; no other bike-related signs	C: high traffic and narrow lanes	Low: no amenities or resources	<ul style="list-style-type: none"> <li>• Additional signage</li> <li>• Shoulder improvements</li> </ul>
Palmyra Area (53 and 15)	Goes through central Fluvanna including Palmyra Village	Rural Two-Lane	6 Rte. 76 signs; no other bike-related signs	C-D: no shoulder on 53; volume and speed of traffic; trucks and guardrails	High: scenic views, historical assets, parks and trails	<ul style="list-style-type: none"> <li>• Additional signage</li> <li>• Designate shoulders as bike lanes</li> <li>• Road widening</li> <li>• Shoulders at guardrails</li> <li>• Minor Rerouting</li> </ul>

Courthouse Road	Links Palmyra Village with eastern Fluvanna	Rural Two-Lane	4 Rte. 76 signs; no other bike-related signs	C: narrow lanes; no shoulder; guardrails	Low: no amenities or resources	<ul style="list-style-type: none"> <li>• Additional signage</li> <li>• Maintain vegetation</li> <li>• Road widening</li> <li>• Bike lanes at guardrails</li> </ul>
Venable and Tabscott Roads	Links eastern Fluvanna with Louisa County	Rural Two-Lane	8 Rte. 76 signs; no other bike-related signs	B-C: low traffic offsets narrow lanes; few trucks; bike lanes offset guardrail	Low: no amenities or resources ; historic scenery	<ul style="list-style-type: none"> <li>• Additional signage</li> <li>• Maintain vegetation</li> </ul>

In its 2014 *Route 76 Corridor Study*, Thomas Jefferson Planning District Commission has analyzed the road segments which make up Route 76, and made suggestions for improvements:

**Rail Access**

AMTRAK passenger rail service is available in Charlottesville, with at least two trains daily. The Crescent travels between New Orleans and New York City, stopping in Charlottesville in the morning on the way north, and in the evening on the way south. A second train, the Cardinal, travels between New York (by way of Washington, D.C.) and Chicago three times a week.

Freight rail serving Fluvanna County is the CSX line, whose single track follows the James River along the county’s southern border from Columbia in the southeast to Scottsville in the southwest.

Buckingham Branch Railroad is a shortline railroad from Dillwyn in Buckingham that has leases to use CSX and Norfolk Southern lines. The east - west (E-W) rail line that goes from Louisa to past Crozet is a N-S line leased by BB.

**Public Transportation and RideShare**

The majority of workers commute to Richmond and Charlottesville for employment, with commuting distances averaging sixty miles and twenty-five to thirty miles, respectively. These distances and the cost of commuting leave many low-income families struggling to improve their economic conditions. Elderly, infirm, and indigent persons usually have to travel to Richmond or Charlottesville for medical care and other basic services but frequently require transportation assistance.

The number of commuters to Richmond and Charlottesville increases congestion on roads. A majority of commuters travel by automobile with a single occupant. The Thomas Jefferson Planning District Commission’s RideShare program is designed to reduce congestion and increase mobility throughout the region by offering free carpool and “SchoolPool” services. RideShare is also responsible for marketing the region’s park-and-ride lots.

JAUNT provides transportation opportunities for those who are unable to afford the high cost of commuting while also reducing the congestion on the roadways throughout the region. JAUNT offers two daily commuter routes and advance-notice request-response transportation, along with intra-county service three days a week and service to Charlottesville three days a week, operating between the commuter route times.

### **Air Travel**

Richmond International Airport, within a one-hour drive from the Zion Crossroads exit on I-64, is the nearest major air transportation hub. The closest passenger and commercial airport—the Charlottesville-Albemarle Airport (CHO) in Albemarle County—is a non-hub commercial service airport offering daily nonstop flights to and from Charlotte, Philadelphia, New York/LaGuardia, Washington/Dulles, Cincinnati, Detroit, and Atlanta. There are also one-stop international and domestic destinations. The facility includes a 60,000-square-foot terminal facility with modern customer amenities.

Louisa County Industrial Airpark is a general aviation airport that provides local, charter air service. The airport has a 4,300-foot runway. There are approximately forty-six hangars now located at the airport, with space for more.

There are two private airfields in the county: Camp Friendship Airfield and Fork Union Military Academy Airfield. These are used for small private aircraft only.



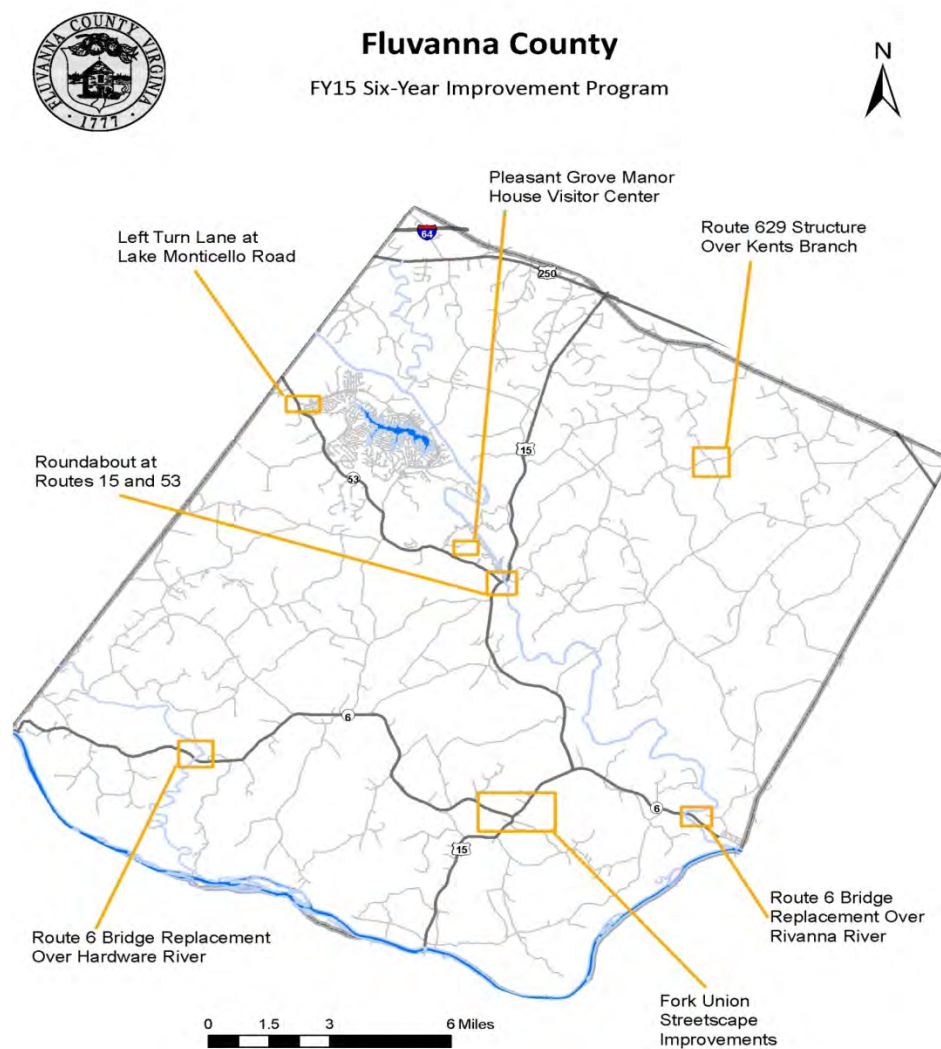
*Figure T-2, Regional Airports*

## **FY15 Six Year Improvement Program**



The Six-Year Improvement Program (SYIP) outlines spending for transportation projects proposed for construction, development, or study for the next six years. The SYIP is updated annually. The SYIP also identifies planned program funding for the succeeding five fiscal years. The FY15 Six Year Improvement Program calls for a number of improvements in Fluvanna:

1. Fork Union streetscape improvements along scenic byways into the Village of Fork Union;
2. Construct rural, single lane roundabout at the intersection of Routes 15 and 53;
3. Construct left turn lane at Lake Monticello Road;
4. Route 6 Bridge Replacement over Rivanna River;
5. Route 6 Bridge Replacement over Hardware River;
6. Route 629 Structure over middle fork of Kents Branch.



**Figure T-3, Six Year Plan**

## Community Plans

Each of the three community plans prepared by the county and the Thomas Jefferson Planning District Commission—Lake Monticello (Rivanna), Palmyra, and Fork Union—make recommendations for transportation improvements.

### Rivanna (Lake Monticello) Community Plan

One of the key recommendations of this community plan is to improve traffic safety. Large volumes of traffic on small country roads can lead to safety problems. Improving intersections, paving shoulders, and adding features for pedestrians, bicycles, and slow-moving vehicles in congested areas can alleviate traffic and promote safety. This may be particularly important as the county's population continues to grow.

- Provide paved shoulders to improve the safety of walking and biking on the surrounding roads. Shoulders can also be safer for slow-moving vehicles such as cars and trucks with trailers, and for pull-offs for disabled vehicles. This improves the overall safety of the roadway while retaining its rural character.
- Ensure that the county's zoning code encourages safe pedestrian access to shopping and residential areas, especially in compact village development areas (requiring sidewalks, crosswalks, and safe access to commercial areas).
- Work with county and local residents to establish a park-and-ride lot at Effort Baptist Church, near the main gate, or at the Lake Monticello Clubhouse.
- Encourage participation in RideShare, which encourages alternative forms of transportation and pairs up commuters in carpools, vanpools, and SchoolPools. For more information, go to [www.rideshareinfo.org](http://www.rideshareinfo.org).
- Consider establishing transit target stops at key shopping-center parking lots (and possibly within the Lake gates) so that JAUNT and other commuter services can have fixed stops where possible. With trails connecting residential areas to these service areas, alternatives to single-occupant commuting will be more attractive.
- Consider roundabouts at key intersections, particularly where traffic enters and exits commercial areas or the main gate, and for entrances to new developments.

Roundabouts are safer than signalized intersections or stop signs. A recent study by Virginia's own Insurance Institute for Highway Safety reviewed before-and-after crash data for twenty-four roundabouts in eight states that had replaced either signals or three- and four-way stop signs. The study found highly significant reductions in crashes, injuries, and fatalities:

- 39% reduction for all crash severities combined;
- 76% reduction for all injury crashes;
- 90% reduction for fatal and incapacitating injury crashes.

### Palmyra Community Plan

- Increase alternative transportation options by improving bus service (JAUNT), including creating transit target stops in the Village. Also, encourage greater participation in

RideShare and construct visible and accessible park-and-ride locations. Future locations should be determined by RideShare, JAUNT, local officials, and citizens.

- Develop a coordinated plan to improve traffic safety on Route 15 while maintaining capacity in accordance with VDOT requirements and reflecting changing vehicular activity as a result of the new Palmyra Bridge. As part of the plan, explore the following improvements:
  - Enhance the pedestrian and bicycle network. For the transportation system to operate at optimal efficiency, continue creating a pedestrian and bicycle network within the village and surrounding area.
  - Pedestrian improvements should be coordinated with traffic-calming measures on Route 15 to improve pedestrian access to areas east of the highway.
  - Install curb and gutters along Route 15 through the commercial district. The priority areas for curb and gutters are noted on the Transportation Master Plan.
  - Ensure pedestrian and bicycle features similar to those on the new Route 15 bridge will be built on north- and southbound Route 15.
  - Create connections to Pleasant Grove. In the short term, residents can use the Route 15 bridge; citizens could pursue a pedestrian/bicycle bridge over the Rivanna River at a location that increases connectivity to both sides of the river and between Palmyra and Pleasant Grove.
  - The pedestrian and bicycle network will not be complete until direct connections are established between the historic village and Pleasant Grove. Trails should also be constructed to Lake Monticello, and the rail trail should be expanded.

### **Fork Union Community Plan**

There are several transportation-related improvements that can be done to improve the safety and appearance of Fork Union.

- Add a walking/biking trail between the Community Center and “downtown.” Determine whether a sidewalk setback from Route 15 or a trail behind houses, such as the Fluvanna Heritage Trail, would be more appropriate. Both options require consent from landowners.
- Conduct an engineering analysis to determine whether traffic-calming devices (curb extensions, median crossings, roundabouts) can be installed at key intersections.
- Install marked crosswalks along Route 15 in strategic places.
- Improve existing sidewalks and add additional sidewalks along Route 15 connecting downtown to the Village Shopping Center.
- Consider adding bike lanes, which make the roads safer for cyclists and slow traffic by narrowing lanes, on wide roads.
- Review building and zoning codes and recommend relevant changes to allow the type of development and infrastructure desired by residents.

Blank Page

## Chapter 5

# ECONOMIC DEVELOPMENT

### *A Sustainable Plan for the Future*

Zion Crossroads is the county's primary commercial node, with primarily retail, office uses, and light industrial, it also incorporates mixed-use, mixed-income residential development. Route 250 is a vital alternative to Interstate 64 and is a primary gateway into Fluvanna.

Residential development within the community planning areas encourages a diverse workforce. Varied housing types and income levels ensure a labor pool for a variety of businesses. Concentrations of employment and residential development reduce congestion on the county's roads and infrastructure, minimizing the cost to the community while maximizing the revenue from businesses.



*Figure ED-1, Eco-friendly Business*

### **EXISTING CONDITIONS**

Fluvanna's location between Charlottesville and Richmond creates employment options for residents. Around 2,000 people live and work in Fluvanna. 2,554 commute into the county, and 8,265 county residents commute elsewhere. This means that, currently, 5,711 more people commute *from* Fluvanna for work every day, than *to* it.

Local sales tax revenues brought Fluvanna \$1,400,149 in 2013. This continues an overall positive trend over the past decade (sales tax revenue brought in \$908,731 in 2003). The county's tax base currently relies on personal and real property taxes to finance approximately 69 percent of local needs.

### **Business Climate Factors**

Strong and supportive government, quality education and labor resources, public safety, favorable taxation policies, and loyal consumers are just some of the important factors that contribute to a positive business climate. Increased risk, uncertainty, and instability, in the marketplace and in the community, negatively impact businesses.

### *Workforce Preparedness and Education*

Fluvanna County is located near a major university and two community colleges. Fluvanna County High School has a strong relationship with a local technical education center,

Charlottesville Albemarle Technical Education Center (CATEC). Fluvanna County High School is a top-quality public school with new (opened 2012) facilities (<http://www.fluco.org>).

Institutions of higher learning offer partnering opportunities for industry to pursue research, development, and production. They are economic generators for the region, offer a variety of cultural activities for the entire community, and create opportunities for residents.

#### University of Virginia

The University of Virginia (UVA) is located in Charlottesville, less than thirty miles west of Fluvanna County. The university has ten schools that offer bachelor's, master's, educational specialist, first-professional (law and medicine), and doctoral degrees. There were just over 23,464 students during the 2013–14 academic year. UVA continues to rank in the top twenty-five among all national universities, public and private. The University of Virginia health system is a nationally renowned academic medical center (<http://www.virginia.edu>).

#### Piedmont Virginia Community College

Piedmont Virginia Community College (PVCC) was established in 1972 and is a nonresidential two-year institution of higher education that serves central Virginia—principally residents of Charlottesville, Albemarle, Buckingham, Fluvanna, Greene, Louisa, and Nelson. PVCC is located in Albemarle County, approximately thirty miles west of Fluvanna. The college offers fifty-two associate degrees and certificate programs to meet educational and career goals. PVCC also offers noncredit workforce classes and certificates as well as individual classes for personal enrichment (<http://www.pvcc.edu>).

#### J. Sargeant Reynolds Community College

J. Sargeant Reynolds has two campuses in Richmond, and one campus in Goochland County. The college was founded in 1972 and is the third largest college in the Virginia Community System, enrolling students at all three major campuses, five off-campus sites, and “virtually” through distance learning. The college currently offers two-year degree programs, occupational/technical certificate programs, two-year college transfer programs, and career studies certificate programs requiring less than one year of full-time study. Over 15,500 noncredit students come to the college for workforce development courses and services through the Community College Workforce Alliance (<http://www.jsr.cc.va.us>).

#### Charlottesville Albemarle Technical Education Center (CATEC)

CATEC offers students at all ability levels programs designed to respond to the community's employment needs. Students may seek employment upon graduation and/or continue their formal education through apprenticeship programs or advanced study at technical institutes, community colleges, and universities. High school programs include computer repair and maintenance, computer operating systems, computer-aided drafting and design, auto body repair, auto technology, barbering, cosmetology, culinary arts, television and video production, carpentry, electricity, masonry, nurse aide, and horticulture, and landscaping (<http://www.catec.org>).

### Other Institutions

There are other colleges, universities, and technical schools within an hour of Fluvanna County, or that offer satellite or online classes and credits. Virginia Commonwealth University, Longwood, Virginia Tech, Mary Washington, Mary Baldwin, and George Mason are other universities in relatively close proximity, or that have satellite programs available to residents of central Virginia.

### *Community Safety*

Fluvanna County's crime rate is consistently below the regional averages. The Department of State Police's *Crime in Virginia* document details crime statistics, by type, for each police jurisdiction in the state using the incident-based reporting (IBR) system. Group A crimes are those considered to be the most serious (e.g., murder, rape, kidnapping, drug trafficking, fraud, larceny, vandalism, etc.) and are generally felonies.

Fluvanna had 293 Group A offenses in 2013 - a crime rate of 1,672 offenses per 100,000 residents. This is significantly lower than the state (4,883 per 100,000), Albemarle County (3,663 per 100,000), Louisa County (3,180 per 100,000), and Buckingham County (2,735 per 100,000); it is also slightly lower than Goochland County (1,729 per 100,000).

### *Wages*

Businesses typically examine the average wages paid in an area as part of making relocation decisions. Good employers want to pay their employees competitively, and knowing how their compensation compares within a region is valuable information along with the other business climate factors. Fluvanna County had an average weekly wage of \$676 in 2013, an increase of 41 percent since 2007 (\$479). In comparison, the state average increased approximately 18 percent, from \$872 in 2007 to \$1,027 in 2013.

### *Utilities and Taxes*

The real estate tax rate in Fluvanna County (\$0.88 per \$100 of assessed value) is \$0.16 higher than the regional average of \$0.72, and the machinery and tools tax rate (\$2.00) is lower than the regional average (\$2.97). The personal property tax rate in Fluvanna County (\$4.15 per \$100 of assessed value) is higher than the regional average of \$3.76, and is the second highest in the region.

<b>Regional Tax Rates, 2014</b>			
	<b>Real Estate</b>	<b>Personal Property</b>	<b>Machinery &amp; Tools</b>
<b>Fluvanna County</b> Source: Fluvanna Co. Commissioner of the Revenue	\$0.88	\$4.15	\$2.00
<b>Albemarle County</b> Source: Albemarle Co. Dept. of Finance	\$0.819	\$4.28	\$4.28
<b>Buckingham County</b> Source: Buckingham Co. Commissioner of the Revenue	\$0.50	\$4.05	\$2.90
<b>City of Charlottesville</b> Source: City of Charlottesville Commissioner of the Revenue	\$0.95	\$4.20	N/A
<b>Goochland County</b> Source: Goochland Co. Treasurer	\$0.53	\$4.00	\$3.75
<b>Louisa County</b> Source: Louisa Co. Commissioner of the Revenue	\$0.65	\$1.90	\$1.90
<b>Regional Average</b>	<b>\$0.72</b>	<b>\$3.76</b>	<b>\$2.97</b>

*Figure ED-2, Regional Tax Rates*

Fluvanna's business sector comprised approximately 7 percent of tax-generated revenue in 2013; this is down from 11 percent in 2007. The county's vision is to have at least one-third of its revenue stream come from the business sector. This has been a common measure of economic success over the years in communities—70 percent revenue from residential (real estate taxes) and 30 percent from businesses (real estate, inventory, BPOL, machinery and tools, etc.).

## Economic Base Analysis

### Economic Sectors

The number of establishments and the number of employees working in these establishments show a positive trend for the period 1997 to 2012. All industries except for arts, entertainment, and recreation show an increase in employees for this period.

<b>Statistics by Economic Sector, 1997, 2002, 2006, and 2012</b>								
<b>Industry Description</b>	<b>Number of Establishments</b>				<b>Number of Employees</b>			
	<b>1997</b>	<b>2002</b>	<b>2006</b>	<b>2012</b>	<b>1997</b>	<b>2002</b>	<b>2006</b>	<b>2012</b>
Wholesale trade	10	12	13	14	20-99	100-249	123	113
Retail trade	33	29	32	41	196	243	270	344
Real estate and rental and leasing	9	19	26	15	0-19	36	42	0-19
Professional, scientific and technical services	22	35	42	32	47	95	107	20-99
Administrative and support and waste management and remediation services	6	26	32	45	47	71	157	237
Health care and social assistance	8	17	19	23	72	100-249	306	210
Arts, entertainment, and recreation	1	3	7	6	0-19	0-19	Suppressed	20-99
Accommodation and food services	9	11	14	23	107	173	300	312
Other services (except public administration)	13	22	37	38	48	162	281	235

Source: U.S. Census

*Figure ED-3, Economic Sector Statistics*



The type of growth of the local economy is an indicator of its strength and weaknesses. As figure ED-9 shows, accommodation and food services have shown the greatest increase in new hires, followed by education services and retail trade. Many of these sectors tend to hire entry-level employees at typically lower wages than, for example, professional and technical services, which hired far fewer new employees.

