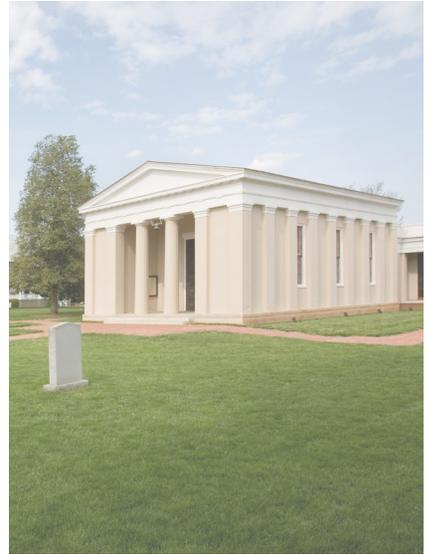




POWHATAN COUNTY

2019 Long-Range Comprehensive Plan
Sustainable and Intelligent Planning for the Future



Adopted
June 24, 2019

Acknowledgements and Contributors

Board of Supervisors

David Williams (District One)

Bill Melton (District Four)

Larry Nordvig (District Two)

Carson Tucker (District Five)

Angie Cabell (District Three)

Planning Commission

Karin Carmack (District One)

Bill Cox (District Four)

Owen Walker (District Two)

David Van Gelder (District Five)

Jen Giovannitti (District Three)

County Staff

Ted Voorhees –
County Administrator

Pat Weiler –
Former County Administrator

Bret Schardein AICP, CZA –
Assistant County Administrator

J. March Altman, Jr. –
Former Deputy County Administrator

Andrew Pompei, AICP, CZA –
Planning Director

Ed Howland LS, PLS, CZO –
Principal Planner

Citizens Working Groups (2010)

Land Use and Land Preservation

Economic Development

Infrastructure

U.S. Route 60 Overlay

Advisory Committees (2010)

Huguenot Trail Advisory Committee

Transportation Study Group

Adopted by the Powhatan County Board of Supervisors on June 24, 2019
(Ordinance O-2019-06)

Table of Contents

Part I: Planning Context

Chapter 1: Introduction.....	1
Chapter 2: Planning Background.....	7
Chapter 3: Vision and Goals	9

Part II: Plan Elements

Chapter 4: Economic Development	13
Chapter 5: Housing.....	21
Chapter 6: Infrastructure and Facilities.....	27
Chapter 7: Natural and Cultural Resources.....	43
Chapter 8: Land Use and Community Character.....	53
Chapter 9: Transportation.....	129

Part III: Implementation and Prioritization

Chapter 10: Action Prioritization.....	145
Chapter 11: Implementation Tools	147

Maps

Map 1: Water and Sewer Service Areas	33
Map 2: Public Facilities	36
Map 3: Natural Resources (Prime Conservation Areas).....	44
Map 4: Historic Resources.....	48
Map 5: Existing Land Use.....	54
Map 6: Countywide Future Land Use Plan	59
Map 7: Route 60 Corridor East Special Area Plan	119
Map 8: Courthouse Village Special Area Plan	121
Map 9: Route 711 Village Special Area Plan.....	123
Map 10: Major Thoroughfare Plan.....	135

Tables

Table 1: Population.....	2
Table 2: Population by Age.....	2
Table 3: Population by Race	3
Table 4: Household Type	3
Table 5: Household Economic Characteristics	3
Table 6: Non-Farm Employment	14
Table 7: Housing Units in Powhatan County	22
Table 8: Housing Types by Tenure.....	22
Table 9: Home Sales in Powhatan County.....	23
Table 10: New Home Closings in Powhatan County	24
Table 11: Countywide Land Use Reference Table	58
Table 12: Minimum Recommended Right-of-Way Width.....	133
Table 13: Major Thoroughfare Plan Project List.....	136

This page is intentionally left blank.

Chapter 1: Introduction

Powhatan County is located in the Lower Piedmont area of Virginia. It is bordered by Chesterfield County to the east, Amelia County and the Appomattox River to the south, Goochland County and the James River to the north, and Cumberland County to the west. The eastern tip of the county is approximately fifteen miles directly west of the downtown area of the City of Richmond. The county encompasses 272 square miles.

Europeans first came to Powhatan County in 1608, in an expedition of 120 men led by Christopher Newport. The expedition traveled up the James River to a point as far west as what is now Maidens Bridge, but were forced back by the native population of Monacan Indians. The Monacan Indians were hunters and farmers, with settlements along the banks of the James River. Between 1699 and 1705, 500 to 700 Huguenot refugees fleeing persecution in France settled on the James River in abandoned Monacan villages. The Huguenots later settled throughout the area, building many substantial houses. Some of those houses remain among the county's many historic structures.

Powhatan County was created by the Virginia General Assembly in 1777 from land located in the eastern portion of Cumberland County. In 1850, a small portion of Chesterfield County was annexed, creating what today is the 272-square-mile County of Powhatan. The county seat was originally called Scottville, after General Charles Scott. Scott was a Revolutionary War hero and personal aide to General George Washington at Valley Forge. The name of the village was changed to Powhatan in 1836. The present courthouse building was erected in 1848.

Throughout its history, the county's economy has been based on farming, including the cultivation of crops, timbering, and livestock production. The economy was traditionally linked to river traffic, especially along the James River. Bateau boats were used on the river and the Kanawha Canal to transport goods to and from the area. During the nineteenth and twentieth centuries, highways and railroads became the primary means of transportation. The county's population grew along with the agricultural economy. Rural hamlets and villages served as focal points for community and commerce throughout Powhatan County. In 1852, the county's population was 8,171. The population remained relatively stable until the mid-twentieth century, when it declined significantly to only about 5,500 in 1950. The modern growth cycle began in the 1970s, as development spread westward from Chesterfield County.

For several decades, the county grew steadily. By the 1990s, dramatic growth and development had occurred. The county's population grew from just over 15,000 in 1990 to over 28,000 in 2017. Since 2000, most new development has occurred in large-lot (5-acre) subdivisions throughout the county, particularly in areas near the Courthouse Village and the Route 711 Corridor. The majority of recent commercial growth has occurred along the Route 60 Corridor and east of the Route 711/Route 288 interchange. Additional growth has been accommodated through lot splits throughout the county. Agricultural activities have decreased and most agriculture is limited to smaller family farms, with some emerging niches like vineyards, greenhouses, or equestrian-related facilities. Silviculture is still practiced within the county.

County Demographics

Table 1: Population
(1990—2040)

Year	Population	% Change
1990	15,328	+17%
2000	22,377	+46%
2010	28,046	+25%
2020*	28,752	+2%
2030*	32,567	+13%
2040*	35,854	+10%

*Population Projection by the Weldon Cooper Center (March 2017)

Source: U.S. Census Bureau and Weldon Cooper Center

Population
(1790 - 2040)