<b>New Hires by Industry 2nd Quarter, 2013</b>	
<b>Industry</b>	<b>Hires</b>
1. Admin. Support and Waste Mgmt	184
2. Retail Trade	112
3. Accomodation and Food Service	96
4. Construction	44
5. Health Care and Social Assistance	42
6. Other Services (except Public Admin.)	27
7. Public administration	22
8. Arts, Entertainment, and Recreation	16
9. Manufacturing	13
10. Transportation and Warehousing	9
11. Real Estate and Rental and Leasing	7
12. Wholesale Trade	6
13. Agriculture, Forestry, Fishing, and Hunting	6
14. Educational Services	4
15. Professional, Scientific, and Technical Services	3

Source: Virginia Employment Commission

*Figure ED-4, New Hires by Industry*

Data on the ten largest employers in the county reinforce the emphasis on education services but do not reflect the strong growth of accommodations and food services and retail trade. This may be due to the smaller size of retail establishments, which means that no one retail operation, save for Food Lion, made the top ten.

<b>Ten Largest Employers Third Quarter, 2013</b>	
1.	Fluvanna County Public School Board
2.	Fluvanna Correctional Center
3.	Fork Union Military Academy
4.	County of Fluvanna
5.	Lake Monticello Owners
6.	Camp Friendship
7.	Food Lion
8.	Domino's Pizza
9.	Correctional Medical Systems
10.	Dominion Virginia Power

Source: Virginia Employment Commission

*Figure ED-5, Ten Largest Employers*

Perhaps as important to the county taxpayer as the top ten employers are the top ten taxpaying companies, which help to diversify the tax base and contribute significantly to the

county's revenue stream. In the future, along with these companies, Fluvanna needs to attract low-impact, high-value companies to further strengthen and diversify this list of companies.

<b>Business Name</b>	<b>Assessed Value</b>	<b>% of Tax Base</b>
Tenaska Virginia Partners	\$264,721,751	6.3%
Virginia Electric and Power	\$113,860,658	2.71%
Central Virginia Electric Co-op	\$26,947,391	0.88%
Aqua Resources, Inc.	\$21,134,423	0.5%
Transcontinental Gas Pipeline	\$15,667,442	0.37%
Colonial Pipeline Co.	\$11,482,400	0.27%
Central Telephone of Virginia	\$10,434,696	0.25%
CSX Transportation	\$9,903,516	0.24%
East Coast Transport	\$6,555,118	0.16%
Virginia Properties LLC	\$5,490,300	0.13%
Total	\$496,197,695	11.8%

*Figure ED-6, Top Ten Taxpayers*

## Employment

Local and state government and construction dominate the number of employees by industry.

<b>Employment by Industry Third Quarter, 2013</b>	
<b>Industry Classification</b>	<b>Number of Employees</b>
Local government	844
Administrative and waste services	594
State government	383
Retail Trade	343
Accommodation and Food Services	335
Health Care and Social Assistance	328
Construction	315
Other Services (Except Public Administration)	164
Utilities	109
Wholesale Trade	105

Source: Virginia Employment Commission

*Figure ED-7, Employment by Industry*

Unemployment in the county is consistently lower than in the state, which is in turn lower than the national rate. While unemployment has yet to return to pre-recession levels, the unemployment rate is dropping at a faster pace in Fluvanna than in the state as a whole.

Unemployment Rates: 2003–2013		
Year	Fluvanna Unemployment Rate (%)	Virginia Unemployment Rate (%)
2003	3.4	4.1
2004	3.0	3.7
2005	3.0	3.5
2006	2.4	3.0
2007	2.4	3.1
2008	3.3	4.0
2009	6.0	7.0
2010	5.9	7.1
2011	5.4	6.4
2012	4.8	5.9
2013	4.4	5.5

Source: Virginia Employment Commission

*Figure ED-8, Unemployment Rates*

The number of people employed in the county is appreciably smaller than the number of employees who are county residents, but work outside the county.

### Land Use

Community planning areas established pursuant to the Code of Virginia, section §15.2-2223.1, (particularly Zion Crossroads) need to effectively balance land use, transportation, and economic development in a holistic approach instead of viewing them as individual issues that could negatively impact the county. By concentrating development off primary transportation corridors, and providing additional critical infrastructure such as water and sewer, the county can then direct commercial, industrial, and a significant amount of residential development into these community planning areas. Conversely, this also helps to alleviate the residential growth pressures throughout the rest of the county, particularly in the rural preservation areas.

### Open Space

Preservation of open space is an important value in Fluvanna County. Virginia's land-use assessment laws help to encourage this, as well as benefiting businesses that engage in agricultural, horticultural, and forestal activities.

The *Code of Virginia* allows any locality that has adopted a comprehensive land-use plan to enact an ordinance providing for special assessments of agricultural, horticultural, forestal, and open-space real estate. Agricultural and horticultural uses, and open-space real estate, must consist of a minimum of five acres. Forestal land must be a minimum of twenty acres. These assessments are intended to encourage the preservation and proper use of land in order to allow for the production of agricultural, horticultural, and forestal products. These assessments

also help alleviate pressures that result in the conversion of these lands to more intensive uses by keeping the assessed tax rate low.

Fluvanna County has had this land-use assessment policy since 1978. The ordinance allows for land-use value assessments in all categories—agricultural, horticultural, forestal, and open-space real estate.

### **Infrastructure**

To promote growth in the Community Planning Areas, established pursuant to the Code of Virginia, section §15.2-2223.1, infrastructure must be established to attract businesses. Having water and sewer infrastructure will make Fluvanna’s growth areas “move-in ready.”

Despite current sources, water and sewer infrastructure are the primary constraints on community growth. Efforts to expand sewer and water services require partnering with Louisa County and the Department of Corrections. The James River Water Authority is the cooperative body representing the water interests of Fluvanna and Louisa. JRWA’s resources will be supplemented by water and sewer services provided by the Department of Corrections, whose Fluvanna facilities enjoy sewer and water surpluses.

The primary infrastructure service areas will be the Zion Crossroads, Lake Monticello, and Fork Union community planning areas, which established pursuant to the Code of Virginia, section §15.2-2223.1. Of these, Zion Crossroads is considered the most viable area to attract light industrial, technology business, medical facilities, and retail. As part of this development, Zion Crossroads could see several large projects; these could include walkable mixed use areas, retail destinations, healthcare facilities, and industrial or office parks. Collaboration with Louisa will be instrumental in the development of Zion Crossroads, as Fluvanna expands on the visibility and success of the Louisa side.

Multiple electric power resources are available, and several high voltage transmission lines deliver large amounts of electricity to the area. Broadband and wireless telecommunications facilities, while not yet widespread, are expanding throughout the county.

### **Our Share of a Flourishing Industry**

A study commissioned by the Virginia Wine Board indicates that the impact of the wine and winegrape industry on Virginia’s economy was \$747 million in 2012. This includes thousands of jobs and hundreds of millions of dollars in sales. Remarkably, this economic impact represents a 106% increase from 2005 – a period of time which includes the recent economic downturn. (THE ECONOMIC IMPACT OF WINE AND WINE GRAPES ON THE STATE OF VIRGINIA – 2010 updated 2012)

The wine industry’s benefits to Fluvanna could extend far beyond its direct economic impact. As wine tourism in Central Virginia becomes more common, Fluvanna can capitalize on its proximity to other wine destinations, inventory of convenient and scenic byways, and agricultural identity to become a vibrant wine destination in its own right. In order to seize this

opportunity, the county should ensure that its policies offer the flexibility to allow wineries and related activities to operate successfully.

## **Community Efforts**

Increased reliance on the economic development function may eventually necessitate dedicated economic development coordinator role and the addition of support staff. A professional economic development team will coordinate efforts of the EDA, and FCCC and be the driving force in the economic development of Fluvanna. Strong and consistent economic development management, along with additional resources, will help the county maintain a fiscal balance between residential and economic tax bases. An expanded staff will provide a competitive advantage in the region.

Although the county will continue to rely on the EDA and the FCCC, an expanded staff is ideal for successful economic development. Business recruitment and retention programs are successful only to the extent that the targeted businesses are able to receive the attention they deserve.

The following are examples of key volunteer organizations and efforts that comprise Fluvanna County's current economic development program:

### *The Economic Development Authority*

The Industrial Development Authority was renamed the Economic Development Authority (EDA) in 2008 to reflect the broad interests of the authority and the county. The EDA is a political subdivision of the state that is authorized to issue tax-exempt revenue bonds. Enabled by Virginia's Industrial Development Authority legislation, the EDA may assist in the financing of startup and expansion programs for both private and public economic development projects. The EDA works to identify areas of economic development for the county and provide input for the economic development business plan, as well as financial assistance to facilitate project implementation.

### *Fluvanna County Chamber of Commerce*

The Fluvanna County Chamber of Commerce (FCCC) has been serving the community since 1956. The chamber now employs one part-time worker. This volunteer organization, composed of over 189 members, promotes the commercial and civic interests of the area.

### *Central Virginia Partnership for Economic Development*

The Central Virginia Partnership for Economic Development (CVPED) is the regional economic development marketing organization, funded by member counties and private business contributions. The partnership works to address the issues affecting economic development across the region and offers assistance when needed.

Blank Page

## Chapter 6

# HISTORIC PRESERVATION

### *Discovering Our Cultural Heritage*

#### **EXISTING CONDITIONS**

Fluvanna County is blessed with many historic and cultural resources. The county is also fortunate to have an active, knowledgeable, and dedicated historical society. In 1993 the Board of Supervisors matched a grant from the Virginia Department of Historic Resources to aid the Fluvanna County Historical Society in producing a study entitled *Architectural History, Identification, and Assessment of Fluvanna County, Virginia*. This publication includes a preservation plan with many goals and provides a list of 480 historical sites identified in the county. Copies of the study are available at the public library or from the society.

The Fluvanna County Historical Society has ownership of and responsibility for four historic properties: the lock and mill site on the Rivanna River at Palmyra, the “Triangle Park” at the north end of Palmyra on Route 15, the Holland Page Log House on Route 601, and Maggie’s House in Palmyra. The society uses Maggie’s House for their offices and archives. These properties are intended to be available for public use and education.

Fluvanna County, the Fluvanna County Historical Society, and the Fluvanna Heritage Trail Foundation have partnered in the restoration of the Summer Kitchen at Pleasant Grove and have completed the restoration of the Haden House at Pleasant Grove. The Old Stone Jail Museum is owned by the county, but is open for tours through the management and efforts of the Historical Society.

#### ***Easements***

Fluvanna County has taken a proactive position on conservation easements. The Board of Supervisors created a county easement program whereby the county, as a jurisdiction, may hold and protect easements. As of January 1, 2014, there are 33 conservation and historic easements in Fluvanna County. These easements protect 13,266 acres, or approximately 7.2% of the County.

The Virginia Department of Forestry (VDOF), Virginia Department of Historic Resources, Virginia Outdoors Foundation, and Fluvanna County itself hold easements countywide. The County itself currently holds four (4) conservation easements totaling approximately 916 acres. Most of the land protected by conservation and historic easements is located in the eastern portions of the County, along or near the Rivanna and James Rivers. A significant number of properties in the county have been placed under other conservation and historic easements to protect them in perpetuity from overdevelopment. Easements currently exist on Oak Hill Farm, Red Bank Farm,

Lower BreMO, BreMO Recess, Cumber Farm, Lakeview, Melrose, Glen Burnie, Chatham Plantation, Maranatha Farm, Lowfields Farm, Glenarvon, Upper BreMO, Upper Yewers Farm, Granite Hills, Little Byrd Creek, the Palmyra mill site and lock, and the Scheier Natural Area (owned by Rivanna Conservation Society), and the first two county-held conservation easements, on the Barber and Zehler properties.

### ***National Register Historic Districts***

#### ***Bremo Plantation***

This historic district consists of three plantation house groupings and their outbuildings, all built on BreMO Plantation by General John Hartwell Cocke (1780–1866) between 1803 and 1845. The first to be constructed was BreMO Recess (1803–1809); the second and most important of the three, Upper BreMO, was completed in 1820; the last was Lower BreMO, built circa 1844, at the same time BreMO Recess was extensively remodeled.

Noted architectural historian Fiske Kimball has described Upper BreMO as the most nearly perfect of all the houses in the Jeffersonian tradition. Also at Upper BreMO is a large stone barn, which is undoubtedly the finest neoclassical barn in the United States. The entire group of houses and farm buildings at BreMO, taken together, forms one of the most remarkable collections of early-nineteenth-century structures in the country.



***Figure HP-1, Upper BreMO***



***Figure HP-2, Historic Courthouse***

#### ***Fluvanna County Courthouse Historic District***

The first public building erected in Palmyra was the stone jail, completed in 1829. The courthouse was completed in 1831, and has been in continuous use since.



***Figure HP-3, Seven Islands***

#### ***Seven Islands Archaeological and Historic District***

The Seven Islands Archaeological and Historic District covers an area of approximately 312 acres and contains archaeological and architectural resources distributed near the confluence of the James and Slate Rivers in Buckingham County and



Fluvanna County. A total of eight archaeological sites have been identified within the district, of which six are considered contributing properties.

### ***National Register Listings***

Properties on the State and National Register include the Bremono Plantation Historic District, Fluvanna County Courthouse Historic District, Point of Fork Arsenal Site, Point of Fork Plantation, Glenarvon, Bremono Slave Chapel, Seay's Methodist Church, Glen Burnie, Melrose, Rivanna Farm, The Oaks, Laughton, Western View, Gum Creek, Pleasant Grove, and Union Mills Canal Outlet Locks 1 and 2. In addition, several properties that qualify for listing on the National Register of Historic Places are being processed.



*Figure HP-4, Point of Fork Arsenal Site*



*Figure HP-5, Bremono Slave Chapel*

### ***Historic African American Schools***

Among Fluvanna's most important historic resources are its early 20<sup>th</sup> Century African American schools including the New Fork High School and the four existing Rosenwald Schools. Julius Rosenwald donated funds for construction of schools for African American children throughout the south in a concerted effort to bring educational opportunities to everyone. Fluvanna County participated in the program by assisting in the building of six (6) Rosenwald Schools, four (4) of which are still standing. The New Fork High School, a small wooden building on Route 650 in the southern part of the county was the earliest central high school for black students. The NAACP, local churches, and the Fluvanna County Historical Society have launched a program to restore the Dunbar Rosenwald School on Route 650, as well as the New Fork High School, to create a museum of early 20<sup>th</sup> Century African American educational history.

### ***Other Properties of Historic Significance***

The Historic Preservation Task Force, in its 1999 report, recommended that additional historic districts and individual landmarks be recognized either nationally or at the state level. Historic districts would include Palmyra, Wilmington, Columbia, Fork Union, and Bremono Bluff. Properties that may qualify for individual listing on the State and National Registers include Chatham, Cumber, Currin's Tavern, Dunbar School, Mount Airy, Oak Grove, Spring Garden, Jackson House, Roadview, Variety Hill, Bowlesville, and Winnsville. Properties of state and local importance include Allegre's Tavern (Lafayette's Hill Tavern), Carysbrook, Hannum House, Cohasset Railroad Station, Riverview, Twelve Oaks, Weaver's Tavern, Tarnwood, Hill Dale, Hill

Grove, Hickory Level, Pleasant Green, Solitude, Groom's Tavern, Union Mills Church, Gilnockie Farm, Locust Grove, Oak Hill, Mount Burgha, Old Orchard, Beaverdam Farm, Ellerslie, Oakland Grange, Quaint Lea, Terre Haute, Center Hill Farm, and the Oscar Seay House. There may be other properties in the county that have yet to be reviewed or inventoried.

## **ECONOMIC BENEFITS**

Historic preservation can be a key factor in economic growth, stimulating the local economy and providing incentives to improve property maintenance. Properties listed on the National Register qualify for tax credits. Residential properties may qualify for Virginia State tax credits, and commercial properties may also qualify for federal tax credits in addition to the state credits.

### **Property Values**

Property values consistently increase in areas with architectural protection or access to tax incentives. Tax credits and other incentives encourage property owners within historic districts to increase the amount they invest in their properties. This investment improves property maintenance, makes the area more attractive, and encourages individuals to buy real estate. In established historic districts, property values generally increase at a higher rate than for properties located outside the district.

### **Tourism**

Visitors seeking historic or cultural experiences provide an economic benefit. Providing visitors with historic and recreation opportunities encourages them to remain in the area longer, thereby increasing the county's revenues.

### **Employment**

Building rehabilitation is one way to expand employment in the county. The rehabilitation of historic structures is not only cost-competitive but labor-intensive. Both factors increase employment and earnings within the county. For each \$1 million spent on the rehabilitation of older sites, 15.6 construction jobs and 14.2 other jobs are created, and \$779,800 is added to household incomes. This translates into 3.4 more jobs and \$53,000 more added to household incomes than if the same \$1 million was spent on new construction. This difference is due to the variety of skills needed to complete rehabilitation projects.

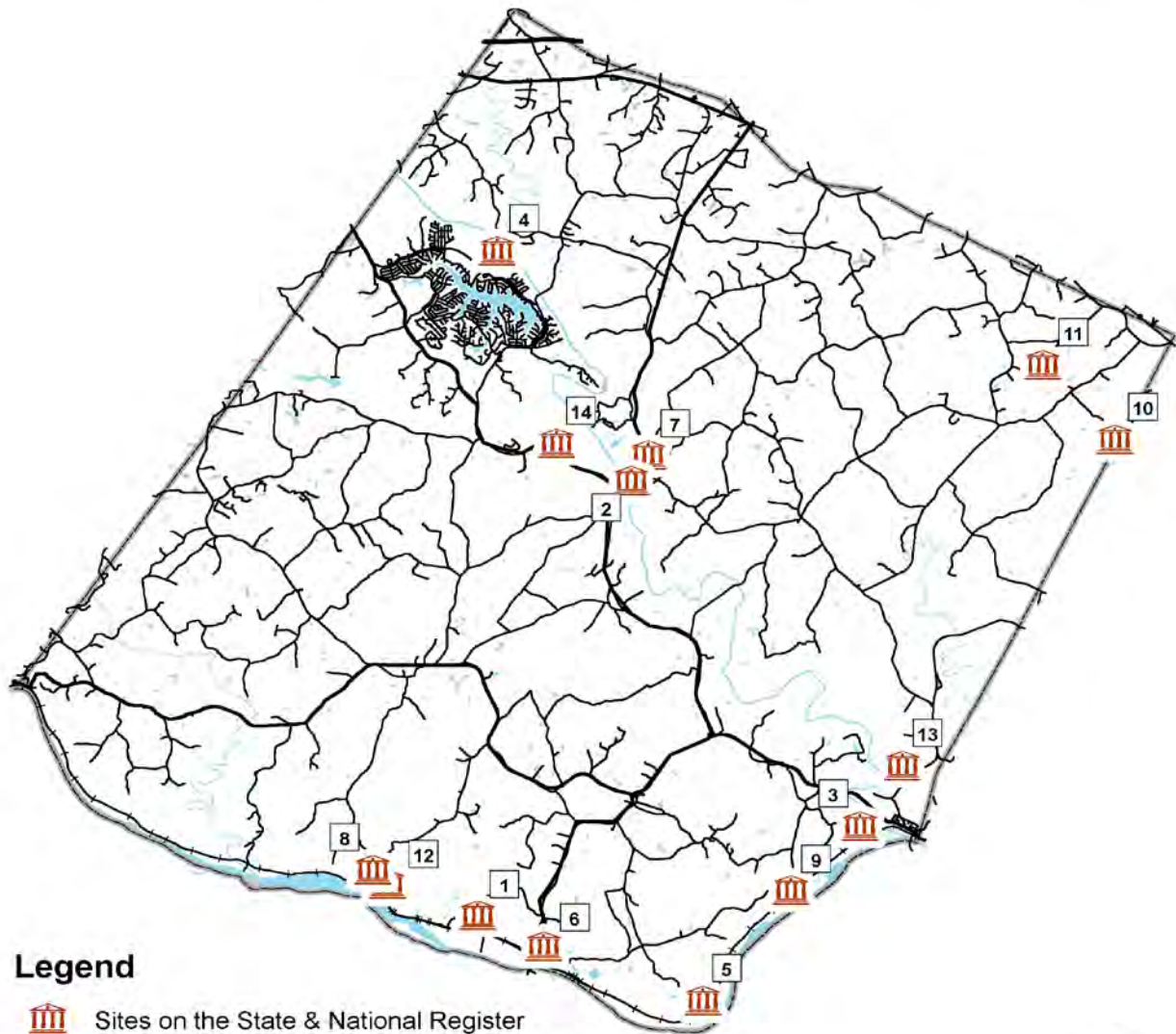
### **Adaptive Reuse**

Historic structures can be utilized in a variety of ways without disrupting the building's character if appropriate preservation techniques are employed. Converting structures for new uses can help prevent expensive rehabilitation or demolition in the future. The reuse of historic buildings often improves property maintenance for an area, as owners tend to maintain these properties better due to this increased investment. However, historic structures are not suitable for all types of uses. Residential structures converted to business space should only be utilized for low-intensity purposes such as office, home business, or similar uses. The intensity or scale of a new use should not require major alterations or accelerate structural deterioration.

# Fluvanna County

## Historic Properties on the State and National Register

Not to Scale



### Legend

 Sites on the State & National Register

- |   |                     |
|---|---------------------|
| 1 - Bremo Plantation                    | 8 - Melrose         |
| 2 - Fluvanna County Courthouse District | 9 - Rivanna Farm    |
| 3 - Point of Fork Plantation            | 10 - The Oaks       |
| 4 - Union Mills Canal Locks 1 & 2       | 11 - Laughton       |
| 5 - Glenarvon                           | 12 - Western View   |
| 6 - Bremo Slave Chapel                  | 13 - Gum Creek      |
| 7 - Glen Burnie                         | 14 - Pleasant Grove |

*Figure HP-6 Map of Sites on the State & National Register*

Blank Page

## Chapter 7

# PARKS AND RECREATION

### *A Master Plan for Tomorrow*

Recreational opportunities are vital to the health and well-being of Fluvanna's citizens. Recreational programs provide the means for citizens to learn new skills, improve their physical fitness, and develop an appreciation and understanding of the arts, through the offering of various leisure activities located in a variety of high-quality facilities.

Pleasant Grove is an eight-hundred-acre park, with an historic area, that serves the Fluvanna community as a center for recreational activities. The community's vision through the Pleasant Grove Master Plan, along with funding from state and federal grants, private/public partnerships, and local tax dollars, has built a flagship facility for the whole community.

Community fairs and events give the county a sense of identity and serve to unite the citizens with a common purpose. These events also bring in valuable tourism dollars to the county. The Fluvanna County Fair, the Kite Festival, and Old Farm Day are among the many proud recreational traditions of Fluvanna.

The careful planning and conservation of natural and historic resources, provision of recreational opportunities, and holistic development of mixed-use residential and commercial areas, with interconnected trails and open space, have enabled Fluvanna to reach its full potential in providing the highest quality of life for its citizens.

## **EXISTING CONDITIONS**

Citizen surveys and task forces have been used to assess the demand for recreational facilities and programs in Fluvanna County. These studies suggest citizen demand for trails, a pool, sports fields, a community park, and for additional programs and facilities. The county also encourages private recreational facilities.

### ***Facility Standards***

There are five classifications for recreation facilities within the county: regional park, community park, neighborhood park, special use facilities, and district park. These classifications are based upon minimum standards for area and service. These classifications together provide a minimum of 16 acres of parkland per 1,000 citizens, or about 480 total acres for a population of 30,000. The county currently owns approximately 1,000 acres of parkland. All parks should be designed and constructed in a manner which preserves the natural environment and showcases the natural features of the land. This approach does not preclude

the development of amenities commonly provided in parks, but it does encourage environmentally responsible planning in accordance with the best available technologies and planning practices.

Parks support both active and passive recreational activities, through appropriate buffers around property boundaries and between centers of activity within the park. Design standards maintain that a park should be no more than 50 percent developed, with minimum hundred-foot vegetative buffers along its boundary. Trails or other passive amenities are commonly found within buffer areas. The inclusion of these features depends on the park's specific details.

### **The Regional Park**

Regional parks provide a wide variety of activities for the community, including opportunities for nontraditional recreation. The typical acreage/population ratio for regional parks is 4–5 acres per 1,000 persons. Pleasant Grove (800 acres) is a regional park due to its attraction of specific users from beyond the county's boundaries. Features include or will include a pool, a sports park with ball diamonds, athletic fields, and hard courts, an outdoor classroom/amphitheatre, an equine/agri-expo barn, picnic shelters, several miles of trails, and other amenities.



**Figure PR-1, Pleasant Grove Park**

### **District Park**

District parks may include playgrounds, athletic fields, tennis and volleyball courts, and trails. Infrastructure may include restrooms, concession stands, benches, picnic areas, shelters, and parking areas. District parks are a minimum of fifty acres in size and have a service radius of five miles. Fluvanna does not have a designated district park, but does have various open spaces which may serve a similar function. A typical level of service for district parks is 4 acres per 1,000 persons for district parks; in Fluvanna this would be 120 acres.

### **Community Park**

Community parks serve several neighborhoods. Amenities are similar to those in district parks; differences include varying scales, neighborhood amenities like horseshoes, basketball courts, and recreation centers. Community parks are a minimum of twenty acres and have a service radius of one mile. Access should be along, or near, a major road that is multimodal in nature. A typical ratio for community parks is 3–4 acres per 1,000 persons. For Fluvanna, this ratio calls for 90–120 acres.



**Figure PR-2, Carysbrook Rec Complex**

Community parks in the county include the Carysbrook Recreation Center complex and the Fork Union Community Center. The Carysbrook facility includes two lighted ball fields, a multiuse field, a playground, a picnic shelter, a mini skate park, and a community arts center. The Fork Union Community Center hosts a playground, an outdoor basketball court, a community center that houses the Jefferson Area Board for Aging (JABA) senior center, classrooms, an auditorium, and the Parks and Recreation administrative offices.

### ***Neighborhood Park***

Neighborhood parks are within walking distance of adjacent neighborhoods. They usually do not provide parking or restrooms. Amenities include playgrounds, shelters, trails, and multipurpose fields. School parks may function as neighborhood parks. Neighborhood parks span a minimum of five acres and have a service radius of one-half mile. A typical ratio for neighborhood parks is 3 acres per 1,000 persons. The Lake Monticello community, Broken Island, and other cluster developments have neighborhood parks that function as community parks with facilities for athletics.



***Figure PR-3,  
Lake Monticello LMOA Park***

### ***Special Use Facilities***

Special use facilities includes recreation centers, aquatic centers, nature centers, outdoor swimming pools, school parks, mini parks, golf courses, urban spaces, historic sites, and greenways.



***Figure PR-4, Lake Monticello Golf***

### ***Public Facilities***

It is the mission of the Fluvanna County Parks and Recreation Department to promote opportunities for all residents to pursue safe and enjoyable leisure activities in balance with the protection and conservation of Fluvanna's natural resources, through cooperative development of programs and amenities to meet the needs of Fluvanna County Citizens. Parks and Recreation is comprised of two indoor facilities, three outdoor recreation areas, and various programs for the youth and adults of the county.

**The Pleasant Grove Recreation Area**, located in Palmyra on Thomas Jefferson Parkway (Route 53), is the central recreational area for citizens of all ages and interests. In 1995, the Board of Supervisors invested \$1 million in the purchase of this public park, which is now 800 acres. Both the Public Safety Building and the library are located on the Pleasant Grove property. Pleasant Grove offers open fields,



***Figure PR-5, Pleasant Grove  
Eastern Trail Head***

river overlooks, a pole barn, a historic residence, and a farmers market. The county's signature events are hosted here, including Old Farm Day, the Kite Festival, and the Fluvanna County Fair.

One-and-a-half miles to the east of the main entrance, the Pleasant Grove Eastern Trailhead offers a dog park, ADA accessible picnic shelters with grills, an ADA accessible trail leading to the Rivanna River, and a permanent restroom. Pleasant Grove has been identified by citizens as one of the county's most valuable resources, and its development will continue according to the updated Pleasant Grove Master Plan adopted by the Board of Supervisors.

**The Carysbrook Recreation Center** is located on James Madison Highway (Route 15) next to Fluvanna Middle School. The center includes two lighted ball fields, a gymnasium with a multisport court, a fitness center, a playground, a skate park, an outdoor basketball court, and a picnic shelter. Programs are offered through Parks and Recreation and county-based youth sport organizations. The Carysbrook complex houses the Monticello Area Community Action Agency, the Fluvanna County Performing Arts Center, and the Department of Social Services.

**The Fluvanna County Community Center** is two miles south of Carysbrook on James Madison Highway (Route 15) in Fork Union. Recently renovated, the facility is located in the former Fork Union School and includes several meeting spaces, classrooms, an auditorium, and a kitchen. It is also home to the JABA senior center and the Parks and Recreation administrative offices. This facility is dedicated to the memory and service of Jerome J. Booker, former member of the Board of Supervisors and the first African-American to serve on that body.

**The BreMO Recreation Area** is owned by Dominion Virginia Power and managed by the County. The facility is located on BreMO Road (Route 656) east of BreMO Bluff, and consists of a ball field, picnic shelter, playground, and restrooms.



*Figure PR-6, BreMO Recreation Area*

**The Fluvanna County School System** has facilities that are appropriate for community use, and can expand community programs through cooperation with the parks department. Community groups and agencies regularly partner with the schools to provide additional recreational activities. In 2007, the county and the school system entered into a Memorandum of Understanding to make school facilities accessible for the provision of active recreation opportunities. The school system also has after-school programs, including varsity and junior varsity sports, and athletic and special interest clubs.

### **Private Facilities**

A community's private recreational facilities are important for additional recreation amenities in the area. It is important that these private facilities supplement, not substitute for, public recreation facilities. In addition to the facilities described below, Fluvanna citizens can stay fit at the private gyms located near Lake Monticello – Health Nutz Fitness and Aquatic Center,



Anytime Fitness, and Orme Family Fitness.

**The Scheier Natural Area** on Long Acre Road (Route 639) is owned and overseen by the Rivanna Conservation Society, and aims to promote the enjoyment of the outdoors. Recreational uses include strolling, hiking, jogging, fishing, and environmental education. The Scheier Natural Area consists of one hundred acres of mixed upland woodland, pine regrowth, and open fields threaded with over three miles of trails.

**The Fluvanna Heritage Trail** is located on both public and private property, and is operated by the Fluvanna Heritage Trail Foundation. The trail consists of roughly five miles of trails at Pleasant Grove, plus the Rail Trail, which was developed from an abandoned CSX rail line. The Rail Trail is a loop near the County Administration Building in Palmyra. The Foundation collaborates with local agencies and organizations in the construction of trail amenities and renovating historical sites.

Through a VDOT transportation enhancement grant, the Foundation and the county partnered to construct three picnic shelters at the Pleasant Grove Eastern Trailhead, which opened in the spring of 2006. The foundation has also worked with the Fluvanna County Historical Society to provide additional trail connections to the Palmyra Mill Park. Considered part of the Heritage Trail, the park preserves and interprets the river lock and remaining mill foundation. The recently completed Rivanna River Bridge in Palmyra also connects the Palmyra and Pleasant Grove sections of the trail.

The Piedmont section of the **Virginia Birding and Wildlife Trail** comes through Fluvanna and Albemarle counties along the Monticello and Rivanna Loop. The Fluvanna sections are highlighted at Ruritan Lake, the Scheier Natural Area, and along the Heritage Trail. Ruritan Lake is a fifty-acre public lake developed with support from the Fluvanna Ruritan Club. Remnants of an old mill now lie submerged in the lake. The western end of the Fluvanna Heritage Trail begins just behind the historical Pleasant Grove House. This trail leads visitors through open fields of recent agricultural land and regenerating thickets surrounding old home sites. The eastern end of the Fluvanna Heritage Trail has a scenic panorama of the Rivanna River.

**Camp Friendship** is a private residential camp located in Palmyra on James Madison Highway (Route 15) and offers a variety of recreational opportunities in its off season. Frequently during nonsummer months, its facilities may be used for corporate, church, or family retreats. The camp's environmental education center is available for school field trips, and the tennis courts are available for use by the high school tennis team. The camp's gymnastic center offers gymnastic and dance classes to the community. Camp Friendship has one of the largest equine facilities in the area, with stables, an indoor riding facility, and an outdoor jumping ring. The camp has an outdoor recreation program offering a high and low ropes course, a swimming pool, a small lake, and a Rivanna River access point for canoes and tubing.

**Lake Monticello** is a private, gated residential community in the northwest area of the county. The community offers a wide array of recreational opportunities for its residents, and is built

around a 352-acre lake with developed beaches and boat docks. The lake offers swimming, boating, fishing, and water skiing opportunities for residents and their guests. The community has a summer pool, tennis courts, an eighteen-hole golf course (open to public play), playgrounds, picnic facilities, and a sports field. The lake's amenities serve nearly 40 percent of the county's residents.

**Fork Union Military Academy** is located on James Madison Highway (Route 15) in Fork Union. The academy offers its students numerous athletic and recreation amenities. Baseball and football fields, a multiuse gymnasium, and an indoor swimming pool are located on the campus. These facilities, while not widely available for public use, are available to community groups with permission.

**Private landowners** throughout the county have developed their land to meet their personal recreational needs and desires. Private equestrian trails are common, as are hunting preserves. Some landowners have developed sports fields and courts, home fitness centers, and walking/hiking paths on their land for their private, noncommercial use.

New subdivisions are being developed with expanded opportunities for recreation. The development of active and passive recreational opportunities within communities is encouraged and/or required by the Fluvanna County zoning and subdivision ordinances.

### **Other Recreational Amenities**

Private businesses, churches, and community-based organizations offer recreational opportunities for Fluvanna residents. Places of worship, in particular, routinely offer a variety of youth and adult recreational programs, after-school child care, summer camps, and other amenities.

Four primary bodies of water are accessible to the general public for recreation:

- **The James River** runs along the southern boundary of the county, with designated access points at Scottsville (on the Albemarle County line), Hardware, New Canton (in Buckingham County across from Bremono Bluff), and Columbia (in Cumberland County across from Columbia). Except during periods of high water, the James invites unpowered boating throughout the year, with designated points providing half to full-day excursions.
- **The Rivanna River** traverses the county from northwest to southeast, meeting the James River at Columbia. Through the efforts of the Rivanna Conservation Society (RCS), the river has been designated as the Rivanna River Water Trail as part of the Chesapeake Bay Gateways and National Park Service network of canoe and kayak trails. It has adequate access points at Crofton and Palmyra, as well as the Columbia ramp on the James in Cumberland County. Due to old dams and natural obstacles, many stretches of the river are a challenge to navigate about six months of the year. The trip from Crofton to Palmyra is normally quite pleasant; however, it is easy to underestimate the demands of the lengthy trip from Palmyra to Columbia, where the trip culminates in a direct crossing of the

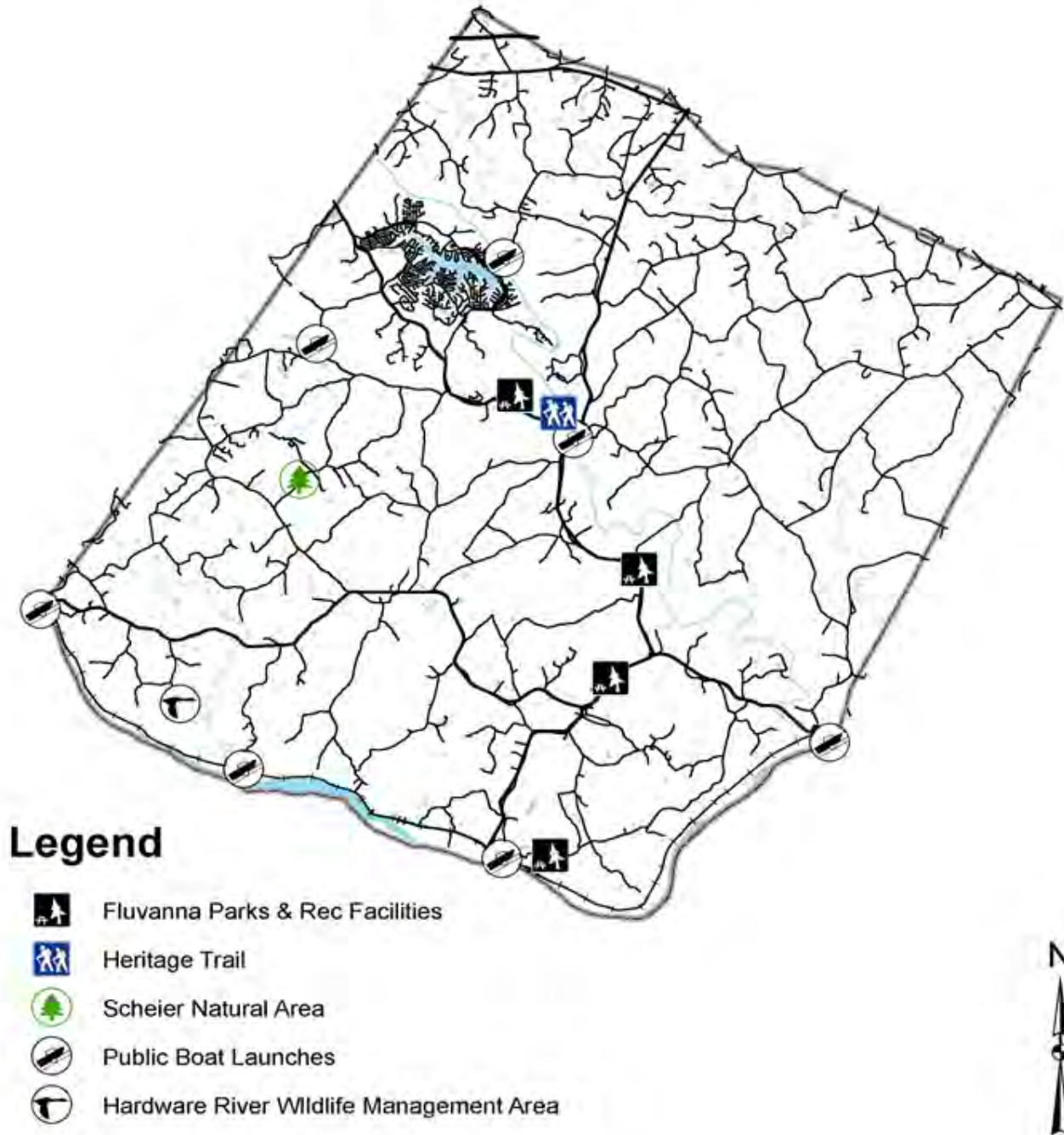
powerful James. A map detailing the history and natural history of the Rivanna River from Charlottesville to Columbia is available from RCS, outdoor sport retailers, and online at <http://www.baygateways.net/watertrailmaps.cfm>.

- **The Hardware River** traverses the western end of the county to join the James River. The Hardware River Wildlife Management Area is located on Hardware Road (Route 646) in the southwest portion of the county. Recreational uses include hunting, fishing, and camping. The river does not have any designated access points for boat launch, and is navigable for only a few months of the year and with considerable exertion. For experienced boaters it can be an enjoyable trip well worth the effort.
- **Ruritan Lake** is located three miles west of Cunningham off Ruritan Lake Road (Route 619). Along with fishing, unpowered boating is permitted. A parking lot is provided for all visitors, and a concrete boat ramp provides good access for small boats and canoes. Visitors can fish the shoreline near the ramp and along the dam adjacent to the parking area. The development of a beach/swimming area could be explored.

# Fluvanna County

## Public Parks and Recreation Facilities

Not to Scale



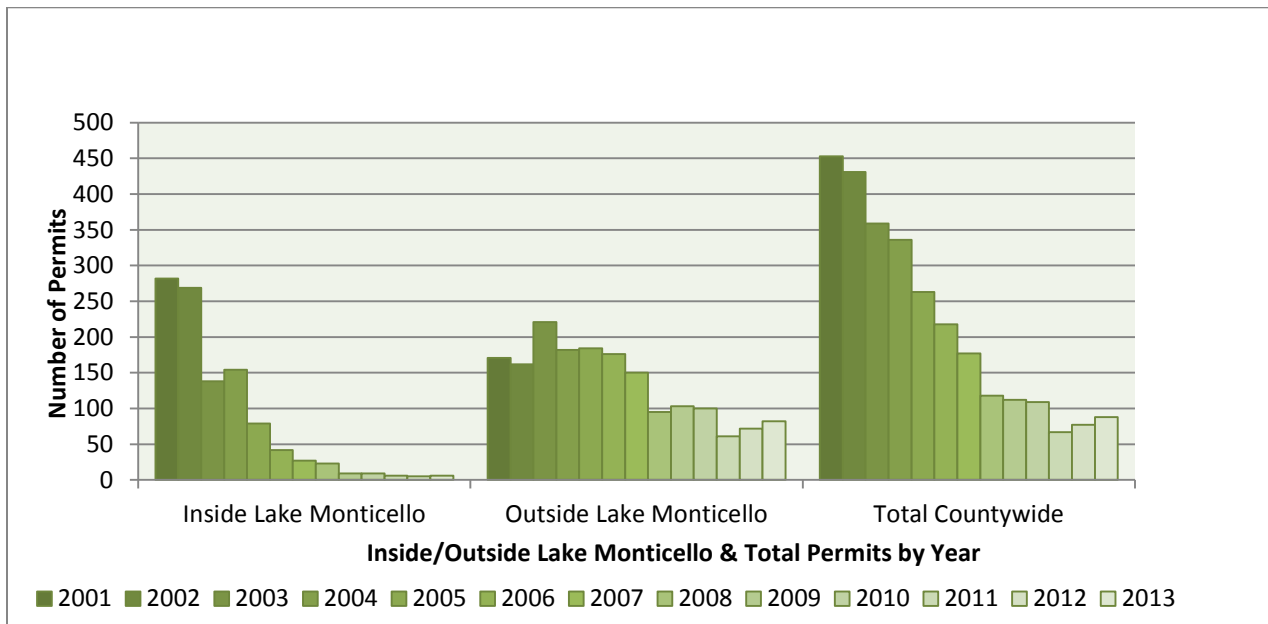
*Figure PR-7, Park Facilities*

# Chapter 8 HOUSING

## Providing Homes for Everyone

### EXISTING CONDITIONS

Fluvanna County is a rural county characterized by a significant amount of open land, farms, and forests. Fluvanna experienced rapid growth in the 1990s, which peaked in 2001, with 453 building permits. Since then the county has seen a steady decrease in the number of building permits, down to 67 in 2011. 2012 and 2013 have seen modest gains, but two years is insufficient for assuming an upward trend. In total, 3,179 housing units have been added in Fluvanna since 2000 – a 43% increase.