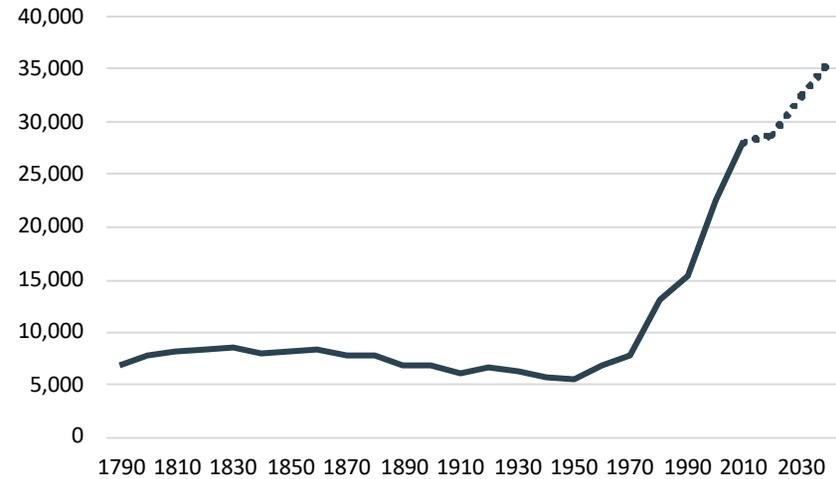
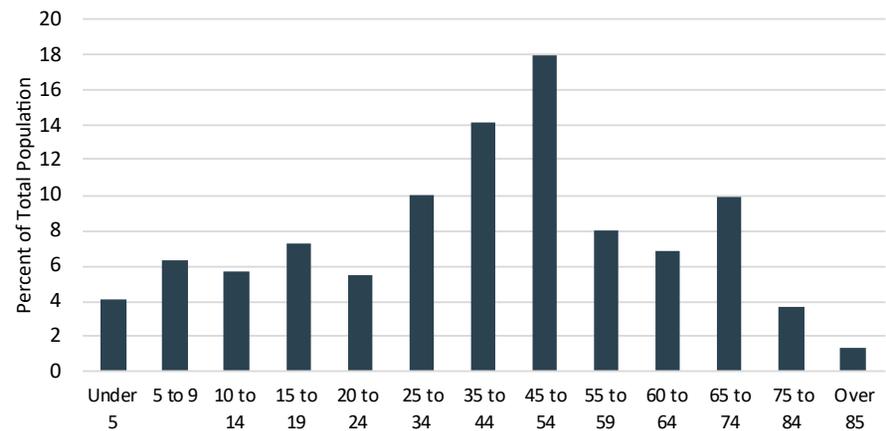


Table 2: Population by Age
(2017 Estimates)

Age	% of Total Population (Powhatan County)	% of Total Population (Virginia)
Under 18 Years	19.0%	22.3%
18 to 64 Years	64.5%	63.5%
65 Years and Over	16.5%	14.2%
Median Age	44.6 Years	37.6 Years

Source: U.S. Census Bureau (2013—2017 American Community Survey)

Population by Age
(2017)



Source: U.S. Census Bureau (2013—2017 American Community Survey)

Table 3: Population by Race
(2017 Estimates)

Race	% of Total Population (Powhatan County)	% of Total Population (Virginia)
White	84.6%	62.6%
Black/African American	11.1%	18.8%
Asian	0.3%	6.2%
American Indian	0.3%	0.2%
Hispanic or Latino	2.0%	9.0%
Two or More Races	1.6%	2.9%

Source: U.S. Census Bureau (2013—2017 American Community Survey)

Table 4: Household Type
(2017 Estimates)

Household Type	% of Total Population (Powhatan County)	% of Total Population (Virginia)
Family Households	79.9%	66.9%
Non-Family Households	20.1%	33.1%
Non-Family Households: Householder Living Alone	17.2%	26.8%

Source: U.S. Census Bureau (2013—2017 American Community Survey)

Table 5: Household Economic Characteristics
(2017 Estimates)

Characteristic	Powhatan County	Virginia
Household Income (Median)	\$80,441	\$68,766
% of Population Below Poverty Level	5.5%	11.2%

Source: U.S. Census Bureau (2013—2017 American Community Survey)

Overview of the Plan

This comprehensive plan is an update to the county's previously-adopted plan from 2010. A comprehensive plan provides a vision for how a community might grow in the future. A comprehensive plan is typically long-range (looking twenty to thirty years in the future) and addresses a wide range of issues and questions relating to land use, including transportation, land use mix, parks and open space, community facilities, community character, housing, neighborhoods, and economic development.

Once adopted, elected and appointed officials of the county will use the plan as a guide for their land use and public investment decisions.

Role and Purpose of the Plan

The plan is intended as a guide to assist elected and appointed officials in decisions related to development, growth, and provision of public services. The comprehensive plan, however, is not the only planning document that the county will maintain, and is not intended to be an exhaustive list of unattainable future needs; rather, the comprehensive plan should be a broad depiction of the best possible and realistic future. These recommendations should focus on issues that the county has the ability to control to attain that future vision.

The various agencies, authorities, and departments of the county's government will maintain planning documents that relate to the overall vision from the comprehensive plan, but provide more in-depth and strategic data and policy for a specific area of interest. Capital improvement plans, annual budgets, facility operation and expansion plans, and special area land use plans are all examples of additional documents the county may employ to expand upon and implement the vision of the comprehensive plan.

Implementation is a key element in the success of a comprehensive plan. The plan is a non-regulatory tool. It provides recommendations, but in order to enact these recommendations, the county must utilize other tools consistent with the vision of the comprehensive plan. The recommendations contained herein are provided for consideration and will be developed further through regulatory tools like the

subdivision ordinance, zoning ordinance, proffer programs, economic development efforts, and management of public facilities. Other tools include fees and taxation in the county, which are also regulatory.

Legal Basis for the Comprehensive Plan

The State of Virginia mandates that localities prepare and adopt a comprehensive plan for the physical development of land within its jurisdiction, in accordance with *Section 15.2-2223 of the Code of Virginia*. The plan must include assessments of existing conditions, trends of growth, and future needs for the order, convenience, prosperity, and general welfare of its residents. The State Code also requires the plan to include transportation and land use components. The land use component is encouraged to provide policies for:

- Locations of future public facilities (parks, schools, waterworks, sewage disposal, etc.);
- Historical areas;
- Areas for redevelopment; and
- Areas of environmental significance.

However, improvements not included in the plan must be found by the Planning Commission to be substantially in accord with the comprehensive plan prior to approval and construction, except as otherwise provided in the State Code. By law, the plan must also address affordable housing within the county.



Powhatan Wildlife Management Area
Source: Virginia Department of Game and Inland Fisheries

How to Use the Plan

The plan is a guide for public decision-making. Specifically, the county's elected and appointed officials will use the plan to evaluate future proposals or policy changes to ensure consistent decisions are made. Furthermore, the plan provides guidance to landowners and developers on what is appropriate in the county.

This plan uses the following terms to describe the various policy recommendations:

Vision

A *vision* is the comprehensive, overarching statement of the desired future of the county. The vision is the ultimate set of ideals to which the county should aspire.

Goal

A *goal* is a statement of desired end-state or target. Goals relate to the vision statement and focus on a specific element of the plan. A goal provides particular guidance for where the county should be in the future, and sets the tone for individual objectives for each element.

Objective

An *objective* is a recommended course of action or task the county or its designated agency could undertake in pursuit of a goal and the vision. An objective provides focused and achievable guidance on specific topics under the plan element headings. The objectives tie implementation of the plan to the goals and vision.

The comprehensive plan is non-regulatory in nature, but it does express the critical policies of the county. The plan does not stand alone and can only be effective when supported by the various implementation measures included in *Chapter 11: Implementation Tools*. The plan acts as a guide to modify regulations like the subdivision and zoning ordinances. Amendments to these ordinances should be consistent with the comprehensive plan.

This page is intentionally left blank.

Chapter 2: Planning Background

Overview

As Powhatan County continues to grow and change, the comprehensive plan must be regularly reviewed to ensure it reflects the vision of the county's residents. *Section 15.2-2230 of the Code of Virginia* requires that localities review their comprehensive plan on a regular basis. In 2016, Powhatan County's Planning Commission began to review and update the 2010 Comprehensive Plan. To update the document, the Planning Commission considered:

- Changes in demographics, land use, infrastructure, and public facilities since 2010.
- Recently-completed planning documents, including:
 - ◊ Route 60 Corridor Study: Maidens Road to Cumberland County Line (August 2016);
 - ◊ Route 60 East Corridor Advance Planning Study (October 2016); and
 - ◊ Route 60 Corridor East: Special Area Plan (March 2017).
- Input from residents, businesses, and property owners.