**Figure H-1, Building Permits Issued for New Homes, 2001–2013**

Lake Monticello, a private, gated community, was designed over forty years ago and began development in the late 1960s and in earnest during the 1970s. About 4,500 residential lots were created, with supporting central infrastructure and recreation facilities to serve the Lake community. Lake Monticello has provided a steady supply of housing, but as the community nears build-out, the number of new homes built in the county has slowed. The homes being built outside the Lake now outnumber those built inside.

Land in the county has increased in value, which in turn has influenced the overall cost of housing. Our slowed growth is due to market forces. Where the county was once considered a best buy, it is now comparable with surrounding counties.

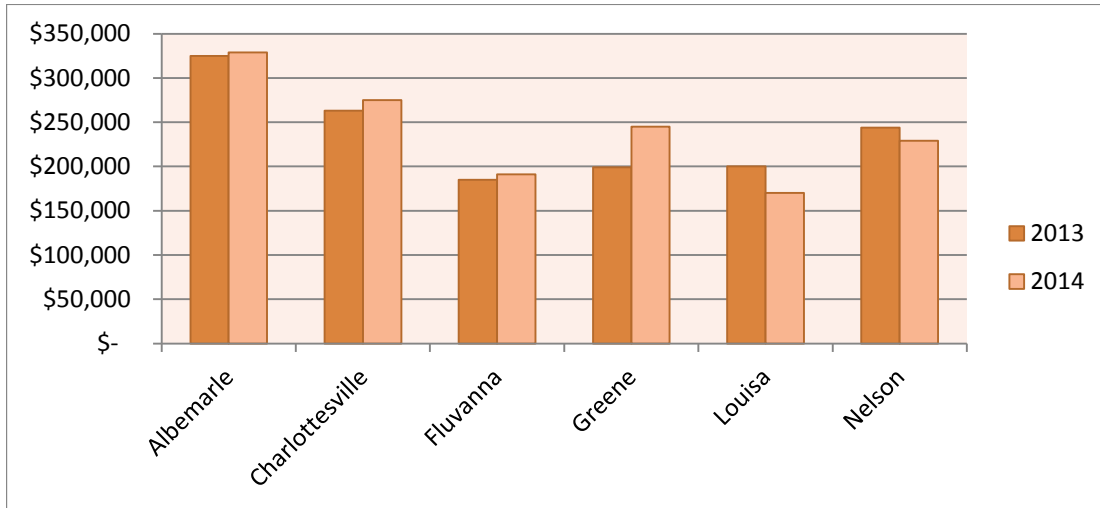
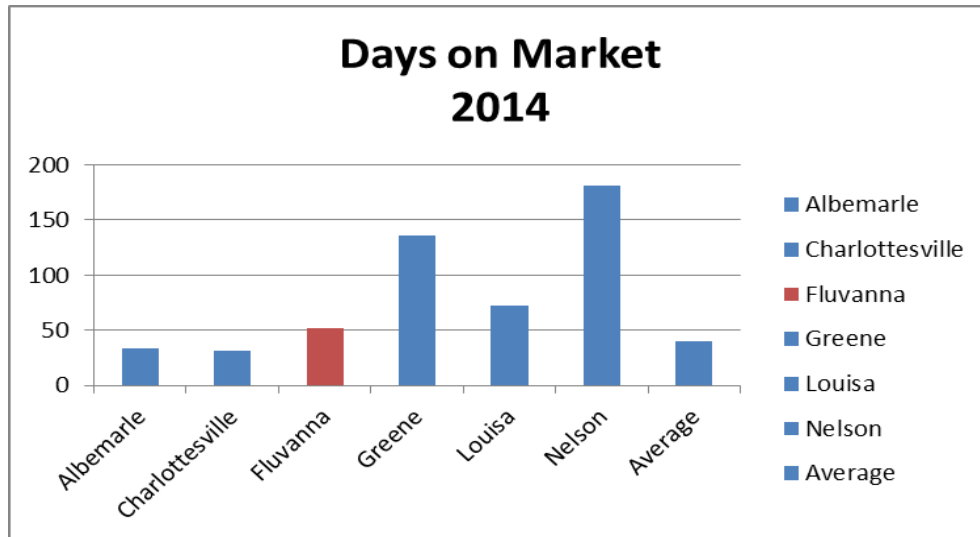


Figure H-2, 2013--2014 Median Sales Price (second quarter)

Figure H-3, 2014 Days on Market



The most significant change to Fluvanna’s housing was the adoption of a rural cluster subdivision ordinance in 2004. The rural cluster ordinance replaced the traditional two-acre subdivision. Any subdivision of more than five parcels in the agriculturally zoned areas of the county must be by rural cluster. The gross density of the subdivision did not change, but how the land was to be developed did. Some of the features and benefits of the cluster are:

1. The cluster ordinance requires that 75 percent of the land in any rural cluster development shall be permanently restricted to prohibit further residential, commercial, or industrial development. The open-space parcel may be used for the benefit of the homeowners in the subdivision or may remain a private farm.
2. The remaining 25 percent of the land may be used for the creation of residential lots with the same density possible with the traditional two-acre subdivision. The cluster lots are generally smaller in area than the traditional but with no minimum or maximum area assigned to each lot.
3. Sensitive areas are protected by incorporating them into the open space.
4. Housing is encouraged to be off the main roads and away from view.

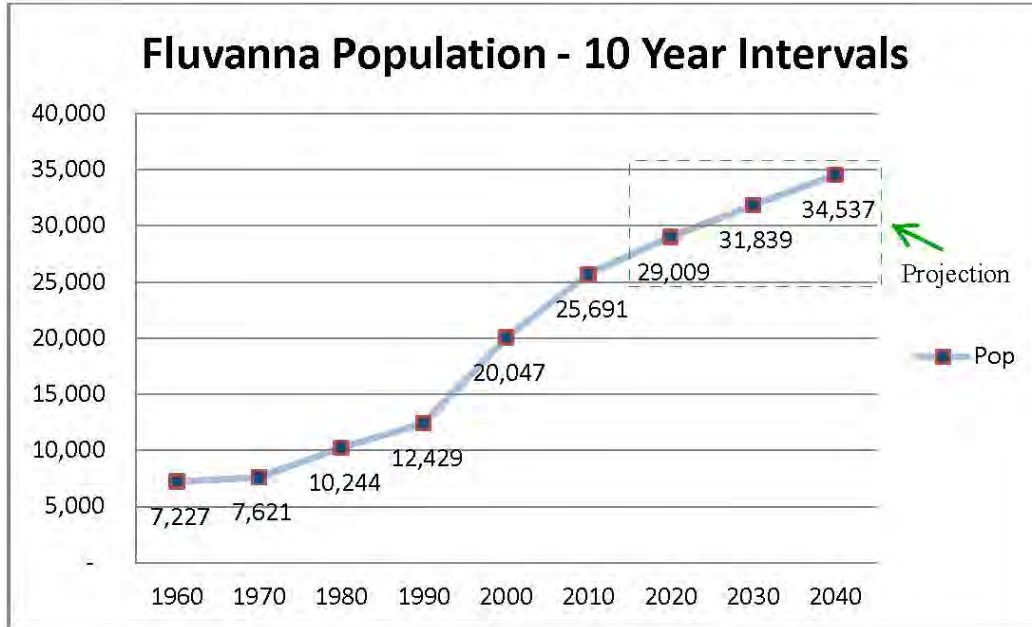
Another issue to consider in Fluvanna is the limited infrastructure available for denser housing. Even as building lots inside Lake Monticello reach capacity, there has been continued growth around the Lake. Businesses, shopping, and other conveniences serve the area, and additional subdivisions have settled nearby. The Lake Monticello community makes up approximately 40 percent of the county's population.

Fork Union is served by central water, but sewer treatment is mostly private septic systems. Fork Union Military Academy has a sewage treatment plant to serve the school. The government complex and the people of Palmyra have a sewage treatment plant near the new Route 15 bridge.

Fluvanna are seeking final approval of a three-million-gallons-per-day water withdrawal permit from the Department of Environmental Quality to pump water from the James River. The use of this water resource will certainly affect the future development of the county. Fluvanna and Louisa counties have partnered in the provision of this water. With the development of Zion Crossroads, water to that area will be a priority. Increased housing density in areas served by infrastructure will make planning and directing growth to designated areas possible.

### **Population Trends**

Fluvanna County was, until recently, among the fastest-growing counties in Virginia. According to the Weldon Cooper Center, Fluvanna's population grew 28 percent between 2000 and 2006, from 20,047 to 25,668 people.



*Figure H-4, County Population and Projection*

### **Housing Trends**

The 2000 Comprehensive Plan established community planning areas pursuant to the Code of Virginia, section §15.2-2223.1. The remaining 80 percent of the county was designated rural residential or rural preservation. Guidelines for growth in the planning areas recommend that the community planning areas absorb 70 percent of Fluvanna’s growth, while rural residential and rural preservation areas provide for the remaining 30 percent.

While building permits have declined in number from year to year since 2005, new subdivision lots continue to be created, increasing potential housing stock. Most of the new subdivisions have been created in rural preservation and rural residential areas, particularly near the I-64 and Route 250 transportation corridors. Between 2001 and 2013, 3,816 subdivision lots were approved.

The mandatory rural cluster for major subdivisions in the A-1 zone has been successful in creating permanent open space in the county. Ordinances to reduce fragmentation of open space within rural clusters help ensure additional protections. The creation of new lots in the community planning areas has not reached the targeted guidelines, however. Without water and sewer to serve the targeted growth areas, higher density to accommodate growth is not possible.

In Fluvanna County, 2004 and 2005 saw the highest number of building permits issued, with a pattern of tapering off beginning in 2004. This is generally reflective of the regional housing market’s slowdown.



### 2001–2013 Residential Activity—Subdivisions: Planning Area

Year	Community Planning Area	Primary Residential Planning Area	Rural Residential Planning Area	Rural Preservation Planning Area	Total	% Change from Previous Year
2001	21	70	11	43	145	49.50%
2002	26	69	13	98	206	42.10%
2003	67	40	97	172	376	82.50%
2004	67	63	91	199	420	11.70%
2005	228	102	115	501	946	125.20%
2006	32	44	250	392	718	-24.10%
2007	79	17	75	418	589	-17.97%
2008	80	4	33	33	150	-74.53%
2009	2	0	48	40	90	-40.00%
2010	40	0	45	30	115	21.74%
2011	6	0	2	14	22	-82.61%
2012	11	0	11	4	26	18.18%
2013	2	NA	4	7	13	-50.00%

*Figure H-5, Subdivision Activity*

#### Type

The majority of Fluvanna County residents currently live in single-family dwellings, either conventionally built or manufactured. The 2000 U.S. Census estimate for total housing units in Fluvanna was 8,018; the 2010 Census estimates total housing units at 9,449. In 2000, 631 households were vacant (7.8%) and in 2010, 934 were vacant (9.8%).

About 2 percent of county residents live in multifamily units. The addition of more multifamily units to the housing mix would increase Fluvanna’s housing options and availability.

#### Affordability

Affordable housing is defined as housing which costs less than 30 percent of the monthly gross incomes of residents whose household incomes are 80 percent or less of the area median income. Fluvanna’s median household income is \$68,288 and 80% of this is \$54,630.44 or \$4,552.53 per month. The cost of affordable housing, including utilities, in Fluvanna is then 30 percent of \$4,552.53, or \$1365.76. The cost of housing, particularly for new construction, has outpaced family income. Households earning less than \$50,000 are struggling to locate and afford a home.

Transportation is second to housing for costs to household budgets. A 2012 study conducted by the national Center for Housing Policy found that the combined burden of transportation and housing costs for working families averaged 59 percent of annual income. In 2008 this number was 57 percent. Transportation costs are based on auto ownership, auto use, and public transit

use, and take into account the cost of commuting, traveling for school, errands, and other daily routines. These expenses subtract from households' income available for housing costs.

Three main barriers to home ownership are: (1) home buyer education and financial planning, (2) money needed for a down payment and closing costs, and (3) the high cost of land and housing. The Regional Home Ownership Center (RHOC), founded by the Charlottesville Regional Chamber of Commerce, the Charlottesville Area Association of Realtors, the Blue Ridge Home Builders Association, and the Piedmont Housing Alliance, helps people achieve home ownership. People meet confidentially with certified housing counselors who review their credit and develop an individual financial strategy to help them buy their home.

The Fluvanna/Louisa Housing Foundation (FLHF) has a full-time housing counselor on staff to meet with individual clients. This nonprofit organization was established by Fluvanna County residents in 1990 to address substandard housing for residents. Since that time the foundation has installed plumbing in over a hundred homes, assisted more than thirty first-time home buyers, and performed hundreds of emergency repairs. The Foundation received no funding from Fluvanna County in 2013.

### **Availability**

The Fluvanna/Louisa Housing Foundation manages the Housing Choice voucher program. According to the Department of Social Services, clients have a hard time finding rental units that fall within the monetary rental limits of the program and which meet HUD's minimum quality standards. This is especially true for one- and two-bedroom units, which are typically rented by elderly clients. Clients often have to go outside the area, particularly to Charlottesville, to find such rental units.

### **Assistance**

The Piedmont Housing Alliance, partnering with Albemarle County and the Charlottesville Area Association of Realtors, established the Piedmont Regional Housing Fund to assist qualified home buyers with down payments and below-market mortgage funds. These funds have limited use and are only for families that live and work in the same community, and for selected occupations in the medical, teaching, police, and fire fields.

Habitat for Humanity constructs new homes for low-income (less than 50 percent of median income) homeowners. The increased cost of residential lots has made it difficult for nonprofit organizations to acquire land.

### **Planning for an Aging Population**

Two age-restricted communities with assisted-living housing and facilities have been approved in the Rivanna community planning area. The southern part of the county is served by a nursing home in Fork Union. Smaller homes to own or rent designed with seniors in mind should be encouraged in the planning process. As the population of the county continues to age, mobility will become a prominent issue. Rural seniors who are no longer able to drive face serious obstacles in accessing food and medical care. Fluvanna is certain to remain rural and

automobile dependent, but creating options for non-drivers (compact, walkable areas, neighborhoods with mixed uses, and access to transit) is essential for allowing residents to thrive here throughout their lives.

Fluvanna County is outperformed by its neighbors in terms of the provision of affordable housing and housing programs. For example, Albemarle and Louisa have implemented down-payment assistance programs and work with agencies on homeowner education and maintenance programs. Louisa County also permits accessory apartments by right throughout the county, which is an important supply of affordable rental housing. Charlottesville requires affordable units associated with special use permits and rezonings that have a floor area ratio (FAR) of one or more (FAR = 1.0); that is, the floor space of the building equals or is greater than the area of the plot the building is set on.

Any rezoning application should be viewed as an opportunity to create some affordable housing (e.g., 15–20 percent of the units in the project). Partnerships are critical to the effective provision of affordable housing, and local governments should not be depended on too heavily. Local government action in collaboration with developers and nonprofit/nongovernmental organizations makes for stronger, more cohesive, and more sustainable housing programs.

Blank Page

## Chapter 9

# HUMAN SERVICES

### *Partnership for a Healthy Community*

## EXISTING CONDITIONS

“Human services” is not the responsibility of just one group or agency but rather the collaborative efforts of many, including social services, the health department, parks and recreation, the schools and education system, churches, and the community. Some services affect Fluvanna County residents across their life span. These include housing, education, and health services.

Fluvanna’s 2010 U.S. Census data shows that residents under 18 make up 21.7 % of the population (down from 23.6 % in 2000) and that residents over 65 make up 17.6 % of the population (up from 14 % in 2000). Statewide, for comparison, 22.6% of residents are under 18 and 13.4% of residents are over 65. These numbers suggest that the county has a growing senior population, and seniors’ demand for services is likely to increase over time.

From 2008-2012, Census data shows that Fluvanna has a lower percentage than the Commonwealth of people living below the poverty line (6.7% and 11.1%, respectively). Over the last two decades, the proportion of Fluvanna residents living below poverty levels has decreased. In 1990, 10.5 percent of the population was below the poverty line; by 2005, 6 percent of the population was. Despite this change, the demand for human services has continued to expand. Some of the primary agencies and programs for county citizens are discussed in this chapter.

### **Human Service Agencies**

#### ***Virginia Department of Social Services***

The Virginia Department of Social Services (VDSS) provides programs and services to help people overcome poverty, abuse, and neglect, achieve self-sufficiency, and shape strong futures for themselves and their communities.

Many of the programs are mandated at the national and state level and receive grants, but these resources are often not enough. Caseloads continue to increase, as staff levels are insufficient to meet demand. The Department of Social Services estimates that ten additional staffers are needed to handle 50 percent of the caseload, or eighteen additional staffers to handle 83 percent.

If the county is not able to provide the increased funding, the following impacts will occur:

- Loss of federal and state funding
- Staff turnover
- Ongoing and increasing difficulty in meeting federal and state mandates
- Inability to improve or to continue services at the current resource level

### **Fluvanna County Social Services**

Fluvanna County Social Services' mission is "To be a leader in collaboration with other community agencies, to serve county citizens promoting self-reliance, well-being and the best possible quality of life." In order to achieve this mission, Fluvanna County Social Services offers a number of service programs to meet local needs. Service programs include:

#### *VIEW (Virginia Initiative for Employment not Welfare)*

Initiated in 1997, this program assists individuals with employment opportunities and promotes the goal of self-sufficiency. Supportive services are provided as needed and may include child care, transportation, medical and dental services necessary for employment, and other work-related expenses. All Temporary Assistance to Needy Families (TANF) and TANF-UP recipients must participate unless exempt.

#### *Adoption*

Registries are maintained of approved for adoption and of children available for adoption, while a variety of efforts attempt to bring these families and children together. Local children's adoptions, including required court reports and home studies of adoptive families, are approved by the local department.

#### *Adult Protective Services*

Reports of abuse, neglect, and/or exploitation are investigated regarding adults age sixty and over and disabled adults over the age of eighteen. Services are delivered to protect adults at risk of abuse, neglect, and/or exploitation. Efforts are coordinated with the Commonwealth's attorney, Sheriff's Office, community resources, and family members.

#### *Adult Services*

Case management services allow aged or disabled adults to remain in the least restrictive setting and function as independently as possible through family and social support systems. Long-term care services are available and include arrangements for care such as home-based assistance, personal care, adult day care, or placement services. In coordination with the Health Department, prescreenings for Medicaid personal care are performed.

#### *Child Day Care Services*

Case management services assist eligible families in procuring day care for children, for less than twenty-four hours per day. Services promote parental choice, consumer education, state

health and safety standards, child care and early childhood development resources. Services are constrained by funding.

#### *Child Protective Services*

Reports of abuse and neglect of children under the age of eighteen are investigated with the goal of protecting children from physical, mental, sexual, emotional, and medical neglect, and from abuse and exploitation. Services are developed with the family to prevent and alleviate family dysfunction and child abuse and neglect.

#### *Family-Based Services*

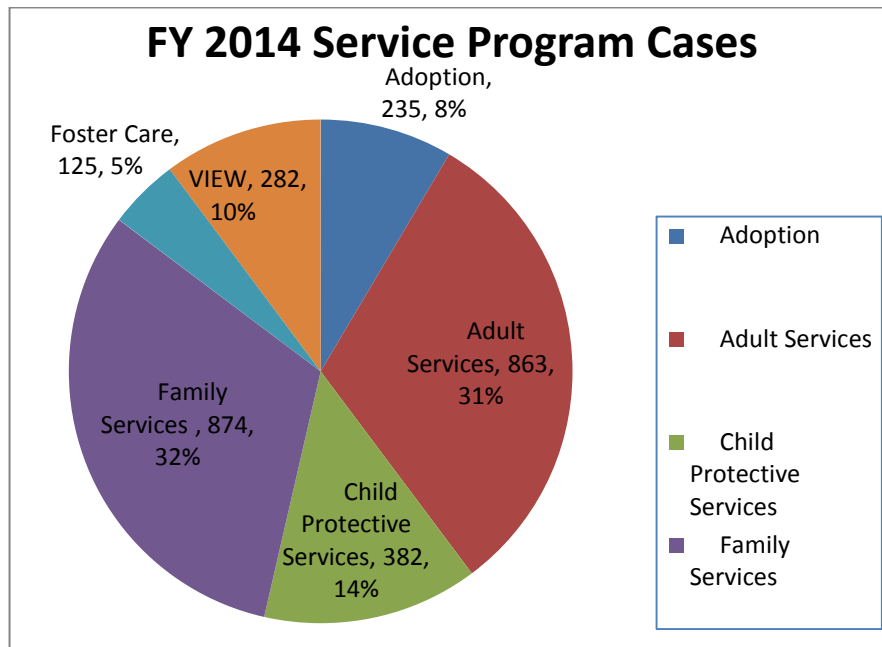
Services include intake services, prevention and support services, and domestic violence services. These services assist families in cases where a child is likely to enter foster care unless services are provided.

#### *Family Planning*

Services are provided to help individuals to determine the number and timing of their children. These services are frequently coordinated with the State Health Department or other medical provider.

#### *Foster Care*

Temporary substitute care is arranged for children who cannot be in their own homes. The agency becomes the child's legal custodian, and as such is responsible for the child's care and well-being. In some circumstances, arrangements are made for the parent to retain custody with temporary substitute care for the child.



**Figure HS-1, FY 2014 Service Program Total Cases**

### *Provider Approval*

Local agencies approve the following providers of care: adoptive parents, foster parents, adult family care providers, and companion providers. Child-care providers are either approved by state licensure or Children, Youth and Family Services (CYFS) for family day-care homes.

Figure HS-2 shows the total number of service program cases for Fluvanna County for the 2014 fiscal year.

Fluvanna County Social Services administers benefit programs supported by federal, state, and local funds, including:

### *Auxiliary Grants Program (AG)*

Financial assistance is available for certain needy aged, blind, or disabled persons in adult care residences. The resources of these individuals must be insufficient to cover the cost of their care.

### *Emergency Assistance to Needy Families' Children*

Financial assistance may be paid to a family or provider of service during specific emergency situations.

### *Energy Assistance Program*

Eligible low-income households receive federal energy assistance with their home heating and cooling bills. Faulty heating/cooling systems may also be repaired in households eligible for fuel assistance.

### *Family Access to Medical Insurance (FAMIS)*

This health insurance program provides access to health services for children of working families.

### *SNAP*

This federal program supplements the food budgets of lower-income households. Eligibility is determined by financial need, income, resources, and nonfinancial criteria such as student status and work registration.

### *General Relief (GR)*

This state/local program provides limited assistance for monthly care of a nonrelative child for whom the recipient has custody.

### *Medicaid*

This federal/state program provides medical care for specified needy persons. Eligibility for Medicaid is determined by the local Social Service department according to criteria established by the Department of Medical Assistance Services.

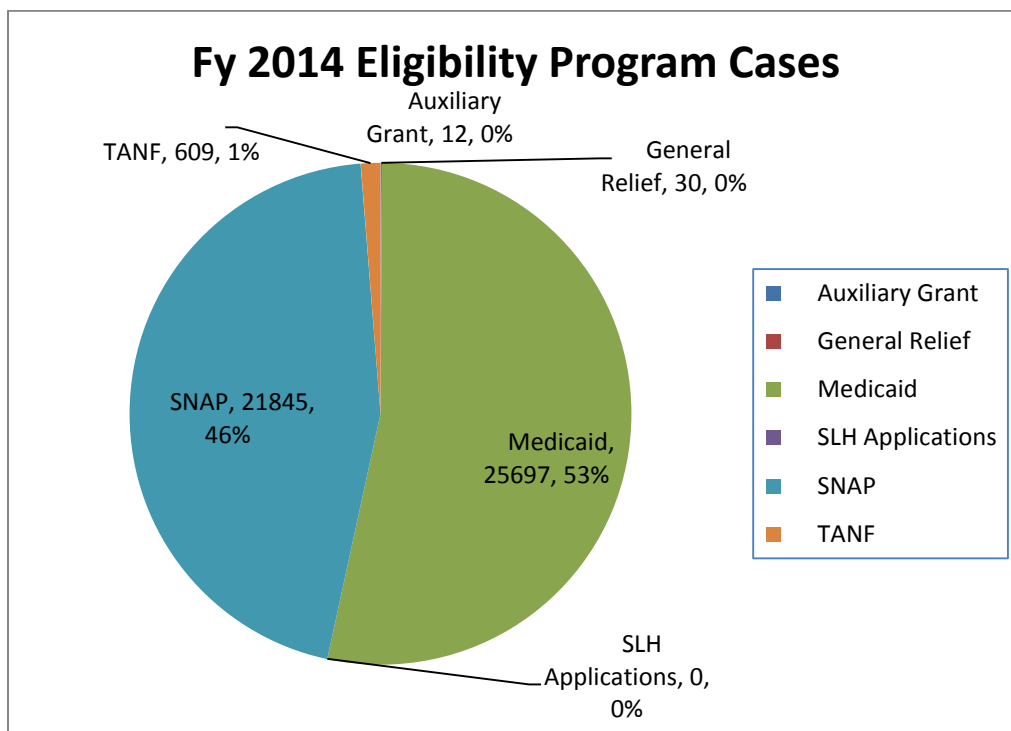


### *Refugee Resettlement Program*

This federal program provides medical and cash assistance to eligible refugees who settle in Virginia.

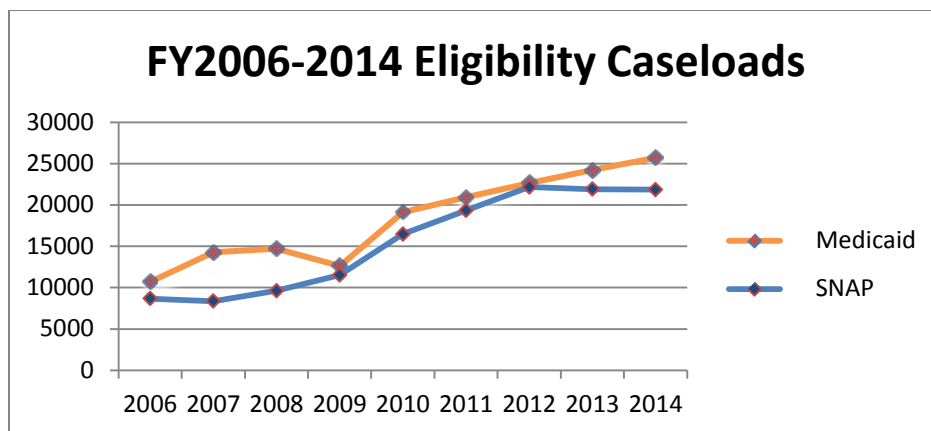
### *Temporary Assistance to Needy Families (TANF)*

This program provides temporary financial assistance to eligible families with children. To be eligible, a family must meet financial criteria, along with certain other requirements such as citizenship, and have a child living with a parent or other relative.



**Figure HS-2, FY 2014 Eligibility Program Total Cases**

The pie chart above shows the total number of eligibility program cases for Fluvanna County for the 2014 fiscal year. Medicaid cases accounted for 53 percent of the total number of cases, while SNAP cases made up 46 percent. The total number of all other cases accounted for the remaining 1 percent. For these programs, each case represents one use of the program per person.



**Figure HS-3, FY 2006-2014 Eligibility Program Total Case Load Comparison**

The graph above shows the total number of Medicaid and food stamp cases from FY 2006-2014. These statistics do not indicate the percent increase of participants in each program, just the number of times a program benefit was utilized (i.e., a case). Medicaid cases increased over this period by 141%, and SNAP cases increased by 152%.

At present, offices providing human services are located in Palmyra, Carysbrook, and the Fluvanna Community Center in Fork Union. In the past all human services offices were located in Palmyra. A central location for all human services would be helpful to citizens and employees, and there are plans to centralize these services again at the former library site in Carysbrook.

### ***Region Ten Community Services Board***

Established in 1969, the Region Ten Community Services Board (CSB) is part of a statewide network of community services boards working to provide mental health, intellectual disability, and substance use services where they are needed—in the local community. An agency of local government, the Region Ten CSB is committed to serving the residents of the city of Charlottesville and the counties of Albemarle, Fluvanna, Greene, Louisa, and Nelson by offering a broad range of services distinguished by innovation and advocacy.

The Fluvanna office of Region Ten offers the following services on site:

- Office-based outpatient mental health therapy (children/adolescents, adults, families)
- Substance abuse services (assessments/drug screening, brief intervention/education, outpatient individual and group counseling for adolescents, adults, and Virginia Alcohol Safety Action Program [VASAP]).
- Anger management classes for adults and for adolescents
- Educational support services (school-based day treatment)

- Mental health case management services (adults, children/adolescents)
- Intellectual disabilities case management services (adults and children)
- Prevention services (school-based prevention services contracted by Fluvanna County schools—provided by the Charlottesville-based prevention team)
- Psychiatric and psychiatric-medication services are offered at our Louisa and Charlottesville offices to persons who are participating in other clinical services in the Fluvanna office.

In 2013, Region Ten served 6,732 persons, 577 of whom were from Fluvanna. Region Ten strives to provide the latest, most proven, and most reliable treatments to its consumers.

### ***Virginia Cooperative Extension***

The Virginia Cooperative Extension serves all individuals and families of Fluvanna. Programs available are in the areas of agriculture and natural resources, 4-H youth development, family and consumer sciences, and community viability. Examples of classes made available to citizens are a nutritional program called Smart Choices. This class also features gardening instruction in the community garden at Pleasant Grove. Many educational programs, including the benefits of conservation easements, leadership in the community, and food safety and science are part of the service.

### ***The Fluvanna County Health Department***

The Fluvanna Health Department provides services to all citizens. Services are not free, but charges are based on income. Inquiries are not made into citizenship and immigration status. Services provided include family planning, WIC (women, infants, and children) nutrition programs, immunizations, tuberculosis testing and treatment, rabies treatment, testing and treatment for sexually transmitted diseases, testing and treatment for HIV (human immunodeficiency virus), and ADAP (AIDS Drug Assistance Program) to help eligible patients obtain necessary prescription drugs and health education.

### ***CHIP (Children's Health Insurance Program)***

Jefferson Area CHIP Inc. is a not-for-profit home visiting program serving children, families, and pregnant women from low-income households. Using a team approach of a nurse and a family support worker, CHIP assists families in meeting both their health and social needs. Services provided include growth and development assessments, home safety assessments, education on improving parenting skills, and assistance in using community resources. Through collaboration and referral to other agencies, CHIP is able to assist families in improving their health and well-being, and promote self-efficiency.

### ***Library***

The new library building, completed in 2008, is located next to the Public Safety Building at Pleasant Grove. The new library offers county residents an expanded reading collection, increased computer access, additional programs, additional hours of operation, and two meeting rooms for library and community group use. The library (as of June 30, 2006) owns 42,852 books and audiovisual items. Library users borrow approximately 10,000 items per month. The library is open forty-eight hours per week. There are three full-time and three part-

time employees. The library's operating budget for the year ending June 30, 2006, was \$235,287, 75 percent from Fluvanna County and 25 percent from the Commonwealth through the Library of Virginia. The library partners with county government agencies and a variety of community groups to distribute information and to act as a community information resource. The library maintains a deposit collection of paperback books at the Lake Monticello Clubhouse as an additional outlet for library service to satisfy a Library of Virginia requirement. The library is governed by a board of trustees appointed by the Board of Supervisors. The library board hires a library director to manage the daily operations of the library.

### ***Faith-Based and Nonprofit Organizations***

The Monticello Area Community Action Agency (MACAA) is a nonprofit, community-based organization dedicated to eliminating both the causes and conditions of poverty in central Virginia, serving the following jurisdictions: Charlottesville, Albemarle, Fluvanna, Louisa, and Nelson. A food pantry and household goods and clothing distribution are made possible through MACAA at their office in Carysbrook.

The Fluvanna Christian Service Society has created the Happy Face Program to give Christmas for children and food baskets at Thanksgiving and Christmas.

The Jefferson Area Board for Aging (JABA) offers a weekly senior program at the Fork Union Community Center and twice monthly at the Scottsville VFW. Activities include health discussions, passive and active recreation, and lunch. Home visits may be made to help provide care or referrals.

The United Way works with the county to provide volunteer opportunities to interested citizens. The United Way Thomas Jefferson Area has a volunteer clearinghouse, and the county has partnered with them to provide training for Fluvanna County agencies that use volunteers, along with how to register their volunteer opportunities on the United Way Web site, [www.BeAVolunteer.info](http://www.BeAVolunteer.info). The county Web site has a link, [www.co.fluvanna.va.us](http://www.co.fluvanna.va.us), which allows anyone to search for volunteer opportunities.

### **Housing and Homelessness**

To address the needs of the homeless in the county, the county works with the Thomas Jefferson Coalition for the Homeless to seek a regional approach to the needs of the homeless. The county will continue to coordinate with key local and regional agencies, including the Fluvanna/Louisa Housing Foundation, the Department of Social Services, the Monticello Area Community Action Agency, the Region Ten Community Services Board, the Shelter for Help in Emergency, and the Salvation Army. This is an area of service that needs to be strengthened locally and regionally.

Similarly, affordable home ownership is a continuing and increasing concern as the cost of homes continues to rise much faster than household incomes. The county needs a variety of affordable housing opportunities for home ownership and rentals. Emergency repairs are another need for the county's existing housing.

The Fluvanna/Louisa Housing Foundation (FLHF) serves about one hundred families per year who are in need of affordable rental housing or health- and safety-related home adaptations or repairs. Over the past sixteen years, the foundation has installed plumbing and remodeled over one hundred homes and built twenty-five new homes in the county. Providing rental assistance and home repairs to keep people safe in their existing homes is the foundation's primary focus.

Habitat for Humanity also assists in the construction of affordable homes in the county. Habitat has purchased twelve acres and is planning to use this land for affordable housing for qualified families. The ninth Habitat home was completed in Fluvanna in 2007.

Housing is discussed in more detail in chapter 9, "Housing."

### **Needs of Children and Youth**

Collaborative efforts of the Youth Advisory Council (YAC), Parks and Recreation, schools, and human services agencies are essential to identify the needs of our children and youth. YAC is a Board of Supervisors-appointed advisory group tasked with creating a forum for the exchange of information about youth services, activities, and programs available to youth in Fluvanna County. YAC is committed to supporting new and existing initiatives that help children enjoy learning, recognize and develop their talents, and participate fully in their community. The Children's Services Act (CSA) provides services and funding for youths. CSA has just completed a cost-containment study to recommend improvements to the program and the best use of available funds. Every four years a committee of individuals representing all of the human service agencies, including courts and schools, performs a community-needs assessment. These needs can be addressed in ways that maximize financial resources and human effort.

According to the Children's Services Act cost-containment recommendations, recreation opportunities play a significant role in providing more constructive after-school opportunities for youth populations. Before- and after-school child care and educational and recreational programs are available through the schools and the Department of Parks and Recreation. Fluvanna County schools offer several opportunities such as structured activities, schoolwork, and recreation as a part of the Extended Education Program at Central Elementary School. Middle school students also may participate in after-school clubs. Additional facilities and programs to meet the demands for youth, such as after-school programs, are needed.

As part of the Extended Education Program, a summer program cares for children from 7:00 a.m. to 6:00 p.m. The Parks and Recreation Department provides summer activities and day camps for children. Transportation is often a deterrent to children being able to participate in activities. Transportation for children and youth to programs offered by the Department of Parks and Recreation enhances participation in these programs, particularly for children from low-income families. Some transportation is provided by Parks and Recreation, but JAUNT is a valuable partner to make the programs available to a larger number of children through their youth transportation services.

Beginning in the fall of 2007, parent education was made available to all citizens. A parent educator works out of the local CSA office, and another works with the Virginia Cooperative Extension office, which provides classes for court-referred clients. For all activities and programs offered by the Virginia Cooperative Extension, go to [www.ext.vt.edu/offices/fluvanna](http://www.ext.vt.edu/offices/fluvanna).

### **Needs of Senior Adults**

The Fluvanna County Community Center in Fork Union offers seniors a place to gather and enjoy programs. The newly renovated center has become a hub of activity. Parks and Recreation and the Jefferson Area Board for Aging (JABA) offer weekly senior programs at the Center. Activities include health discussions, passive and active recreation, and lunch. Home visits may be made to help provide care or referrals. Senior programs are also held twice monthly at the Scottsville VFW.

With an expanding senior population in Fluvanna as around the country, the need for senior support programs continues to grow. Current activities are beneficial to all ages and all generations, and multigenerational programs and mentoring is encouraged. However, expansion of these programs to other areas in the county is desired. And while JAUNT provides transportation for some, additional public transportation is needed. Housing that meets the needs of seniors both in design and affordability is also priority.

# Chapter 10

## EDUCATION

Fluvanna County Public Schools provide quality education for all students to acquire the skills, knowledge, and values needed to develop into responsible and productive citizens. The school system maintains an educational partnership of educators, learners, parents, and a dedicated community.

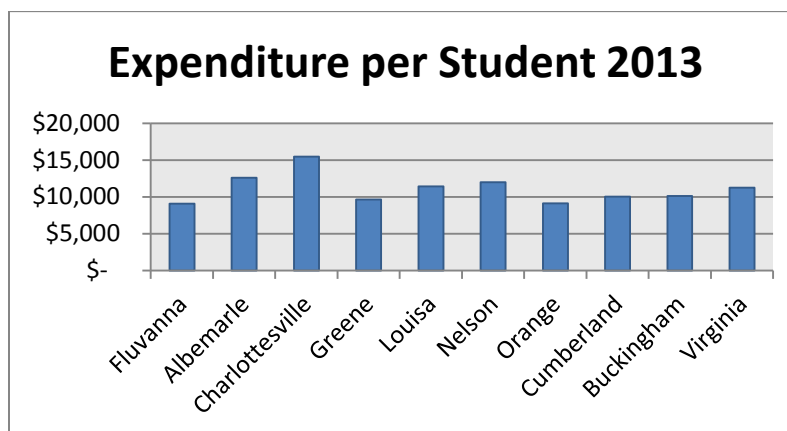
### EXISTING CONDITIONS

#### Public Schools

Fluvanna County has a school-age enrollment population of approximately 3,600 and the schools’ targeted student-teacher ratio is 22:1.. Fluvanna County educational resources include three elementary schools, one middle school, and one high school. All schools are fully accredited. Career and Technical Education courses (CTE) are offered at the high school. CTE programs offered include: business, health and medical sciences, TV production, agriculture, culinary arts, marketing, cosmetology and barbering, carpentry, teachers for tomorrow, and pre-engineering. Other course options may be available to students through dual-enrollment agreements with Piedmont Virginia Community College (PVCC) and the University of Virginia. There are also opportunities through online courses. Fluvanna County Public Schools is 1 of 22 districts, in the State with all schools fully accredited.

	2013	2008
Total revenue	\$9,505	\$8,943
Total expenditures	\$9,497	\$8,677

*Figure E-1: Spending and Revenue per Student*



*Figure E-2: Expenditure per Pupil*

**Fluvanna County Public Schools Demographics (as of December 11, 2014)**

<u>Schools</u>	<u>Students K-12</u>	<u>Student Demographics</u>
Total Schools = 5 Primary (PK-K) = 1 Elementary (1-2) = 1 Elementary (3-4) = 1 Middle (5-7) = 1 High (8-12) = 1	Total Students = 3561 West Central Primary (K) = 229 Central Elementary (1-2) = 515 Carysbrook Elementary (3-4) = 569 Fluvanna Middle (5-7) = 853 Fluvanna County High (8-12) = 1395	American Indian = less than 1% Asian = less than 1% Black = 14.8% White = 73.4% Hispanic = 4.6% Native Hawaiian = less than 1% 2 or more = 6.5% Economically Disadvantaged = 31%
<u>Average Daily Attendance</u> Elementary =96% Secondary = 96%	<u>Transportation</u> Number of square miles covered by district = 280  Total number of students transported home to school = 3,206	<u>Students Receiving Additional Services</u> Pre-K = 75 Special Education Students= 396 504 Students = Gifted Students LEP Students = 64
<u>Average Teacher/Pupil Ratios</u> West Central (K) = 1:19 Central (1-2) = 1:21 Carysbrook (3-4) = 1:24 Middle(5-7) = 1:23 High (8-12) = 1:26		<a href="#">Return to Table of Contents</a>
<u>Graduates</u> 2014 Graduates = 264 Advanced Diplomas = 135 Standard Diplomas = 102 On-Time Graduation Rate = 91.21%*  Attending 4-year College = 33% Attending 2-year College = 34% Continuing Education in Other Areas = 5% Enlisting in Military = 8% Entering Work Force = 18% Other = 2%	<u>Career and Technology Education</u> Total CTE Enrollment (duplicated) = 1033 Percent of Students enrolled in CTE= 50% CTE Completers = 55% CTE Industry Credentials = 654 CTE Completers Earning a Credential = 83%	<u>CTE Program Offerings - Current</u> Agriculture Business and Information Tech. TV Production Carpentry Cosmetology/Barbering Culinary Health Occupations Leadership Pre-Engineering Teacher Cadet
<u>Employees</u> Total = 510 Certified Staff = 300 Highly Qualified =100% Teachers Master’s Degree or Higher = 53%	<u>FY15 Adopted Budget</u> Instruction = \$26,836,506.26 Administration, Attendance & Health = \$1,525,949.94 Transportation = \$2,719,563.52 Operations & Maintenance = \$3,681,626.45 Debt Service = \$0 Technology = \$1,718,289.83	
<u>Finance</u> Adopted Operating Budget = \$36,481,936 Budgeted Per Pupil Expenditure = \$10,346 Budgeted Average Daily Membership = 3,526		



## **Library**

The Library was completed in 2008 and is located next to the Public Safety Building at Pleasant Grove. The Library offers County residents a reading collection, computer access, programs, ebooks, and two meeting rooms for library and community group use. The library owns 71,216 books and audiovisual items as of August 1, 2014. Library users borrow approximately 18,600 items per month. The library is open 54 hours per week. There are three full-time and four part-time employees. The library's operating budget for the year ending June 30, 2014 was \$263,551,77 percent from Fluvanna County and 23 percent from the Commonwealth through the Library of Virginia. The library partners with county government agencies and a variety of community groups to distribute information and to act as a community information resource.