Key Themes of the Plan

It is useful to keep the big picture in mind during review and implementation of this comprehensive plan. The following key themes summarize the intent of this plan:

Maintain Character

Powhatan County is defined, to a large extent, by its distinctive and remarkable rural landscape with development located in several focused areas. This is the dominant land form, and maintaining the important visual character of the county is central to this plan. Powhatan County is not to become universally suburban or metropolitan in character. Maintaining rural character involves preservation of "signature" parts of the county, including the Courthouse Village area, rural segments of Huguenot Trail, riverfront

areas, and broad expanses of wooded and rural landscapes. Protecting cultural and environmentally-sensitive resources is a fundamental goal.

Due to Powhatan County's attractive character, development pressures will likely continue. The county's intent is to manage development in a responsible and purposeful way that does not destroy the area's rural character.

Provide Services to Current and Future Residents

As Powhatan County moves into the future, it is paramount to plan for the provision of services that residents will need: public safety, education, recreation, sewer, water, and transportation. The comprehensive plan will project the services and facilities needed to assure adequate levels-of-service for these basic community necessities.

Maintain Fiscal Sustainability

Fiscal planning is critical to Powhatan County's future. This comprehensive plan provides essential information about demand for services and options for funding those services, so that decisions about growth, development, and the expansion of public services and facilities are aligned in a fiscally-responsible way.

Acknowledge and Accommodate Reasonable Pressures for Growth

This plan acknowledges that there is pressure for growth and supports reasonable levels of development, while maintaining the county's rural character, providing adequate services, and maintaining fiscal sustainability. This cannot be overstated. The overall goal of this plan is to position Powhatan County such that purposeful, planned growth can be accommodated without compromising other aspects of county life that are most valued. The plan describes areas in which growth can best be accommodated, and areas where growth should be minimized, taking into account a broad range of goals and objectives.

2010 Comprehensive Plan

Most of the goals, concepts, and strategies outlined in the 2019 Comprehensive Plan reflect the vision established in the 2010 Comprehensive Plan.

The 2010 Comprehensive Plan was developed with significant input from community members and advisory committees. With this input, several documents were prepared that detail trends and analyze major influences for the future. These documents include:

- Memorandum of Existing Conditions
- Population and Employment Forecasts Memorandum from URS
- Economic Development Citizens Working Group Summary Report
- Infrastructure Citizens Working Group Summary Report
- Land Use and Land Preservation Citizens Working Group Summary Report
- U.S. Route 60 Overlay Citizens Working Group Summary Report
- Transportation Study Group Final Report
- Huguenot Trail Advisory Group Final Report
- Powhatan Comprehensive Plan Update Diagnosis and Assessment

Influencing Trends

Regional Growth Influences

Two primary regional influences will continue to have a major influence on Powhatan County. First, Route 288 provides regional access to Powhatan County. The highway serves as a route for commuters traveling to major employment centers in Chesterfield, Henrico, and Goochland counties, including West Creek and Innsbrook.

The second major regional influence is the potential growth pressure created because of levels of development in northwestern Chesterfield County. According to the Chesterfield County planning staff (as of 2017), there are approximately 8,000 existing housing units within three miles of the boundary between Chesterfield and Powhatan counties. That number is projected to grow to over 34,000 dwelling units in Chesterfield County, based upon a “build-out” analysis. This accounts for all vacant land zoned at the beginning of 2017 and any land that was not zoned, but designated in the comprehensive plan for residential use.

Current commercial and industrial projects in the same part of Chesterfield County account for almost 2.5 million square feet of space. At build-out, that amount is projected to be about 21 million square feet of commercial and industrial development. Much of that new development (3.6 million square feet) will be part of Watkins Centre, a mixed-use development near the Route 288/Route 60 interchange.

However planning in western Chesterfield County turns out, Powhatan County should assume that regional growth pressures will continue. The challenge, of course, is for Powhatan County to decide how it will respond to and manage growth pressures.

The plan addresses growth management by indicating targeted growth areas in the county, where utilities and services can be most efficiently provided, and identifying improvements to the transportation network to accommodate reasonable growth. The recommendations in Part III can be implemented to manage growth.

Chapter 3: Vision and Goals

Introduction

The vision and goals for the plan are presented here to show how they are interrelated and form the basic framework of the plan. The individual goals are reiterated in their respective elements of the plan and are supported by related objectives and recommended strategies.

Vision Statement

The *vision statement* is a comprehensive, overarching statement of the desired future of the county, which was developed with input from residents, elected officials, and other stakeholders:

Powhatan County will be a place where people can see the stars at night, be in touch with the land, and yet be able to work, live, play, shop, and learn without leaving the county.

Powhatan County will be a friendly, safe, and healthy place for people to live and work. It will have a good balance between growth and preservation. It will be primarily rural in character with a preserved natural environment and ample open spaces. The dominant rural character will be supplemented by mixed residential and business uses situated at defined locations primarily along the Route 60 Corridor and along Route 711 east of the Route 288 interchange. Development will utilize architectural features, landscaping, lighting, and other design elements that blend with the area's rural character.

These mixed-use clusters will provide dynamic economic development opportunities. They will provide employment opportunities for local residents to keep them from having to travel out of the county for jobs, and they will attract residents from outside the county to further help fund fiscally-responsible county services, including infrastructure and community facilities. They will also provide diverse housing options to complement the single-family uses that will continue to be prevalent in rural areas.

Goals

Land Use

Powhatan County will have a land use pattern dominated by preserved rural character, with high-quality and economically-productive mixed-use development at clearly-defined locations, which are served (or planned to be served) by utilities and adequate transportation infrastructure.

Economy

Powhatan County will have a diverse and balanced economy that supports sustained business and employment opportunities for its citizens and attracts revenues from outside the county to generate further income to fund high-quality county government services.

Housing

Powhatan County will have a diverse range of housing that provides living opportunities for residents at all stages of their life.

Transportation

Powhatan County will have a transportation system that is coordinated with land use patterns and community character, with an acceptable level-of-service that supports economic development and maintains a high-quality of life.

Infrastructure and Community Facilities

Powhatan County will provide infrastructure and community facilities in a fiscally-responsible manner with adequate levels-of-service, consistent with the proposed future land use plan.

Natural Resources and Open Spaces

Powhatan County will preserve and protect natural resources and open spaces, including rivers, streams, creeks, forests, wildlife habitat, wetlands, floodplains, soil resources, and dark night skies.

Cultural Resources

Powhatan County's cultural and historic resources will be preserved and protected.



This page is intentionally left blank.

Chapter 4: Economic Development

Overview

The county's position as a rural county on the western edge of the Richmond Metro Region creates unique challenges and opportunities regarding economic development. Because of its rural nature, the county will need to work with the private sector to make sure infrastructure can be provided in advance of development. However, the rural landscapes create opportunities for agri-business and tourism that are not present in nearby urban counties.

Economic development is an important component of the comprehensive plan. A sustainable local economy is associated with other goals and objectives of this plan, and is a pivotal element of the county's vision for the future. The physical components of economic development, such as identifying appropriate locations for business development, are addressed in *Chapter 8: Land Use and Community Character*, while the infrastructure improvements needed for effective economic development are addressed in *Chapter 6: Infrastructure and Facilities*. Furthermore, recommendations regarding natural and cultural preservation must be balanced with the need to create a sustainable economy. The economic development priorities and other elements of the plan must be integrated to achieve the plan's vision. This chapter identifies key issues regarding economic development. Recommended strategies address the direction the county will take to achieve the economic development goals and objectives.

Background

Employment Sectors

The top employment sectors are services, government, and construction. The Virginia Employment Commission reports more than 7,000 jobs in the county (as of the fourth quarter of 2018). The largest employers include:

- Powhatan County School Board;
- Deep Meadow Correctional Center;
- Wal-Mart; and
- Powhatan County.

The service industry has shown the most dramatic increase of any employment sector, a trend consistent with the general U.S. economy. Construction jobs have also increased, reflective of the significant growth the county has experienced since the early 1990s. It is an interesting change that the county has increased employment in the manufacturing sector. State and local governments have traditionally contributed many jobs to Powhatan County's economy.

Commuting

Many residents leave Powhatan County for work. Based on commuter data from 2014:

- About 2,000 Powhatan County residents live and work in the county.
- Over 11,000 residents leave Powhatan County each day for work, with most commuting to Chesterfield County, Henrico County, or the City of Richmond.
- 4,266 workers commute from other localities to Powhatan County, with most commuting from Chesterfield County, Henrico County, Cumberland County, the City of Richmond, or Amelia County.

Unemployment Rates

Employment trends in Powhatan County show unemployment rates that are typically lower than Virginia and the U.S. as a whole. In 2018, Powhatan County had an unemployment rate of 2.7 percent, the lowest rate since 2008. This rate was below the state (3.0 percent) and national (3.9 percent) unemployment rates.

Business Growth

In recent years, the county has experienced the growth of small commercial establishments along with residential growth. As of the fourth quarter of 2018, there are 799 employers in Powhatan County, 525 of which have four employees or less.

Table 6: Non-Farm Employment

Sector	1993	2008	2016	2018	Change (1993 – 2018)	% Change (1993 – 2018)
Agricultural Services, Forestry and Fishing	174	32	29	29	-145	-83.3%
Mining	16	n/a*	n/a*	n/a*	n/a	n/a
Construction	886	1,222	1,265	1,315	429	48.4%
Manufacturing	132	200	248	268	136	103.0%
Transportation and Public Utilities	143	97	55	46	-97	-67.8%
Wholesale Trade	108	156	252	185	77	71.3%
Retail Trade	517	429	747	764	247	47.8%
Finance, Insurance, Real Estate	193	192	175	166	-27	-14.0%
Services**	868	1,494	2,252	2,518	1,650	190.1%
Government	1,760	2,320	1,978	1,701	-59	-3.4%
Total	4,797	6,142	7,001	6,992	2,195	45.8%

*Nondisclosable data.

**This category includes the following service-related industries, as defined by the Virginia Employment Commission: *Professional, Scientific, and Technical Services; Management of Companies and Enterprises; Administrative and Support and Waste Management; Educational Services; Health Care and Social Assistance; Arts, Entertainment, and Recreation; Accommodation and Food Services; and Other Services (except Public Administration)*.

Sources:

Virginia's Local Economics: An Economic Profile for the Richmond Regional Planning District. Weldon Cooper Center for Public Services, 1993.

Virginia's Local Economies-Statistical Update 1996, Weldon Cooper Center for Public Services, 1996.

Powhatan Community Profile: Virginia Employment Commission, 2009, March 2017, and May 2019.

Heritage

Powhatan County is rich in natural, historic, cultural, and rural heritage. These local resources, expanded upon in other chapters of the plan, are an asset to the community and provide opportunities for economic development, provided they are carefully managed and remain viable resources into the future.

Rural heritage is a combination of the following characteristics:

- Rural landscapes with fields, forests, and historic structures;
- Lifestyle associated with a rural community;
- Farm production; and
- Potential for agri-tourism and recreational activities related to rural operations, such as equestrian centers, boutique agriculture, country retreats or conference centers, and bed and breakfast inns.

Currently, the county's identity is largely associated with its rural heritage. Protecting the county's rural character and encouraging agri-tourism, farming, and other rural operations will create economic development opportunities.

Similar to rural heritage is the natural and historic heritage of the county. The natural landscape of hardwood and evergreen forests on rolling topography, interspersed with farms, fields, and historic landmarks, contributes to the community's quality of life. These assets make Powhatan County an attractive place to live and provide opportunities for recreation and tourism, which is important in economic development. For example, improving access to the James and Appomattox rivers relates to natural conservation and economic development. Likewise, historic preservation contributes to the identity of the county and creates a draw for tourism.

Agriculture

Powhatan County has been (and is) transitioning from a rural/farming community to a more residential bedroom community. Be that as it may, Powhatan County has a proud legacy of agriculture, which the community intends to respect and preserve as change continues. According to the most recent Census of Agriculture (2012), Powhatan County still has 250 farms (including 121 families for whom farming is the principal income) and contributes \$10,000,000 to the economy (market value of agricultural products). Additionally, farming is a (if not "the") bedrock of much of what makes Powhatan County a special place—open space, fields, forests, rural viewsheds, clean air and water, hunting and fishing, and dark night skies.

Accordingly, Powhatan County, through its comprehensive plan and zoning ordinance, will reasonably protect existing farms and foster new, farms—large, small, field crops, niche farming, farm-to-table, fiber, viticulture/brewing, and silviculture.



Cows on a Farm in Western Powhatan County
Source: Virginia Cooperative Extension



Industrial Operation in Powhatan County
Source: Powhatan County



Quarry in Eastern Powhatan County
Source: Powhatan County



Business Opening along Route 711 Corridor
Source: Powhatan Chamber of Commerce

Regional Proximity

Powhatan County is located outside of the economic core of the Richmond Metropolitan Region, but Routes 60, 288, and 522 provide access to major employment and retail centers in surrounding counties. These regional connections, along with the county's proximity to fast-growing areas in western Chesterfield County, create economic development opportunities. Access to major highways not only attracts commercial and industrial development, but residential development as well. As the county's population grows, there will be demand for new shops, offices, and other businesses that provide services to surrounding neighborhoods.

Powhatan County's proximity to the Richmond Metropolitan Region also provides businesses and residents with access to regional amenities. Richmond International Airport is less than a one-hour drive from most of Powhatan County. Virginia Commonwealth University, the University of Richmond, and other colleges and universities are a short drive away.

Infrastructure

While most of Powhatan County lacks access to public utilities, water and sewer are provided or planned for key areas along Route 60 and near the Route 711/Route 288 interchange. Water, sewer, and broadband or communication technologies will be essential to economic development success. Strategically coordinating utility availability and land use recommendations will be important. Routes 60, 288, and 522 provide regional connections to neighboring localities, allowing goods and materials to be easily transported.

Challenges facing the county's infrastructure include the lack of funding to make infrastructure improvements that could support greater development. There is limited funding to improve infrastructure and utilities in advance of development; additional development (and the revenue it generates) is needed to fund infrastructure expansion. Rural roadways will need to be improved to accommodate growth located in strategic, compact districts in the county.

Population and Growth

The county has experienced significant growth over the last twenty years. The population growth brought a more diverse population and increased market demand for local businesses. As the population continues to grow, it will be important to maintain socioeconomic diversity and ensure that affordable housing is available to various income groups. A balance of employment opportunities will also be important to keep pace with the growing population and changing skill sets. The county should strive to attract employment that is compatible with the population to decrease commuting to other counties.

Recommendations

Goal: Economic Development

Powhatan County will have a diverse and balanced economy that supports sustained business and employment opportunities for its citizens and attracts revenues from outside the county to generate further income to fund high-quality county government services.

Objectives and Strategies: Economic Development

Objective ED.1

Implement the 2016 Economic Development Strategic Plan.

Strategy ED.1.a

Using the 2016 Economic Development Strategy as a guiding document, the Board of Supervisors and Economic Development Authority (EDA) have identified initial priority steps and are beginning to engage relevant stakeholders to implement them.

Strategy ED.1.b

The most immediate steps to be taken by the EDA in implementing recommendations from the 2016 Economic Development Strategic Plan include:

- i. Design and initial implementation of a strong business retention and expansion (BRE) program.
- ii. Validation of the target business markets that are most appropriate for growth in Powhatan County.
- iii. Development of a brand and image complemented by a communication message that is embedded into the county's leadership and key stakeholders' minds.
- iv. Raising awareness of the current state of economic development activities in Virginia by learning more about partners and resources available to support Powhatan County's own vision.