The library has a deposit collection of paperback books at the Lake Monticello Clubhouse. A board of trustees appointed by the Board of Supervisors governs the library. The library board hires a library director to manage the daily operations of the library.

## **Private Schools and Homeschooling**

Approximately 6 percent of the county's student-age population does not attend public schools. Options for nonpublic elementary, middle, or secondary education in the county include homeschooling, Effort Baptist Church, the Open Door Christian Academy, the Fork Union Military Academy, the Oakland School, and the newly established Light Academy. Children from Fluvanna also attend private schools in Albemarle and Buckingham counties and the Richmond area.

Homeschooling began in Fluvanna County in 1984. The homeschooling population has increased from 120 in 2008-2009 to 157 in 2013. Projections from the national and state levels call for continued growth in this segment of education, so Fluvanna County might expect to follow the same trends. Most children who are homeschooled return to the public school system in middle or high school years.

## **Technology**

County schools are equipped with technology labs. The schools have a wireless local area network within each building and a wireless wide area network between school buildings. There is a computer in each classroom, and all county public schools have Internet capabilities.

## **Adult Education**

According to the 2010 Census Bureau Web site, [www.census.gov](http://www.census.gov), the education level in Fluvanna's adult population consists of:

- 14.3% with less than a high school education (25 or older)
- 33.3% high school graduates or higher (25 or older); including
- 28.6% with bachelor's degree or higher (25 or older)

Presently, Fluvanna County offers General Educational Development (GED) and Adult Basic Education (ABE) programs for those who have not completed their high school education. The Families Learning Together program is offered to adults with children in grades PK–3 who have not completed their high school education.

### **Workforce Preparedness and Continuing Education**

Fluvanna County is located close to a major university (the University of Virginia) and two community colleges (Piedmont Virginia Community College and J. Sargeant Reynolds Community College), and has a strong relationship with the Charlottesville Albemarle Technical Education Center (CATEC).

#### University of Virginia

The University of Virginia (UVA) is located in Charlottesville, Virginia, less than thirty miles west of Fluvanna County. UVA continues to rank in the top twenty-five national universities, public and private (<http://www.virginia.edu>).

#### Piedmont Virginia Community College

Piedmont Virginia Community College (PVCC) is a nonresidential two-year institution of higher education that serves central Virginia—principally residents of Charlottesville and the counties of Albemarle, Buckingham, Fluvanna, Greene, Louisa, and Nelson. PVCC is located in Albemarle County, approximately thirty miles west of Fluvanna County. The college offers fifty-two associate degrees and certificate programs. PVCC also offers noncredit workforce classes and certificates as well as individual classes for personal enrichment (<http://www.pvcc.edu>).

#### J. Sargeant Reynolds Community College

J. Sargeant Reynolds has two campuses in Richmond, Virginia, and one in Goochland County. The college is the third largest in the Virginia Community College System, enrolling students at all three major campuses, five off-campus sites, and through distance learning. The college currently offers twenty-four two-year occupational/technical degree programs, nine occupational/technical certificate programs, five two-year college transfer programs, and forty-three career studies certificate programs requiring less than one year of full-time study (<http://www.jsr.cc.va.us>).

#### Charlottesville Albemarle Technical Education Center (CATEC)

CATEC offers programs to students at all ability levels. Students may seek employment upon graduation and/or to continue their formal education through apprenticeship programs or advanced study at technical institutes, community colleges, and universities (<http://www.catec.org>).

#### Other Institutions

Other colleges, universities, and technical schools are within an hour of Fluvanna, or offer satellite or online classes and credits. Virginia Commonwealth University, Longwood, Virginia Tech, Mary Washington, Mary Baldwin, and George Mason are relatively close, or have satellite programs available to residents of central Virginia.

Blank Page

Blank Page

## Chapter 11

# PUBLIC SAFETY

### *Planning for a Safe Future*

Public safety serves a vital role in the community: providing for the safety and welfare of the public through the preservation of life, health, property and the environment and coordinating lifesaving services. Essential services include response to fires and hazardous materials incidents, special operations, countywide radio system coordination, E-911 communications, and emergency management.

The Fluvanna County Sheriff's Office, Fire and EMS volunteer agencies, Fluvanna Emergency Communications Center and Fluvanna Department of Emergency Management all function with common purpose, training and orientation to provide these services to Fluvanna citizens and visitors.

### *Coordinating Emergency Services with Growth*

Emergency call volumes will increase as development results in population growth. Growth will increase the demand for services beyond current levels. Reducing, or even maintaining response times will become more difficult. New technology can improve the efficiency of resources, but public safety requires that staffing, vehicles and equipment, and facilities grow apace with new development. Planning for the future includes ensuring adequate ratios of staffing and facilities to population.

### **Law Enforcement**

The Fluvanna County Sheriff's Office has primary responsibility for law enforcement in the County. The Sheriff's Office is responsible for the enforcement of criminal, traffic, and regulatory laws, service to the courtrooms, security of the judge, transportation of prisoners, and civil process.

The Virginia State Police generally focus on traffic safety, but provide additional assistance at the request of the Sheriff's Office. Lake Monticello employs a small private police force to provide law enforcement services primarily inside the gates of the Lake Monticello community.

### *Community Policing*

The increase in population due to development is changing Fluvanna's demands on law enforcement. There is an increase in drug activity, potential gang activity, and an increase in serious crimes such as domestic violence (although the overall crime rate is down).

Citizens of Fluvanna are invaluable to the safety of the county. Community policing is a means to educate citizens, build good communications between the community and the sheriff's office, and provide a visible security presence. Individual deputies are assigned to geographic sectors of the County as community liaisons to keep deputies up-to-date on activities within the

community. Neighborhoods can implement Neighborhood Watch programs with the help of the sheriff's office. As the County's population increases, more Neighborhood Watch projects will be initiated.

#### *School Security*

The presence of a school resource officer (SRO) improves school safety by patrolling hallways, parking lots, and cafeterias. Officers also assist school staff in responding to disturbances, counseling students, and teaching safety and drug prevention. Two SROs share responsibilities among the schools with primary time dedicated to the high school and middle school. Additional funding and staffing are needed for the elementary schools coverage and for a supervisory position.

#### *Hunter Safety*

Responsible hunting is a traditional activity for many county residents, and hunter safety is an important issue in a rural area like Fluvanna County. The game warden or sheriff's office conducts hunter safety classes through the Department of Conservation and Recreation twice a year at no charge.

#### **Fluvanna County Sheriff's Office**

In 2003, the Sheriff's Office moved into a new, larger facility, which increased the efficiency of Sheriff's Office operations. Fluvanna's secured E-911 communication center is housed in this building, as well as a dedicated space for an Emergency Operations Center (EOC). The EOC is used as a facility to coordinate County emergencies and also serves as a multipurpose area for trainings and community public safety-related meetings.

The office implemented Automated Fingerprint Identification System software for its criminal records exchange system, installed mobile data terminals (MDTs) and video cameras in patrol vehicles, and purchased needed personal protection and hazmat equipment. The agency's staff has completed advanced training initiatives to increase their capacity to respond to incidents. This training has been particularly noticeable in the sheriff's investigation and enforcement efforts against illegal drug trafficking and other criminal activities. These additions have contributed to the County's safety and security, which is evident in the current downward trend in the County's overall crime rate.

As of 2014, there are 32 trained deputies on staff. Three full-time deputies are assigned to the courthouse four days a week, and are supplemented with two part-time employees. One deputy acts as a civil process server to handle 6,000 to 9,000 civil papers annually (supplemented by other deputies whose duties include other tasks). Sixteen are assigned to patrol duty. There are four criminal investigators and two school resource officers. Two trained Animal Control officers are assigned to animal control enforcement. The office also has one part-time deputy for property and evidence management. This staffing represents approximately 72% of what is needed to service a full-service agency for our population (courts functions, patrol, civil processes, and investigations). Additional staffing includes a new administrative services division, which would include a Virginia Criminal Information Network

(VCIN) section and records management capacity. Existing facilities may need to be renovated and/or expanded to meet these challenges in the future.

### **Lake Monticello Police**

The Lake Monticello Police, a private police organization, provides services similar to those of the sheriff's office, except for court security and civil process responsibilities. Its responsibility is limited to the Lake Monticello gated community and the immediate roads around the community. On request of the sheriff, Lake Police may extend service outside the area.

### **Fire Protection and Emergency Medical Services**

The Fluvanna Fire and Rescue Association (FFRA) is the volunteer agency responsible for the coordination and provision of the County's fire, rescue, and emergency medical services. The Association is comprised of representatives from the three volunteer fire and rescue organizations within the County. Its combined mission is to ensure the delivery of quality, efficient and effective fire protection, emergency medical services, and safety education throughout Fluvanna County.

The Association is charged with overall management of the fire, rescue, and emergency medical services system, and for establishing policies and procedures for all fire, rescue, and medical service operations. The Association also serves as the conduit for appropriations by the Fluvanna Board of Supervisors in support of the fire and rescue organizations in Fluvanna County.

The County provides funding to the fire/rescue agencies for operations, facilities, and equipment. Capital equipment, such as engines, tankers, and ambulances, is replaced according to a schedule under FFRA's oversight. Agencies organize individual funding drives to supplement the County's funding, and to provide for additional needs.

### **Fire Protection Services**

Fire Protection is provided by two all-volunteer agencies. Fluvanna Volunteer Fire Department has three companies located in Fork Union, Kents Store, and Palmyra. Lake Monticello Volunteer Fire and Rescue Squad, Inc. (LMVFRS) is a combination agency with a fire company, rescue squad and water rescue personnel, located near the Slice gate at Lake Monticello.



*Figure PS-1, Palmyra Fire Company 1*

Facilities for Fluvanna Fire Department are owned and maintained by the County. The Palmyra Fire Department moved to their facility in 2008. The Kents Store fire house was updated in 2011. The newest fire house in Fork Union was dedicated in November 2013. These facilities are all self-contained with generators, able to function during extreme emergencies.

The Lake Monticello firehouse (built in 1980 and fully owned and maintained by LMVFRS) is the only fire company without living quarters available; however, LMVFRS purchased adjoining land to expand the firehouse beginning in 2015. Since 2005, Lake Rescue Squad shares a building with Lake Monticello Water Rescue and Dive Team - is a specialized asset who responds to about two dozen calls per year in Fluvanna, but are also available for regional deployment. This building contains a training center, sleeping quarters, a kitchen, and a large bay for ambulances, response cars, and the water rescue team's trucks, boats, and other gear.



Figure PS-2, Fork Union Fire Company 2

### *Growth and Infrastructure*

As growth occurs in CPAs and cluster development areas, water infrastructure needs to be planned and installed to handle additional loads. Firefighters prefer to have active hydrants and other water infrastructure available. Fire engines carry less water than tankers (e.g., 750–1,000 gallons), but pump large volumes from external sources. Tankers carry more water (2,000 gallons), but do not have as large a pump capacity as engines. Firefighters can use dry hydrants, where available, to get water or use tankers to haul in additional capacity. If there is a large fire outside of active hydrant infrastructure facilities, a series of tankers must be used to pull water from a pond or active hydrants and shuttle it to the fire—not a desirable situation, as it greatly impedes the firefighters' efforts.

Along with water infrastructure needs, density and development standards should respect emergency services' requirements. All proposed roadway and traffic improvements should have emergency services' review and input for effects of new projects on response capability; including, for example, interconnectivity and multiple means of ingress/egress for all large subdivisions, street width requirements to handle apparatus maneuverability, restrictions on hammerhead roads or speed bumps.

### **Emergency Medical Services**

Emergency Medical Services are provided by two agencies: Lake Monticello Rescue and Fluvanna Rescue Squad. Fluvanna Rescue owns and operates three stations: in Fork Union, Kents Store, and Palmyra. Due to membership decline, they are increasingly unable to maintain these facilities to the same standards as the County-owned fire facilities. Fluvanna County currently augments EMS services by contracting with UVa Medic5 for 24/7 EMS crews, who run under Fluvanna Rescue's license and operate from the Palmyra rescue facility.

### *Maintaining Volunteer Staffing*

As is typical with many communities across the nation, EMS-trained volunteer numbers in Fluvanna are declining. Many Fluvanna volunteers are paid firemen or EMTs in other localities, limiting their ability to respond during the day, when call volume is the highest. Lake Monticello Rescue operates from their station twenty-four/seven and has been able to maintain staff to date. Fluvanna Rescue membership numbers are at an all-time low and are currently inadequate to provide necessary service requirements. Attrition due to retired



volunteers is also an issue, particularly since these volunteers have the most experience. Fluvanna County provides funding for firefighting and EMT training for new recruits.

To counteract this trend, many jurisdictions are moving to combination volunteer-career staffing models to maintain suitable membership and response levels. Two primary issues associated with this significant change in emergency operations are cost recovery and supervision of paid staff.

#### *EMS Cost Recovery*

On March 18, 2015, the Fluvanna County Board of Supervisors adopted Chapter 8, Section 8-6 Emergency Medical Services Cost Recovery of the Fluvanna County Code to defray costs and improve services associated with providing EMS transport services by collecting a user fee for ambulance transports, effective September 1, 2015. This reimbursement program is a compassionate model that collects money for system operations from the people who receive services, with the vast majority of the revenues collected directly from Medicare, Medicaid and private insurance companies. Patients will receive a bill for any co-insurance or deductibles. However, if a patient cannot pay due to a financial hardship, the County will not pursue payment and will not refer the bill to collections. Revenue collected will be used to offset the rising costs associated with supporting rescue squads and other EMS service providers, helping them to continue providing the best possible service to the County's residents. When this program is fully operational, program revenue will provide only a portion of the total funding needed for EMS operational and capital expenses; thus, volunteer agencies will still need to pursue fundraising efforts to supplement county contributions.

### **Emergency Radio Communications**

The improvement of the communications capability for public safety is a high priority. The current conventional VHF system only provides reliable coverage in approximately 35% of the County, creating numerous safety problems for deputies in the field and fire and rescue personnel, who often use apparatus to function as relays back to dispatch. The paging system coverage is also intermittent. Currently only fire departments, rescue squads and the sheriff's office personnel utilize the public safety system. The communications capability has been a known problem since the late 1990s, which various studies enumerating the challenges of the aged infrastructure.

In the fall 2014 the County issued a Request for Proposal (RFP) for a new public safety radio system to address the coverage and interoperability issues. The Board of Supervisors approved a \$6.6 million contract in June 2015 to provide a VHF simulcast P25 trunked system for public safety agencies. The 18-month project will provide adequate coverage, future expansion and regional interoperability for emergency services agencies, law enforcement, and public works and utilities. Further exploration is expected to expand regional collaboration possibilities, thus improving interoperability and potentially sharing future maintenance costs of the new system. Since the Fluvanna school system is currently on a separate radio system, discussions should consider whether combining these systems would be cost effective and beneficial. As the new

infrastructure system is implemented, the communications software should also be reviewed and updated so that the new state of the art system performs properly.

Since this radio system is for public safety voice communications only and does not address data needs, further plans should comprehensively address needs for cellular telephone and high-speed broadband services across the County, as well as possibilities for fiber connectivity among county facilities. These infrastructure assets would serve residents as well as add benefit to public safety agencies and County departments.

The county should continue to support the citizen groups Amateur Radio Emergency Services (ARES) and Radio Amateur Communications Emergency Services (RACES). Additional and/or updated equipment and space are necessary for these volunteers to supplement county communications during emergencies.

### **E911 Communications Center**

Under the sheriff's office oversight, the Emergency Communications Center (ECC) is responsible for call management and dispatching all of the County's law enforcement, fire, and EMS agencies. Eleven full-time and one part-time telecommunications officers currently staff the 24/7 ECC. All emergency calls are dispatched within three minutes of the receipt of the call. The average time for responders to arrive at the scene of an E-911 call is approximately 16 minutes.

Fluvanna ECC also provides primary dispatch for Lake Monticello Police, who use County-provided portable and mobile radios. Lake Monticello Homeowners Association (LMOA) also has a UHF system that is cross-banded with the County's VHF system, which is used internally for police, grounds and maintenance. Fluvanna County Public Schools have a separate radio system to dispatch their buses and maintain administration communication.

Along with handling E-911 calls, telecommunication officers take all incoming administrative calls for the Sheriff's Office, ensuring that requests are routed to the appropriate personnel. Communications officers must be able to multi-task and remain attentive to details. Separating out and placing these administrative duties within an administrative services division in the Sheriff's Office would facilitate stronger support systems for the Sheriff's Office and for ECC staffing functions.

Given industry standards and our population, the Emergency Communications Center is understaffed; current standards call for a staff size of 19. Because response times are frequently increased in rural areas, Fluvanna citizens would benefit from emergency medical dispatch (EMD), which provides assistance and instructions by voice prior to the arrival of emergency medical services.

## Emergency Management

There is a phrase amongst emergency managers – “It is not a matter of *if* but *when* disasters happen.”

Disasters are unexpected, they can overwhelm first responders; lives, health, and the environment are often endangered. At a minimum, emergencies and disasters are disruptive and often occur at inopportune times. The county must promote individual and community preparedness.

The county’s Emergency Management Department is on the frontline of developing and maintaining disaster response plans, coordinating training, drills and exercises, and educating the public. Not only does the county need to be ready to respond to disasters, it should act proactively to mitigate the effects of disasters. Fluvanna can reduce damages by utilizing flood plain management and land use planning, and enforcing safety standards. Fluvanna participates with the Thomas Jefferson Planning District Commission (TJPDC) in writing and implementing regional hazard mitigation plans, which can be viewed online at either the County’s or the TJPDC’s Web site. This position may need to expand in the future in order to meet the challenges that Fluvanna is experiencing, primarily as a result of its growth.

### Local Emergency Planning Committee (LEPC)

The Local Emergency Planning Committee (LEPC) was created to handle hazardous material notifications, but the committee’s focus has expanded to handle all hazards. Under the leadership of the Emergency Services Coordinator, the committee meets quarterly to plan and practice emergency preparedness. The LEPC schedules training exercises to practice emergency responses and to coordinate the efforts of the member agencies. There are over twenty-five represented agencies, from the schools, VDOT, social services, fire and rescue, and the Lake Monticello Owners’ Association, who regularly participate in LEPC meetings.



Figure PS-3, E911 Center Standards

Blank Page

# Chapter 12

## FINANCIAL SUSTAINABILITY

### *Managed Growth that Benefits Fluvanna's Citizens*

Through the Comprehensive Plan, Fluvanna County's leaders and citizens set goals and strategies that balance expansion against the fiscal strain of supporting an increasing population. Virginia's Declaration of Legislative Intent (§15.2-2200) states that in planning for the future development of communities "that the growth of the community be consonant with the efficient and economical use of public funds."

County leaders must, in all decisions, recognize that they are the stewards for the people's money. **Expenditures and obligations are entered into only when it is in the people's best interest.** Each year the County develops a Capital Improvement Plan (CIP) that guides major capital expenditures for the County. The annual review process for the CIP utilizes the goals and strategies in the Comprehensive Plan. Decisions to implement the CIP and obligate county taxpayers for major capital projects are made with gravity and respect for public funds. When the County presents financial data about capital improvements, it does not merely state the capital cost and financing of a project, but shows the estimated tax impact of the debt service plus any ongoing costs necessary to maintain and staff the project in the future. The County strives to run itself like a business seeking the best return on investment for its citizens while still providing the product and services that are its foundation.

### EXISTING CONDITIONS

The County is organized along functional lines and the annual budget includes a discussion of each department's objectives and significant changes in operations. Each narrative provides a breakdown of expenditures by function, including the number of full-time and part-time positions in each department.

#### **Financial Planning**

The Comprehensive Plan, Capital Improvements Program (CIP), and current economic conditions are used to derive the annual budget. This section discusses how the county's priorities are established and achieved, what checks and balances exist, and how successful the County's process has been to date. This provides the foundation for a detailed discussion of how the budget is developed.

#### *Establishing Priorities*

The foundation for establishing the County's priorities and strategies for implementation are achieved within the following primary planning and financial management tools:

### Comprehensive Plan

The Comprehensive Plan provides findings and analyses for the County as a whole with respect to natural conditions, population and demographics, economy, housing, transportation, utilities, and community facilities and services. The plan establishes the County's goals and identifies specific strategies to achieve those goals and the overall vision of the plan. The Comprehensive Plan is reviewed every five years to ensure that it remains a relevant planning and policy implementation tool.