Objective ED.2

Increase the number and variety of jobs in the county through the retention and attraction of clean, small, and medium-sized industrial, office, and commercial enterprises.

Strategy ED.2.a

Develop a consistent, focused, and visible communications campaign targeting these enterprises.

Strategy ED.2.b

Provide support services, utilities, and high-tech infrastructure to facilitate growth of businesses in targeted sectors.

Strategy ED.2.c

Adopt a fast-track program for the county economic development services addressing rezoning, utility connections, site review, and state and local government department reviews. If local government staff limitations prohibit fast-track action, private sector contract assistance should be used.

Objectives and Strategies: Economic Development	
Objective ED.3 Encourage and support initiatives to target economic sectors that capitalize on local and regional strengths through a systematic approach based on an economic development plan.	<p>Strategy ED.3.a Build a diverse economic base in terms of business sectors targeted and required skill levels.</p> <p>Strategy ED.3.b Seek business opportunities that generate the export of goods and services beyond the local economy and bring outside income and wealth into the county, creating benefit from the cumulative effect of basic employment activities.</p> <p>Strategy ED.3.c Empower the Economic Development Authority to take part in a comprehensive plan oversight committee to ensure action and implementation of the plan recommendations.</p> <p>Strategy ED.3.d Encourage the development of niche farming activities, agricultural support businesses, and an organizational conduit to supply goods to the local consumer market.</p>
Objective ED.4 Strive to move closer to a commercial/residential tax base valuation of at least 30% / 70% in order to be able to fund infrastructure and community facilities in a fiscally-sustainable manner.	<p>Strategy ED.4.a Assess the county’s current tax base valuation and monitor it annually to identify development needed to achieve this target.</p> <p>Strategy ED.4.b Identify adequate land for which infrastructure can be provided, and determine the most appropriate method for controlling and marketing the properties for economic development.</p> <p>Strategy ED.4.c Manage residential growth through implementation of the land use plan and revision to land development regulations.</p> <p>Strategy ED.4.d Promote land use patterns that create population densities that demand additional employment uses.</p>

Objectives and Strategies: Economic Development

Objective ED.5

Retaining existing businesses is of high priority, and present employers and job opportunities should be maintained and enhanced.

Strategy ED.5.a

Strive to retain existing businesses and industries in the county and encourage their viability and growth through systematic outreach and communication.

Strategy ED.5.b

Encourage continued participation by local business owners in communicating their needs and identifying public policies that sustain a business-friendly local government.

Strategy ED.5.c

Consider implications on existing businesses when considering the costs and benefits of providing incentives to new or competing business growth.

Strategy ED.5.d

Identify existing local businesses that can be used in marketing the county as an eco-tourism destination.

Strategy ED.5.e

Identify existing local businesses that could participate in a farm-to-table program with regional restaurants, groceries, and farmers' markets.

Strategy ED.5.f

Allow the continued operation of non-conforming industrial and commercial uses, but do not encourage expansion at these sites, unless adequate public facilities or mitigation efforts can be made to ensure minimal impacts on the surrounding streets, communities, and infrastructure.

Strategy ED.5.g

Develop policies and programs that existing businesses could utilize to improve the exterior appearance of their buildings, especially if they are located along major entrance corridors.

Objectives and Strategies: Economic Development

<p>Objective ED.6 Support agriculture, forestry, and agribusiness enterprises.</p>	<p>Strategy ED.6.a Coordinate with Virginia Tech Extension and the Chamber of Commerce to enhance traditional and emerging sustainable agriculture-based enterprises.</p>
	<p>Strategy ED.6.b Allow new agricultural activity anywhere within the community unless a specific health or safety hazard can be documented.</p>
	<p>Strategy ED.6.c Recognize agriculture as a valuable part of the community’s culture, landscape, history, and economy, and provide notice that while farming can cause noise, dust, odors, these are not nuisances if best management practices are being applied.</p>
	<p>Strategy ED.6.d Permit and encourage the continued use of land for agriculture, farming, dairying, pasturage, apiculture, horticulture, floriculture, and animal and poultry husbandry in areas currently under such use.</p>
	<p>Strategy ED.6.e Support existing and potential agricultural uses. Review current and forthcoming regulations and evaluate them to ensure they are not an obstacle to agricultural uses.</p>
	<p>Strategy ED.6.f In order to preserve the county’s rural character and heritage, support agribusinesses, including farms, forestry operations, agritourism, and ecotourism. Evaluate obstacles to, and incentives for, the creation and/or expansion of these businesses.</p>
	<p>Strategy ED.6.g Support the creation of unique eco-tourism businesses.</p>

Chapter 5: Housing

Overview

Vibrant communities provide a range of safe, high-quality housing options that meet the needs and preferences of all residents. While some homebuyers prefer a single-family home in a rural setting, others want low-maintenance housing close to shopping and other amenities. As growth continues, the county can encourage development of different housing types in appropriate locations.

In Powhatan County, most of the housing stock consists of single-family detached units (Table 7). There are limited options available for low-maintenance housing on smaller lots. Lack of housing choice may make it difficult for existing residents to find suitable housing as their circumstances change, or for new homebuyers to secure housing that meets their needs. Providing a diverse stock of housing, consisting of a range of styles, sizes, prices, and locations, will allow the county to meet the needs and preferences of its residents, and to be more resilient to changes in the housing market.

Most of the county does not have infrastructure necessary to support single-family homes on smaller lots or multi-family development. Larger lots are necessary to accommodate an on-site septic system and well, making townhouses, duplexes, and other higher-density housing options infeasible without public utilities. As an alternative, this plan and revisions to the *Subdivision and Zoning Ordinances* are creating opportunities for denser residential development in villages where adequate infrastructure exists or is planned.

Not only can the county's housing needs be met by building new housing, but by encouraging reinvestment in existing homes. Rehabilitating aging housing stock will help stabilize older neighborhoods and could reduce demand for new housing in rural areas.

Background

While much of the county's housing stock consists of single-family homes on larger lots, developers are beginning to provide greater housing options. Existing and planned developments in the Courthouse Village and near the Route 288/Route 711 interchange include townhouses, apartments, and low-maintenance single-family homes. These higher-density developments are within designated growth areas served by public sewer and water systems.

Aging in Place

As the county's population ages, there may be more demand for low-maintenance, one-level living that allows residents to age in place. In 2017, 16.5 percent of the county's residents were age 65 years and over, an increase from 8.4 percent in 2000. By 2040, the Virginia Employment Commission estimates that 27.6 percent will be age 65 years or older. Providing greater housing options will allow older residents to stay within the county as they age.



Scottville at Powhatan Courthouse
Source: Powhatan County

Affordability

Maintaining quality affordable housing can help the county attract a diverse workforce. Traditionally, the Commonwealth characterizes affordable housing as that which residents with incomes at or below the area median income can afford, provided they pay no more than 30 percent of their gross income for gross housing costs, including utilities.

As the price of housing increases both locally and regionally, demand for affordable housing will rise accordingly. Smaller lots, attached housing, multi-family housing, and rental options in more compact development forms may increase the supply of affordable homes.

Reinvestment in Existing Housing

According to estimates by the U.S. Census Bureau, 45 percent of the county’s housing stock was built before 1990, and 8.2 percent of the housing stock was built before 1960. Older homes are often less energy-efficient than new construction and may not have the amenities today’s homebuyers are looking for. Reinvestment in aging housing stock can help ensure that older subdivisions remain desirable places to live.

Table 7: Housing Units in Powhatan County (2017)

Type	Estimated Number	% of Total
Single-Family Dwellings (Detached)	9,975	94.5%
Single-Family Dwellings (Attached)	152	1.4%
Mobile Homes	361	3.4%
Multi-Family Dwellings	68	0.7%
Total Housing Units	10,556	100.0%

Source: U.S. Census Bureau (2013—2017 American Community Survey)

Table 8: Housing Types by Tenure (2017)

Type	Estimated Number	% of Total Occupied Units
Owner-Occupied Housing Units	8,954	89.8%
Renter-Occupied Housing Units	1,020	10.2%
Total (Occupied Housing Units)	9,974	100.0%

Source: U.S. Census Bureau (2013—2017 American Community Survey)

Table 9: Home Sales in Powhatan County
(January 1, 2016—December 31, 2017)

Price Range	Number of Sales	% of Sales	Average Square Footage	Average Bedroom Count
\$0—\$24,999	1	0.1%	1,056	3.0
\$25,000—\$49,999	3	0.3%	1,994	3.7
\$50,000—\$74,999	9	0.9%	1,120	2.7
\$75,000—\$99,999	15	1.6%	1,223	2.7
\$100,000—\$124,999	14	1.5%	1,331	2.8
\$125,000—\$149,999	33	3.5%	1,267	2.9
\$150,000—\$174,999	53	5.6%	1,313	3.1
\$175,000—\$199,999	79	8.3%	1,496	3.1
\$200,000—\$224,999	84	8.8%	1,640	3.1
\$225,000—\$249,999	86	9.1%	1,728	3.1
\$250,000—\$274,999	84	8.8%	1,931	3.4
\$275,000—\$299,999	85	8.9%	2,235	3.5
\$300,000—\$349,999	139	14.6%	2,421	3.8
\$350,000—\$399,999	71	7.5%	2,753	3.9
\$400,000—\$449,999	51	5.4%	3,285	4.0
\$450,000—\$499,999	44	4.6%	3,490	4.1
\$500,000—\$599,999	44	4.6%	3,729	4.0
\$600,000—\$699,999	37	3.9%	4,035	4.0
\$700,000—\$799,999	13	1.4%	4,251	3.8
\$800,000—\$899,999	2	0.2%	4,381	4.0
\$900,000—\$999,999	1	0.1%	5,999	5.0
\$1,000,000 or more	2	0.2%	5,217	4.0
All Sales	950	100.0%	2,268	3.5
Median Sales Price (2016): \$267,500				
Median Sales Price (2017): \$289,700				

Source: Richmond Assoc. of Realtors (MLS Database Query: Apr. 30, 2018). Includes data on all homes (new construction and resale) listed on the MLS sold in 2016 and 2017.

Table 10: New Home Sales in Powhatan County
(January 1, 2016—December 31, 2017)

Price Range	Number of New Home Sales	% of New Home Sales	Average Square Footage	Average Bedroom Count
\$0—\$24,999	0	0.0%	N/A	N/A
\$25,000—\$49,999	0	0.0%	N/A	N/A
\$50,000—\$74,999	0	0.0%	N/A	N/A
\$75,000—\$99,999	0	0.0%	N/A	N/A
\$100,000—\$124,999	0	0.0%	N/A	N/A
\$125,000—\$149,999	0	0.0%	N/A	N/A
\$150,000—\$174,999	0	0.0%	N/A	N/A
\$175,000—\$199,999	4	2.6%	1,336	3.0
\$200,000—\$224,999	16	10.6%	1,429	2.9
\$225,000—\$249,999	12	7.9%	1,610	2.9
\$250,000—\$274,999	13	8.6%	1,811	3.2
\$275,000—\$299,999	8	5.3%	1,893	3.1
\$300,000—\$349,999	22	14.6%	2,153	3.8
\$350,000—\$399,999	9	6.0%	2,440	3.8
\$400,000—\$449,999	21	13.9%	3,161	4.0
\$450,000—\$499,999	13	8.6%	3,234	4.1
\$500,000—\$599,999	17	11.3%	3,189	3.6
\$600,000—\$699,999	9	6.0%	3,598	3.7
\$700,000—\$799,999	7	4.6%	3,541	3.6
\$800,000—\$899,999	0	0.0%	N/A	N/A
\$900,000—\$999,999	0	0.0%	N/A	N/A
\$1,000,000 or more	0	0.0%	N/A	N/A
All Sales	151	100.0%	2,486	3.6
Median Sales Price (2016): \$331,526				
Median Sales Price (2017): \$377,450				

Source: Richmond Assoc. of Realtors (MLS Database Query: May 2, 2018). Includes data on new (never occupied) homes listed on the MLS sold in 2016 and 2017.

Recommendations

Goal: Housing

Powhatan County will have a diverse range of housing that provides living opportunities for residents at all stages of their life.

Objectives and Strategies: Housing

Objective HS.1

Foster the development of an adequate supply and variety of housing that will meet the needs of all of the county's population in a manner that is consistent with the land use vision, goals, and objectives.

Strategy HS.1.a

Work with non-profit organizations and developers to provide affordable housing in appropriate locations with convenient access to shopping, services, and employment opportunities.

Strategy HS.1.b

Encourage developers to incorporate Universal Design principles into new construction, creating housing that allows older residents to *age in place*.

Strategy HS.1.c

Encourage non-profit organizations to provide resources and assistance to homeowners rehabilitating existing housing.

Objective HS.2

Pursue diverse housing types in areas where public utilities exist or are planned, particularly along the Route 60 Corridor and along Route 711 near the Route 288 interchange.

Strategy HS.2.a

Services, including sewer and water, should be made available for residential development (for a fee) in the focused growth areas indicated in the special area plans, to allow for higher density of residential development.

Strategy HS.2.b

As part of major rezoning requests, encourage developers to provide a mixture of housing types. Work with developers to ensure different housing types are visually compatible with one another.

This page is intentionally left blank.

Chapter 6: Infrastructure and Facilities

Overview

As Powhatan County approaches growth management issues, public infrastructure and community facilities are tightly linked to every other consideration. It is incumbent upon the county to provide necessary public services to residents and property owners, and the county has a strong record of successful service delivery. This comprehensive plan focuses on the physical and geographic components of providing public services: the location and capacity of infrastructure and facilities. As the county continues to experience significant growth, purposeful attention to facilities' needs is critical to long-term sustainability.

The components of Powhatan County's array of public facilities fall into the following categories:

- Sewer and Water
- Broadband
- Schools
- County Facilities
- Parks
- Libraries
- Emergency Services
- Solid Waste Management

Recommendations

Goal: Infrastructure and Community Facilities	
Powhatan County will provide infrastructure and community facilities in a fiscally-responsible manner with adequate levels-of-service, consistent with the proposed future land use plan.	
Objectives: Infrastructure and Community Facilities	
<p>Objective IF.1 Achieve a balance between the quality and cost of infrastructure and community facilities.</p>	<p>Objective IF.7 Establish adequate level-of-service standards for infrastructure and community facilities and services, consistent with other county goals. Plan development to achieve the established level-of-service and maintain or increase level-of-service going forward.</p>
<p>Objective IF.2 Continue to update the Capital Improvement Program annually to maintain a strong link between land use planning and infrastructure/community facilities. Identify and plan capital improvement needs in relation to anticipated growth.</p>	<p>Objective IF.8 Develop a system for benchmarking level-of-service of facilities to monitor substantial accord with the comprehensive plan and use this to assist in land use decisions.</p>
<p>Objective IF.3 Concurrently link land use planning and development decisions so that infrastructure and community facilities have capacity for expected growth and are in place when needed.</p>	<p>Objective IF.9 Locate new infrastructure and community facilities to promote compact development at focused locations within the Route 60 Corridor East, Route 711 Village, and Courthouse Village areas.</p>
<p>Objective IF.4 Plan for rural densities in areas not intended to be provided with infrastructure.</p>	<p>Objective IF.10 Coordinate land use planning with other county sewer and water planning efforts, recognizing that separate utility planning efforts will be ongoing.</p>
<p>Objective IF.5 Promote the public expectation that rural areas will receive only rural levels of service.</p>	<p>Objective IF.11 Coordinate land use planning and growth forecasts with school facility planning that is conducted by the school district, recognizing that the school district is responsible for actual facility planning.</p>
<p>Objective IF.6 Plan for compatible higher-density mixes of uses in areas where infrastructure is planned.</p>	

These eleven objectives apply to the general topic of planning for facilities. Specific strategies and directions for action appear further below under each facility topic. A main mechanism to accomplish infrastructure and community facilities objectives is the county's Capital Improvement Program (CIP). The county adopts a CIP annually

to manage and coordinate the planning, funding, and construction of new public facilities that will be needed to serve the expanding population. Another main mechanism for action on these objectives will be the adopted Countywide Land Use Plan.