### Capital Improvement Program (CIP)

The CIP is a five year plan that tries to anticipate all new or replaceable capital needs. A capital project is defined as a generally non-recurring asset, both tangible (e.g., buildings, vehicles, land, etc.) and intangible (e.g., software, easements, licenses, studies, services, etc), that exceeds an established dollar amount ( $\geq$ \$20,000 in Fluvanna County). Projects to be included in the annual budget are identified in the first year of the plan and all other capital projects are planned for later years. An important aspect of the CIP is the projected operational and maintenance costs of a proposed project.

### Annual Budget

The annual budget is the primary operational mechanism for achieving the priorities and strategies established in the Comprehensive Plan and Capital Improvements Program, including the daily operations necessary for implementation of the County's identified needs, services, and projects. This detailed and ongoing process is critical to the successful implementation of the community's goals and vision within a sustainable and fiscally responsible framework. The annual budget is outlined in more detail in the Budget Methodology and Budget Process sections, along with an overview of other budget components.

### *Checks & Balances*

A number of policies and procedures work in tandem to ensure responsible and consistent government investment and operations. The Board of Supervisors periodically adopts and amends their financial policies to provide better clarification, more procedural detail, stronger documentation of management actions, and to account for other changes within the County related to development, demographics, or other socio-economic factors.

### Investment Policy

The Board of Supervisors has adopted a formal Investment Policy to safeguard principal, meet liquidity objectives, and seek fair value rates of return within the parameters of the Code of Virginia.

### Fund Balance Policy

The Board of Supervisors has a fund balance policy for the County's General Fund. The policy sets the minimum undesignated, unreserved fund balance to be at least 12 percent of Governmental General Fund Revenues and Component Unit – School Board Operating Revenues.

### Debt Management Policy

This policy establishes parameters and provides guidance for limitations of debt and the continuing evaluation of, and reporting on, all debt obligations issued by the County. The policy sets the limitation for tax supported debt not to exceed 3.5 percent of the taxable value of property (assessed value). The policy also sets the limit that debt service expenditures shall not exceed 12 percent of the revenues of the total governmental fund operating revenues.

### Accounting and Financial Reporting Policy

The monthly financial report details the county's monthly revenue and expenditure activity. It shows each department's monthly expenditures in relation to the adopted budget as well as the revenue collection trends for the county. The County regularly monitors revenue estimates to identify any shortfalls and potential trends that would significantly affect the various revenue sources in the current budget. A significant emphasis is placed on controlling departmental expenditures to the adopted budget through accounts payable and purchasing card policies and procedures.

The Comprehensive Annual Financial Report (CAFR) presents the County's financial statements at June 30<sup>th</sup> of each year. This report is generated in accordance with the Governmental Accounting Standards Board (GASB), Financial Accounting Standards Board (FASB), and the Auditor of Public Accounts of the Commonwealth of Virginia standards. This report includes an annual audit opinion by an independent accounting firm on the fairness and accuracy of the financial statements.

Fluvanna has received the Government Finance Officers Association (GFOA) Certificate of Excellence in Financial Reporting designation since 2007. This distinction is important in that it establishes a nationally recognized benchmark for excellence in financial operations. The quality of the CAFR and certificate of excellence recognition demonstrate the County's commitment to financial transparency and responsibility.

### **Budget**

The budget establishes the revenue and expenditure appropriations for the governmental and proprietary funds, and is developed in accordance with generally accepted accounting principles (GAAP). As part of the budgetary process, the Capital Improvements Program is also adopted. All appropriations conclude at year-end, except those for the Capital Projects Fund and Grant Funds. The Board of Supervisors allows the appropriations for capital and grant funded projects to carry forward until completion of the project.

### *Process*

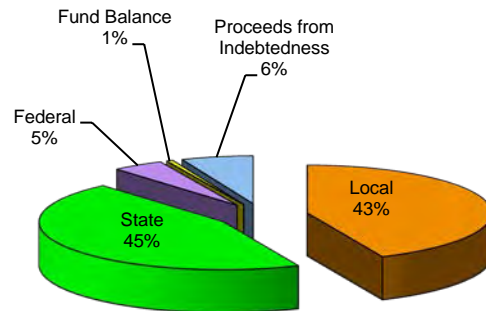
Fluvanna County's budget development begins each year in November with a kick-off meeting and concludes with the final budget adoption in April. The process is designed so that county administration can work closely with departments in determining the proposed annual budget. Each budget request is thoroughly reviewed to ensure funds are allocated appropriately. In late January, the County Administrator submits the proposed fiscal year operating budget to the

Board of Supervisors for consideration. In April, a public hearing is held to inform citizens and obtain their input on the proposed budget. The budget is also available to citizens on the County’s website ([www.fluvannacounty.org](http://www.fluvannacounty.org)) throughout the year and during budget development process.

Budgets for all funds are adopted on a basis consistent with generally accepted accounting principles applicable to governmental units. Budgeted amounts reflected in the financial statements are as originally adopted. Appropriations for the General Fund, School Fund, and Enterprise Funds conclude at the end of the fiscal year. Appropriations for capital projects funds and grant funds are continued until the completion of the applicable project or grant, even when the project or grant extends beyond the end of the fiscal year. The Board of Supervisors must approve supplemental appropriations or amendments that alter the total appropriation of any fund.

**Fund Structure**

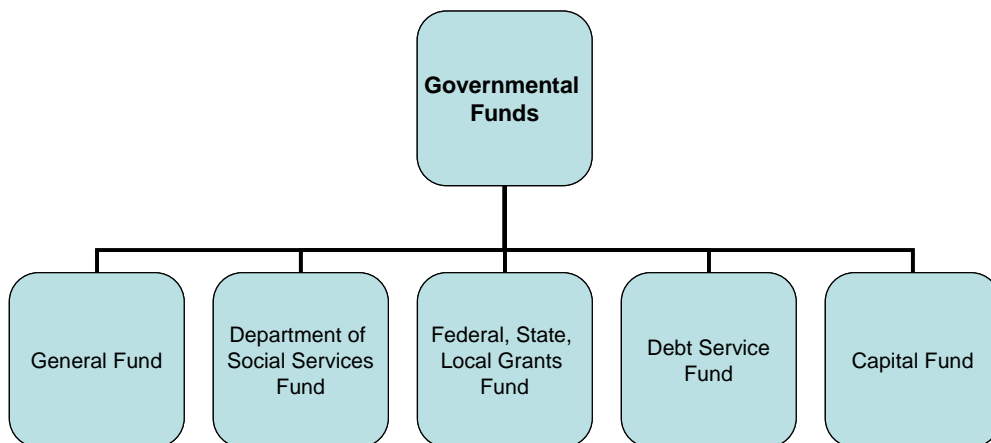
The budget of the County is organized by fund type, each of which is considered to be a separate accounting entity. The operations of each fund are accounted for by providing a separate set of self-balancing accounts that comprise its assets, liabilities, fund equity, revenues and expenditures. The various funds are grouped as follows:



*Figure FS-1, Typical General Revenue Sources*

**Governmental Funds**

Governmental funds are those through which most governmental functions of the county are financed. The government reports the following major governmental funds.



*Figure FS-2, Fund Structure*



- **General Fund**

The General Fund is the primary operating fund of the County. This fund is used to account for all financial transactions and resources that are not required to be accounted for in another fund. Examples of other funds that are specifically designated or required by law to be separate are discussed below such as the Debt Service and Capital Project funds. Approximately 80 percent of revenues are primarily derived from general property taxes such as real estate taxes, personal property taxes, and public service corporations. A significant part of the General Fund's revenue is used to maintain and operate the government and school system. A portion is also transferred to other funds primarily to fund debt service requirements and capital projects. Expenditures include those for general government, Comprehensive Services Act, emergency communications (E-911), education, public safety, social services, and culture and recreation. The General Fund is considered a major fund for government-wide reporting purposes.
- **Debt Service Fund**

The Debt Service Fund accounts for the payment of annual principal and interest on general and school related long-term debt. Debt Service Fund resources are derived from transfers from the General Fund.
- **Capital Projects Fund**

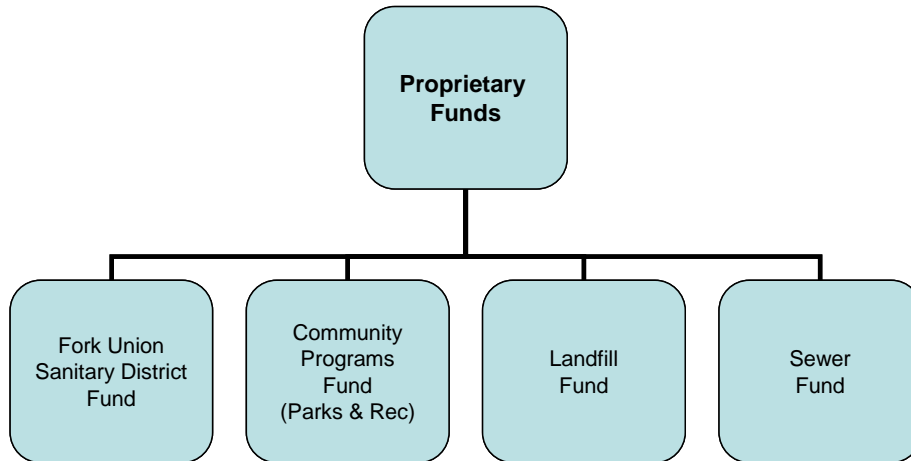
The Capital Projects Fund (Capital Improvements) accounts for all financial resources used for the acquisition or construction of major capital facilities not being financed by proprietary funds, including general government and school system capital projects. The projects are financed through a combination of proceeds from general obligation bonds, operating transfers from the General Fund, and grants. The Capital Projects Fund is considered a major fund for government-wide reporting purposes.

#### Fiduciary Funds (Trust and Agency Funds)

Fiduciary Funds account for assets held by the County in a trustee capacity or as an agent or custodian for individuals, private organizations, other governmental units, or other funds. These funds include Agency Funds. These funds utilize the accrual basis of accounting. Fiduciary funds are not included in the government-wide financial statements. The County's only Agency Fund is the Special Welfare Fund.

#### Proprietary Funds

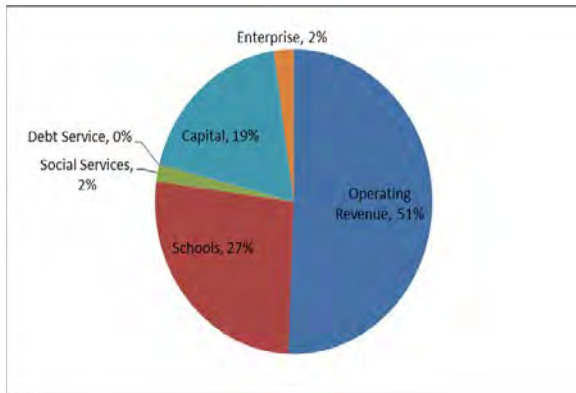
Proprietary funds account for operations that are financed and operated in a manner similar to private business enterprises. These funds are self-supporting in that the users pay fees to recover the cost of providing services. The Proprietary Fund measurement focus is based upon determination of net income, financial position, and changes in financial position. Proprietary Funds consist of Enterprise Funds such as the Fork Union Sanitary District, Landfill, Recreation Program, and Utility accounts.



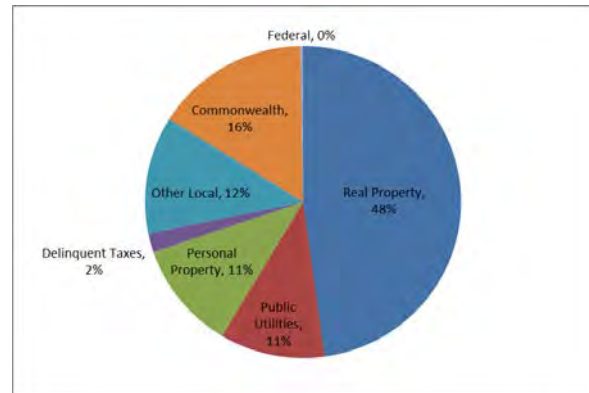
**Figure FS-3, Fund Structure**

**Governmental Revenues**

A significant portion of fiscal year revenues are generated from general property taxes (approx. 80 percent). The graph below depicts the sources of local revenue for the County.

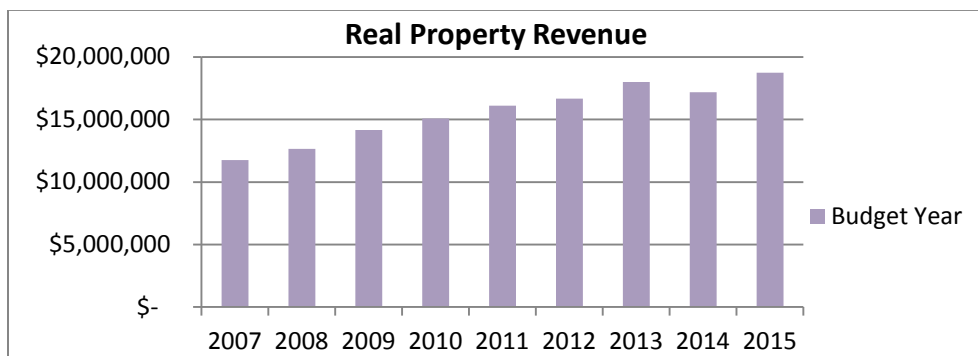


**Figure FS-4, FY15 Total Revenues**



**Figure FS-5, FY15 Operating Revenue**

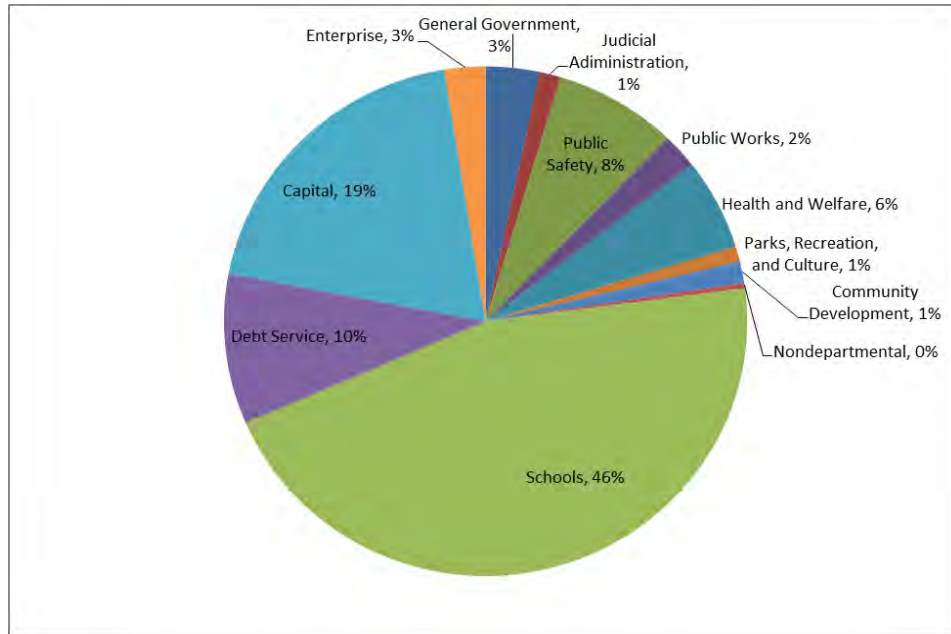
Real property values are shown in the graph below. The rate of increase does not reflect the rate of growth in the County; however, it reflects the increased value in property in the County.



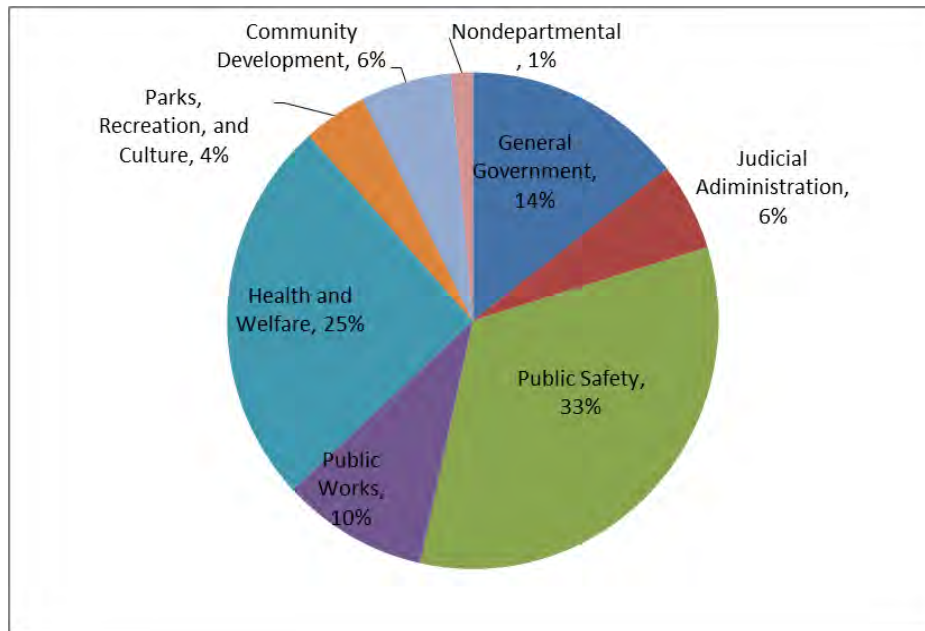
**Figure FS-6, Real Property Revenue**

**Governmental Expenditures**

The fiscal year 2015 budget was \$80,105,825 including \$36,481,936 for schools. This represents an increase of \$13.71 million (20.65 percent) from the fiscal year 2014 budget.



**Figure FS-7, FY15 Total Expenditures**



**Figure FS-8, FY15 Operating Expenditures**

Blank Page

## Implementation Goals and Strategies

Goal	Strategy	Timeline	Tasked To
<b>Chapter 1 – Natural Environment</b>			
<b>A</b>	<b>To develop land-use policies and regulations that will preserve and enhance the county’s natural environment.</b>		
	(1) Protect farm and forest landowners from conflicting adjacent land uses with utilization of buffers, screening, and contiguous tracts of open space.	Ongoing	Planning Comm. and Staff
	(2) Review zoning and subdivision regulations to maximize environmental benefits through best management practices and ensure that the subdivision of land does not adversely affect open-space features.	Ongoing	Planning Comm. and Staff
	(3) Continue to promote land-use valuation taxation, conservation easements, ag-for districts, and other programs to alleviate economic burdens on owners of land used for agricultural, horticultural, forest, or open-space purposes.	Ongoing	Commissioner of the Revenue; Planning Staff
<b>B</b>	<b>To protect environmental resources.</b>		
	(1) Promote development projects that minimize environmental impact through the effective utilization of green infrastructure, low-impact development practices, and other sustainable development policies.	Ongoing	Planning Comm. and Staff
<b>C</b>	<b>To manage and protect surface water and groundwater resources.</b>		
	(1) Work with the Virginia Dept. of Health to evaluate and develop local regulations for alternative waste treatment systems (e.g., Wisconsin mounds or other systems that alter the natural topography or hydrology).	2016	Planning Comm. and Staff
	(2) Participate in, and cooperate with, federal and state groundwater protection programs, including sole-source aquifer designation for important drinking water supplies.	Ongoing	Planning Comm. and Staff
	(3) Research the viability of incorporating the well-drilling logs provided by the Fluvanna Dept. of Health into the county’s geographic information system (GIS).	2016	Planning Comm. and Staff
	(4) Require riparian buffers adjacent to waterways to protect local and regional water resources such as perennial streams, floodplains, wetlands, steep slopes, and highly erodible soils.	Ongoing	Planning Comm. and Staff
	(5) Proactively educate the public on the values and benefits of preserving river and stream corridors.	Ongoing	NGO’s – Rivanna River Basin Commission, Rivanna Conservation Society, etc.