Sewer and Water Utilities

Sewer and water is provided, or planned to be provided, in the water and wastewater service district as outlined in the 2015 Water and Wastewater Master Plan. There are three service areas, including the Courthouse Village Area, the Route 60 Corridor, and the Route 711 Village.

The primary planning issue associated with water is the need for additional long-term supply. The opinion of the Public Works Department is that with advance planning (which is currently underway), the problem can be solved and should not deter long-term economic development.

A related issue is the future mix of uses along the Route 60 Corridor. As discussed previously, there is considerable interest in promoting a mix of residential and business uses along Route 60. There are currently limited residential water customers, as previous policy has been to reserve capacity for business uses. This policy will change as Powhatan County promotes housing opportunities along the corridor in the updated Countywide Land Use Plan. Provision of water and sewer are also related to the context of the economic development needs discussed in the previous section.

The county should continue to focus water and sewer services in these geographic areas, both to target economic development opportunities and to discourage development in rural areas. Specifically, there is no recommendation to provide sewer and water in the rural areas.

Strategies listed on the following page will help achieve objectives of the 2015 Water and Wastewater Master Plan and the comprehensive plan.

Existing Infrastructure: Water (2018)

System	Area Served	Capacity (gallons per day)	Ownership
Flat Rock Area Water System	Route 60 Corridor: Chesterfield County Line to Rocky Oak Road	572,000	Public
Aqua Virginia	Courthouse Village Area	176,000	Private
Founders Bridge Utility Company	Huguenot Trail/ Winterfield Road Area	180,000	Private

Existing Infrastructure: Sewer (2018)

Wastewater Treatment Plant	Area Served	Capacity (gallons per day)	Average Daily Flow in 2016 (gallons per day)
Dutoy Creek	Route 60 Corridor East	250,000	45,000
Fighting Creek	Courthouse Village	100,000	37,500



Dutoy Creek Wastewater Treatment Plant

Source: Powhatan County

Strategies: Infrastructure and Community Facilities (Sewer and Water Utilities)	
<p>Strategy IF.UT.1 Continue to update the county’s Water and Wastewater Master Plan and implement as appropriate.</p>	<p>Strategy IF.UT.9 Recognize the need for ongoing upgrades and expansion of water and sewer infrastructure over a twenty- to thirty-year timeframe.</p>
<p>Strategy IF.UT.2 Secure a long-term source(s) of water with a decreased reliance on groundwater. Investigate the availability of off-stream storage, such as quarries. Investigate wholesale purchase of sewer and water service with surrounding counties.</p>	<p>Strategy IF.UT.10 Conduct a rate study for sewer and water fees and implement.</p>
<p>Strategy IF.UT.3 Continue pursuing cooperative efforts with surrounding counties to secure long-term water supplies.</p>	<p>Strategy IF.UT.11 Investigate alternative funding sources, such as Water Quality Improvement Funds.</p>
<p>Strategy IF.UT.4 Investigate opportunities for a long-term surface water supply.</p>	<p>Strategy IF.UT.12 Develop a program to secure “nutrient credits” for future wastewater plant expansions (e.g. offsets and credits).</p>
<p>Strategy IF.UT.5 Explore water reuse opportunities.</p>	<p>Strategy IF.UT.13 Investigate and secure alternate wastewater treatment options, such as combining treatment plants, collaboration with neighboring localities, and innovative technologies.</p>
<p>Strategy IF.UT.6 Develop a plan to bring water from the Route 60 Corridor East to the Courthouse Village area, which now relies on limited groundwater supplies.</p>	<p>Strategy IF.UT.14 The following recommendations should be considered for the location of sewer and water facilities and infrastructure:</p> <ul style="list-style-type: none"> • Gravity sewer lines are preferable, but pumping stations may be needed. • Sewer lines should correspond to the natural and altered slope of the land. • When possible, water and sewer lines should follow public rights-of-way. • A water treatment plant should be located close to targeted development areas so that treated water is not running through rural areas.
<p>Strategy IF.UT.7 Ensure that water systems (new and existing) are of a size for adequate flow and pressure during fire events, including installation of any necessary above-ground storage towers.</p>	
<p>Strategy IF.UT.8 Develop utilities into a self-reliant enterprise fund. Move toward a “user fee” revenue-based utility.</p>	

Strategies: Infrastructure and Community Facilities (Sewer and Water Utilities)

Strategy IF.UT.15

Evaluate the adequacy of water supply for domestic use and fire protection during the rezoning process.

Strategy IF.UT.16

Evaluate the adequacy of sewer capacity within the collection system and at the treatment plants during the rezoning process.

Developing Water and Sewer Infrastructure

The geographic service areas are currently operating on separate systems. The long-term objective is to connect the systems by laying lines along the Route 60 Corridor and expanding service in other areas through cooperation with surrounding localities. The existing water and sewer service district extends along Route 60 from the Chesterfield County line westward past Route 522, terminating at the intersection of Bell Road. Portions of the service district are currently not served, such as the area between Academy Road and Rocky Oak Road along Route 60.

The intent is to direct growth to locations where the county has planned for utility services. Utility services are needed to support more intense development within the service area, aligning with recommendations made in the comprehensive plan. Recommendations and policies established in the comprehensive plan will guide projections of water and wastewater demands and infrastructure needs to allow future planning.

Map 1 shows Powhatan County's Water and Wastewater Service District, overlaid with designated growth areas. The Water and Wastewater Service District shows areas currently served by public utilities or areas designated for future connections. Depending upon the area, public water and sewer may or may not be available for new development:

- New development within the Water and Wastewater Service District may be required to connect to public water and sewer. Developers may be responsible for extending existing water and sewer mains to their projects.

- New development within designated growth areas (Route 60 Corridor East, Courthouse Village, and Route 711 Village) but outside of the Water and Wastewater Service District must be evaluated on a case-by-case basis to determine if capacity is available to accommodate the development's needs. Developers may be responsible for extending water and sewer mains to their projects and securing approval from the Board of Supervisors to connect to public utilities.
- Development outside of the Water and Wastewater Service District and outside of designated growth areas will not be served by public utilities.

Within each designated growth area, the following improvements may be necessary as growth occurs:

- *Route 60 Corridor East*
The comprehensive plan will help guide development along the Route 60 Corridor. As development occurs, increased demand will be placed on the water supply (572,000 gpd currently purchased from Chesterfield County) and the Dutoy Creek Treatment Plant. The county needs to continue to pursue additional water resources to avoid placing restrictions on development. Based on demand projections presented in the 2015 Water and Wastewater Master Plan, the county will require additional water and sewer capacity by 2027. The capital improvement program (CIP) addresses funding needed to make upgrades necessary to meet future demand for both water and sewer.
- *Courthouse Village*
Water service in the Courthouse Village is currently provided by well water and infrastructure owned by Aqua Virginia. Future water demands for the area are planned to be met with supply

from the Route 60 Corridor East. The 500,000 gallon water tower, which was completed in 2018, will be converted to potable supply when infrastructure is available.