Goal	Strategy	Timeline	Tasked To
	(6) Pursue the state designation of the Hardware River as a Tier 3 stream, classifying it as exceptional surface water not subject to degradation.	2016	NGO's – Rivanna River Basin Commission, Rivanna Conservation Society, etc.
	(7) Promote BMPs and recognize landowners who protect streams from nonpoint-source pollution using BMPs.	Ongoing	NGO's – Rivanna River Basin Commission, Rivanna Conservation Society, etc.
<b>D</b>	<b>To promote energy efficiency throughout the county to improve air quality and reduce the country's dependence on fossil fuels.</b>		
	(1) Promote energy efficiency in developments and throughout the community including the use of solar, geothermal, wind, and other decentralized energy technologies and support renewable energy generation by allowing such uses in the zoning ordinance.	Ongoing	Planning Comm. and Staff
	(2) Build new and remodeled county buildings to an established energy efficiency standard such as Energy Star, Green Globes, or LEED.	Ongoing	Planning Comm. and Staff; TJPDC and VDOT
	(3) Promote greenways, bikeways, and walkways as viable forms of recreation and transportation.	Ongoing	Planning Comm. and Staff; TJPDC and VDOT
<b>Chapter 2 – Land Use and Community Design Environment</b>			
<b>A</b>	<b>To enable well-planned, coordinated, and sustainable development to occur throughout the county.</b>		
	(1) Develop new zoning and subdivision regulations that will further the desired growth patterns and property uses, and to protect the rural preservation area, including such measures as:	2016	Planning Comm. and Staff
	(a) New zoning districts for rural areas that encourage a variety of housing types and rural mixture of uses		
	(b) Require that new developments provide easements for connection to future developments, including utilities, transportation, and recreation/open space		
	(c) Require development projects to provide any necessary infrastructure such as waste treatment facilities, telecommunication services, road improvements, and stormwater facilities. Within service districts this should include assessing the potential for public ownership and operation		
	(d) Establish requirements for appropriate planning/phasing of development to match the service/infrastructure availability and capacity		

Goal	Strategy	Timeline	Tasked To
	(e) Adopt zoning and subdivision regulations that allow for higher-density, compact developments in the Zion Crossroads CPA.		
	(2) Provide public water to the county's community planning areas as feasible and discourage public and central potable water and sewer connections to residential, commercial, and industrial uses in the rural preservation area.	5 year	Dept. of Public Works
	(3) Develop a cash proffer recommendation, impact fee ordinance, and level-of-services standards, in accordance with state code, to fairly assess the fiscal impact of development on public services and infrastructure.	2016	Planning Comm. and Staff
	(4) To promote infill development, ensure adequate infrastructure is constructed or upgraded to support development in existing communities.	Ongoing	Planning Comm. and Staff; Dept. of Public Works
	(5) Ensure appropriate infrastructure is available to support mixed-use development.	Ongoing	Planning Comm. and Staff; Dept. of Public Works
<b>B</b>	<b>To preserve and enhance Fluvanna's unique identity and rural character.</b>		
	(1) Examine the impacts of large-lot developments versus rural cluster developments and amend the zoning and subdivision ordinances as appropriate.	2016	Planning Comm. and Staff
	(2) Protect the forest, wildlife habitats, and the rural community landscape as part of a development's green infrastructure.	Ongoing	Planning Comm. and Staff
	(3) Require developments located in fire-prone areas such as pine plantations to implement firewise practices and other defensible space techniques as recommended by the Virginia Dept. of Forestry and local public safety officials.	2016	Planning Comm. and Staff
	(4) Work with electric power companies to facilitate the replacement of current overhead facilities with underground lines, and require all new lines to be placed underground.	2016	Dept. of Public Works
<b>C</b>	<b>To preserve and enhance Fluvanna's unique identity and rural character.</b>		
	(1) Require rezoning requests and other development plans to identify any open space or other natural or cultural resource shown by maps or observed through field inspection, and include measures that will mitigate disturbance to these resources.	2016	Planning Comm. and Staff
	(2) Require a subdivision's open space to:	Ongoing	Planning Comm. and Staff
	(a) Be located so as to further the rural character of the area, particularly related to views from public roads and other developments.		

Goal	Strategy	Timeline	Tasked To
	(b) Be designed for maximum connectivity to other open spaces of existing or potential adjacent developments, or to act as buffers to agricultural activities.		
	(c) Be privately maintained and not be further developed as part of the associated project, or without further public or legal discussion and formal action.		
<b>D</b>	<b>To promote village-scaled development in the Palmyra and Fork Union communities.</b>		
	(1) Improve the streetscape of the village communities by installing traffic-calming measures, improving existing sidewalks, and installing new sidewalks, street lighting, and so on.	2016 and Ongoing	VDOT; Dept. of Public Works
	(2) Encourage the establishment of new local businesses and support existing local business in village cores.	Ongoing	Community Development
<b>Chapter 3 – Infrastructure</b>			
<b>A</b>	<b>To develop a comprehensive public water system to serve the county’s community planning areas.</b>		
	(1) Design and construct a water line from the James River to Zion Crossroads in cooperation with Louisa County through the JRWA.	5 year	Public Works; JRWA
	(2) Complete the state-mandated Master Water and Sewer Plan to identify sources for the county’s long-term water needs; particularly for each of its community planning areas.	2016	Public Works
	(3) Establish requirements for hydrogeological studies to determine groundwater capacity for development that proposes to use wells to serve the project.	2016	Public Works/ Planning Staff and Commission
<b>B</b>	<b>To provide central sewer to the community planning areas.</b>		
	(1) Provide central sewer service in Zion Crossroads in partnership with both Louisa County and private developers.	5 year	Public Works
	(2) Work with the private sector to develop a public sewer system to serve the Fork Union community planning area to enable future growth in this area, and to assist current residents with their aging (and increasingly failing) septic systems.	5 year	Public Works
	(3) Work with development projects in all community planning areas for the provision of central sewer whether publicly or privately owned and operated.	Ongoing	Public Works
<b>C</b>	<b>To regulate private utilities, whether centralized or decentralized.</b>		
	(1) Require development to determine future septic suitability and groundwater resources for the proposed project, and its potential impact on surrounding wells.	Ongoing	Health Dept.
	(2) Discourage the use of central sewer in the rural preservation areas and carefully limit its use in the rural residential areas to primarily cluster developments.	Ongoing	Public Works and Planning Staff



<b>Goal</b>	<b>Strategy</b>	<b>Timeline</b>	<b>Tasked To</b>
<b>D</b>	<b>To maintain a comprehensive, long-range solid waste management program.</b>		
	(1) Continue the annual collection of household hazardous waste and publicize the importance of the program.	Ongoing	Public Works
	(2) Continue a countywide education program on the advantages of waste reduction, composting, recycling, and reuse, and continue to utilize the recycling center at the county landfill site.	Ongoing	Public Works
<b>E</b>	<b>To facilitate the deployment of comprehensive communications networks that ensures the reliability of public safety, wireless, and broadband services.</b>		
	(1) Establish a Broadband Taskforce, containing members of County Staff, citizens, technical experts, and stakeholders such as business owners, which will organize and facilitate future efforts to provide the county with Broadband Internet.	2016	Planning Staff; Planning Commission
	(2) Increase access to high-speed broadband for residences and businesses throughout the county.	2016	Planning; Public Works; TJPDC
	(3) Give priority for towers on publicly owned land, as appropriate, including sites owned by the Fork Union Sanitary District, among others.	Ongoing	Planning Comm. and Staff
<b>F</b>	<b>To evaluate private developments and public investments, such as capital improvement projects, within a fiscal framework as approved by the Board of Supervisors.</b>		
	(1) Provide a fiscal impact statement, including an examination of alternative solutions and their costs and benefits, for all capital improvements over \$100,000.	2016-2017	Finance; Public Works
	(2) Analyze capital project costs, including the debt service over the life of the loan period to accurately project the financial (tax) impact.	Ongoing	Finance; Public Works
	(3) Adopt a system of cash proffers, impact fees, level-of-service standards, or some combination thereof, and collect at the earliest possible time while allowing for feasible implementation of the project.	2016	Planning Comm. and Staff; Finance
<b>Chapter 4 – Transportation</b>			
<b>A</b>	<b>To make needed improvements to primary roads.</b>		
	(1) Development along state Scenic Byways and bicycle routes should be carefully screened to ensure that development is compatible with the scenic character and tourist value of the route.	2016-2017	VDOT
	(2) Work with VDOT and adjacent counties to plan for and design necessary improvements to US Route 250.	2016-2017	Planning Comm. and Staff
	(3) Evaluate potential need for traffic-calming measures such as traffic lights, roundabouts, and so on at certain intersections.	Ongoing	VDOT
<b>B</b>	<b>To improve secondary roads with the assistance of VDOT.</b>		

Goal	Strategy	Timeline	Tasked To
	(1) Continue to cooperate with VDOT to cut foliage back from alongside roadways. Identify ways to make all secondary roads safely passable to school buses and all emergency vehicles, and then prioritize and implement accordingly.	Ongoing	Public Works; VDOT; Planning Staff
<b>C</b>	<b>To improve pedestrian and bicycle access to roads and provide off-road trails and walkways.</b>		
	(1) Require the development of alternative transportation infrastructure such as sidewalks and trails in new major subdivisions, and sidewalks in commercial areas. Multiuse trails do not necessarily need to parallel existing roadways, but should link neighborhoods and commercial centers, particularly within the planning areas.	Ongoing	Planning Comm. and Staff
<b>D</b>	<b>To improve the availability and quality of public transportation in the county.</b>		
	(1) Support the Thomas Jefferson Planning District Commission's RideShare program and continue to work with JAUNT to provide transportation opportunities for people with special needs.	Ongoing	Planning Comm. and Staff;
	(2) Provide affordable mass transit to employment centers and commercial areas.	5 year	JAUNT; VDOT
<b>E</b>	<b>To support road construction and maintenance.</b>		
	(1) Work with VDOT to effectively implement the state's Chapter 527 regulations for all qualifying development projects to identify and mitigate the projected traffic impacts.	Ongoing	Public Works
<b>Chapter 5 – Economic Development</b>			
<b>A</b>	<b>To implement the county's community planning areas, as shown on the Future Land Use Map.</b>		
	(1) Establish incentives, such as streamlined permitting, flexible zoning (CI zones), and preapproved floating zones, to attract diverse businesses and employers to Zion Crossroads.	2016-2017	Planning Comm. and Staff
	(2) Restrict approval of planned unit development (PUD) zoning to Zion Crossroads, to allow for increased flexibility for commercial, industrial, and residential uses while protecting the county's rural areas.	Ongoing	Planning Comm. and Staff
<b>B</b>	<b>To protect rural areas through economic development.</b>		
	(1) Work with large landowners to utilize their land for larger-scale agricultural, horticultural, or forestal activities that will economically benefit the county, landowner, and business, and help preserve the rural character of the county.	Ongoing	Community Development
	(2) Utilize the county's natural resources, culture, and historic and recreational sites to capitalize on heritage, ecological, and recreational tourism, as well as attracting other visitors.	Ongoing	Community Development

<b>Goal</b>	<b>Strategy</b>	<b>Timeline</b>	<b>Tasked To</b>
	(3) Support the development of local economies, locally owned businesses, and entrepreneurial opportunities, particularly those that are of rural character and will require little provision of infrastructure.	2016-2017	Community Development; Planning Comm. and Staff
	(4) Offer incentives for building mixed-income housing, with an emphasis on workforce and affordable housing, in the community planning areas to maximize the use of existing transportation corridors, creating the level of density needed for attracting mixed-use development and creating vibrant, diverse, and healthy neighborhoods.	Ongoing	Community Development; Planning Comm. and Staff
	(5) Promote local and regional markets for value-added agricultural and forestry enterprises and products.	Ongoing	Community Development; VA Tech Cooperative Extension
<b>C</b>	<b>To diversify and strengthen the county's tax base.</b>		
	(1) Develop policies that will accommodate wineries, distilleries, and breweries so the county may work with and benefit from Virginia's thriving beverage industry.	2016	Planning Comm. and Staff
	(2) Establish and maintain an online database of available properties and unutilized special use permits within the county.	2016	Planning Comm. and Staff
	(3) Retain existing businesses by working with organizations such as the EDA, CIC, and Chamber of Commerce and identify sources of help for those businesses, supporting the expansion of local businesses, and assisting with any other needs that arise.	Ongoing	Community Development
	(4) Recruit new businesses through the Economic Development Business Plan by identifying Fluvanna's competitive advantages, skilled workforce, necessary infrastructure, and effective marketing strategies.	2016-2017	Community Development
	(5) Consider designating, as by-right, some uses which currently require special use permits.	2016	Planning Comm. and Staff
	(6) Streamline the application and permitting process by working with businesses to help them locate in the appropriate areas of the county and by .	2016-2017	Planning Comm. and Staff
	(7) Clearly articulate the county's development standards and requirements to the development community.	Ongoing	Planning Comm. and Staff
<b>D</b>	<b>To develop a stronger regional presence.</b>		
	(1) Coordinate development activity at Fluvanna's northern border with Louisa County.	Ongoing	Community Development; BOS
<b>Chapter 6 – Historic Preservation</b>			
<b>A</b>	<b>To protect and conserve the county's historic and cultural resources.</b>		
	(1) Enhance historic areas with streetscape or other infrastructure improvements consistent with the period and style.	5 year	Fluvanna Historical Society; Public Works
<b>B</b>	<b>To identify and classify significant historic resources.</b>		

Goal	Strategy	Timeline	Tasked To
	(1) Use GIS to support Fluvanna County Historical Society efforts to document sites and include information in the society's archives, and adjust classifications accordingly.	2017	Planning Staff
	(2) Seek partnerships with higher education that will aid in the identification and possible rehabilitation of historic resources.	Ongoing	Fluvanna Historical Society
<b>C</b>	<b>To identify areas with tourism potential based on historic, cultural, recreational, and other relevant resources.</b>		
	(1) Market the historic qualities of Fluvanna and the surrounding area to encourage heritage tourism in the region.	Ongoing	Fluvanna Historical Society; Community Development
	(2) Include the rehabilitation or restoration of historic, cultural, or recreational resources as part of development projects, and through the establishment of other partnerships.	Ongoing	Fluvanna Historical Society; Community Development
<b>Chapter 7 – Parks and Recreation</b>			
<b>A</b>	<b>To upgrade or maintain existing facilities to allow for effective program delivery and community use.</b>		
	(1) Continue to develop Pleasant Grove as a primary location for major new facilities, using the updated Pleasant Grove Master Plan as a guide.	Ongoing	Parks & Rec
	(2) Continue to adequately maintain facilities to ensure healthy and safe environments for recreational activities and programs, through interagency cooperation.	Ongoing	Parks & Rec
<b>B</b>	<b>To plan and construct additional recreational facilities that will diversify and strengthen the existing parks and programs.</b>		
	(1) Amend the subdivision ordinance to ensure that at least some open space is used for recreation in cluster subdivisions and higher-density developments.	2017	Planning Comm. and Staff
	(2) Develop a greenway and parks master plan that will coordinate and plan for an integrated open-space network that includes multiuse trails, bikeways, and walkways that function as both recreational and alternative transportation amenities.	2017	Parks & Rec; Planning Comm. and Staff
<b>C</b>	<b>To foster public-private partnerships with recreation-based organizations or other interested parties, for facility construction and program implementation.</b>		
	(1) Maintain the partnership with the school system for shared use of county and school owned facilities.	Ongoing	Parks & Rec and School Board
<b>D</b>	<b>To expand customer outreach using contemporary technology.</b>		
	(1) Replace and update registration system, Use internet and new technology to provide 24/7 customer service. as tools to reach customers.	2016-2017	Parks & Rec
<b>E</b>	<b>To provide a balanced system of available parks, facilities, open space and recreation program opportunities that are distributed and accessible to all residents.</b>		

Goal	Strategy	Timeline	Tasked To
	(1) Develop community gathering locations that will enhance sense of community.	Ongoing	arks & Rec
	(2) Work with Fluvanna County Planning Dept. to create an ordinance for new housing projects to include recreational resources and encourage private developers to provide recreational facilities.		
<b>Chapter 8 – Housing</b>			
<b>A</b>	<b>To provide for most of the county’s future housing needs within the community planning areas.</b>		
	(1) Create zoning that enables increased residential density in the growth areas, and allows for mixed-use and mixed-income developments including residences above storefronts.	2016-2017	Planning Comm. and Staff
	(2) Consider well-planned, holistic developments within growth areas and near supporting infrastructure such as schools, utilities, emergency services, parks, and natural areas in order to create balanced communities, maximize land use, and minimize negative environmental impacts.	Ongoing	Planning Comm. and Staff
	(3) Encourage housing in close proximity to commercial development so that the need for transportation to work is lessened.	Ongoing	Planning Comm. and Staff
<b>B</b>	<b>To provide a variety of well-planned housing choices.</b>		
	(1) Amend the zoning and subdivision ordinances to allow for varying lot sizes, from small clustered lots to large parcels suitable for continued farming and rural living.	2016	Planning Comm. and Staff
	(2) Allow for a mix of housing types and densities in individual developments (single and multifamily) as appropriate for the area and existing or planned infrastructure.	Ongoing	Planning Comm. and Staff
	(3) Eliminate the previously established planned unit development (PUD) zoning district outside of Zion Crossroads.	2016	Planning Comm. and Staff
	(4) Allow for housing and care facilities suited to the needs of senior populations - particularly within the community planning areas.	Ongoing	Planning Comm. and Staff
	(5) Allow for manufactured housing parks only in areas with appropriate infrastructure.	2016	Planning Comm. and Staff
<b>Chapter 9 – Human Services</b>			
<b>A</b>	<b>To provide adequate services for adolescent and teen populations.</b>		
	(1) Work with Fluvanna County Public Schools to establish an adolescent/teen multi-program center that offers opportunities for enrichment and social interaction.	5 year	Social Services
<b>B</b>	<b>To provide adequate services for elderly, disabled, and mentally ill or impaired citizens.</b>		
	(1) Encourage the development of nursing home facilities to meet the needs of the growing population.	Ongoing	Social Services, Planning Comm. and Staff

Goal	Strategy	Timeline	Tasked To
C	<b>To provide appropriate and adequate medical, health, and safety service facilities that are available to all populations.</b>		
<b>Chapter 10 – Education</b>			
A	<b>Assure a high quality education for all students in order that they thrive in the 21<sup>st</sup> century.</b>		
	(1) Secure funding to implement and strengthen a Pre-K to 12 focus on relevant and meaningful programs and courses for all students.	Ongoing	School Board; School Staff
<b>Chapter 11 – Public Safety</b>			
A	<b>To improve public safety infrastructure and operability in order to provide excellent service and protection to County residents.</b>		
	(1) Implement an Emergency Medical Dispatch protocol and system in the E-911 Center.	2016-2017	Emergency Services
	(2) Renovate and/or expand the E-911 Center and Sheriff’s Office to accommodate growing service requirements.	5 year	Emergency Services
	(3) Provide police, fire, rescue, and water rescue personnel with state-of-the-art equipment.	Ongoing	Emergency Services
	(4) Plan for the replacement of vehicles and other capital items through the CIP.	Ongoing	Emergency Services
	(5) Actively seek funding sources for emergency preparedness training and administration.	Ongoing	Emergency Services
	(6) Establish and maintain funding levels that are competitive within the region, and appropriate for Fluvanna’s population and growth rate, in order to provide the most efficient and effective public safety services.	Ongoing	Emergency Services
	(7) Implement recommendations from the 2012 Virginia Fire Services Board’s Fire-Rescue Study for Fluvanna to improve services in four areas: organizational and operational development; communications; personnel and training; and administration policy and Finance.	2016-2017	Emergency Services
B	<b>To promote the effectiveness of community-based programs.</b>		
	(1) Advance the dialogue between law enforcement and the community concerning the need to reduce adult and juvenile crime rates through education and citizen participation at County events such as the county fair, Old Farm Day, Senior Citizen Day, Law Enforcement Appreciation Day, and so on.	2016-2017	Emergency Services
	(2) Enhance the community’s emergency preparedness and response capability through increased education and training programs, as well as expanded partnerships with area business, nonprofit, and faith-based organizations.	2016-2017	Emergency Services
C	<b>To strengthen the human capital component of emergency services.</b>		
	(1) Support fire and rescue volunteers with open communication between the County government and volunteer organizations.	Ongoing	Emergency Services/ FFRA

Goal	Strategy	Timeline	Tasked To
	(2) Develop a data-driven Strategic Plan for long-term County fire-rescue services and operations with stakeholder input.	2016-2017	Emergency Services
<b>D</b>	<b>To integrate the provision of emergency services with other county and regional policies.</b>		
	(1) Enact the Statewide Fire Prevention Code through local ordinance, including ordinances to require notification of intent to burn brush.	2016-2017	Emergency Services
	(2) Amend the subdivision ordinance to include emergency services requirements; e.g. interconnectivity, restrictions on hammerhead roads, street width requirements, multiple means of ingress/egress, etc.	2016	Planning Comm. and Staff
	(3) Amend the subdivision ordinance to require defensible space provisions as recommended by the Virginia Dept. of Forestry.	2016-2017	Planning Comm. and Staff
	(4) Educate citizens on emergency preparedness, including existing health and emergency plans.	Ongoing	Emergency Services
<b>Chapter 12 – Financial Sustainability</b>			
<b>A</b>	<b>Synchronize the Capital Improvement Program (CIP) with the Comprehensive Plan, level-of services standards, and impact fee/proffer programs.</b>		
	(1) Align the CIP with level-of-services standards and impact fee/proffer programs so that development helps to finance public services and improvements that it will require, resulting in a revenue neutral or positive impact to the County.	2016	Planning Comm. and Staff
<b>B</b>	<b>Seek to maximize revenue streams from new development.</b>		
	(1) Establish level-of-services standards that must be met by every residential, commercial and industrial development as a condition of rezoning.	2016	Planning Comm. and Staff; Finance
	(2) Develop a comprehensive policy with guidelines regarding proffers (cash or otherwise) and/or impact fees to mitigate capital and services costs, as appropriate, to minimize the impact on County resources.	2016-2017	Planning Comm. and Staff; Finance
	(3) Reward development in the designated growth areas with higher density and access to public infrastructure.	Ongoing	Planning Comm. and Staff
<b>C</b>	<b>Achieve maximum cost savings through efficiency and effectiveness in County operations.</b>		
	(1) Establish a Financial Sustainability Task Force, consisting of County officials and citizens, to identify and develop best practices necessary to ensure County operations and policies are, and remain, cost-effective.	2016	BOS; Finance

Blank Page



Blank Page



## **Fluvanna County, Virginia**

*A great place to live, learn, work, and play!*