The Fighting Creek Wastewater Treatment Plant serves this area and will reach capacity around 2025. The 2015 Water and Wastewater Master Plan outlines capital projects that are needed to align with population growth anticipated through 2035.

- *Beaumont Area*

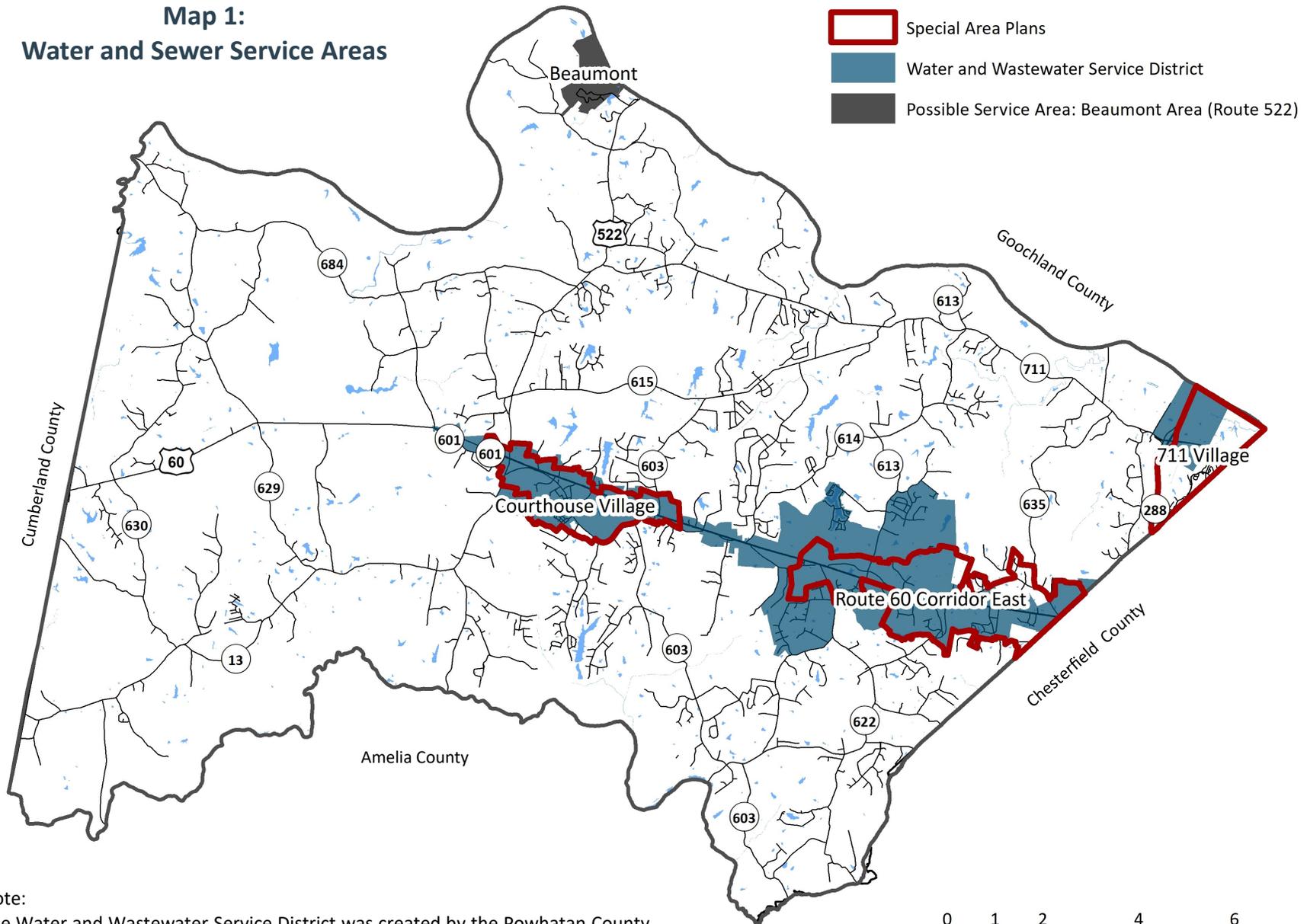
The county should only expand service to this area if land currently owned by Beaumont Juvenile Correctional Center is made available to the county. There is currently a 12" water main from the Goochland County Department of Corrections that goes under the James River and could service Powhatan County in the Beaumont area. Sewer service is currently provided via a small private packaged treatment facility.

- *Route 711 Village*

The Route 711 Village is currently provided water and sewer service through a private utility company. The private utility company obtains water and sewer service through a contract agreement with Chesterfield County. Powhatan County is working with Chesterfield County to determine possibilities of water and sewer service to be provided from Powhatan County. Future economic development in this area will require additional water sources, such as purchasing from a neighboring jurisdiction.

To implement the 2015 Water and Wastewater Master Plan, the CIP should contain utility projects that plan for development within growth areas identified in the comprehensive plan. This will help create a more robust system that ultimately will connect to a long-term water source, such as a surface water source. These improvements will help provide an adequate water supply for growth, while providing this valuable resource for both domestic demand and fire protection.

Map 1: Water and Sewer Service Areas



Note:
The Water and Wastewater Service District was created by the Powhatan County Board of Supervisors in March 2015. The district includes areas where public utilities exist or are planned.

See page 31 for more information on locations where development may be served by public utilities.

Broadband and Telecommunications

In today's economy, access to high-speed data connections is a necessity for most businesses. Communities lacking adequate broadband service are unable to take advantage of many economic development opportunities, including e-commerce, telecommuting, and distance learning. Currently, not all of parts of the county have access to broadband services. Improving broadband availability will not only benefit businesses, but provide residents with greater opportunities, improving quality of life. Strategies listed on this page offer specific direction on how to improve broadband access and telecommunications infrastructure.

Strategies: Infrastructure and Community Facilities (Broadband/Telecommunications)

Strategy IF.BT.1

Develop specific areas in the county where new or current businesses can utilize high-speed internet broadband or wireless communications.

Strategy IF.BT.2

Continue to monitor the wireless broadband project in the county and work with the private partner that has been chosen to bring high-speed broadband to underserved areas and for businesses.

Strategy IF.BT.3

Explore any grant opportunities to accelerate the wireless broadband project deployment timeline and minimize the amount of county funding needed.

Strategy IF.BT.4

Work with the local representative on the Virginia Wireless Communications Infrastructure Group to further promote bringing broadband to underserved areas of the county.

Strategy IF.BT.5

Continue working with the radio project consultant to provide a telecommunications design plan for a new radio system. The design plan should include recommendations for new towers and explore all co-location opportunities on existing towers to remove "holes" in radio communication.

Strategy IF.BT.6

Centralize and maintain a countywide telecommunication tower inventory and users process, utilizing the GIS system.

Strategy IF.BT.7

Maintain a uniform and comprehensive set of standards for development and installation of telecommunications towers and related facilities.

Schools

Schools represent the largest share of the county’s capital budget. While the county has no direct role in school planning, the way in which capital facilities are addressed is of direct interest to the county and relates to other components of this comprehensive plan.

The school system has a five-year capital improvement plan and conducts an annual review to revise the needs assessment, capacities, and new locations for additional school facilities. Major projects include a new elementary school, which opened in 2008, a new middle school that opened in Fall 2018, and a new joint transportation facility that opened in early 2018.

One planning issue associated with this comprehensive plan involves school forecasts, and specifically with the assumptions that are made in terms of student generation. Given recommendations for a more diverse housing mix (as discussed in the Chapter 8: Land Use and Community Character), there are implications for future school planning, highlighting the need for continued coordination between the School Board and the county.

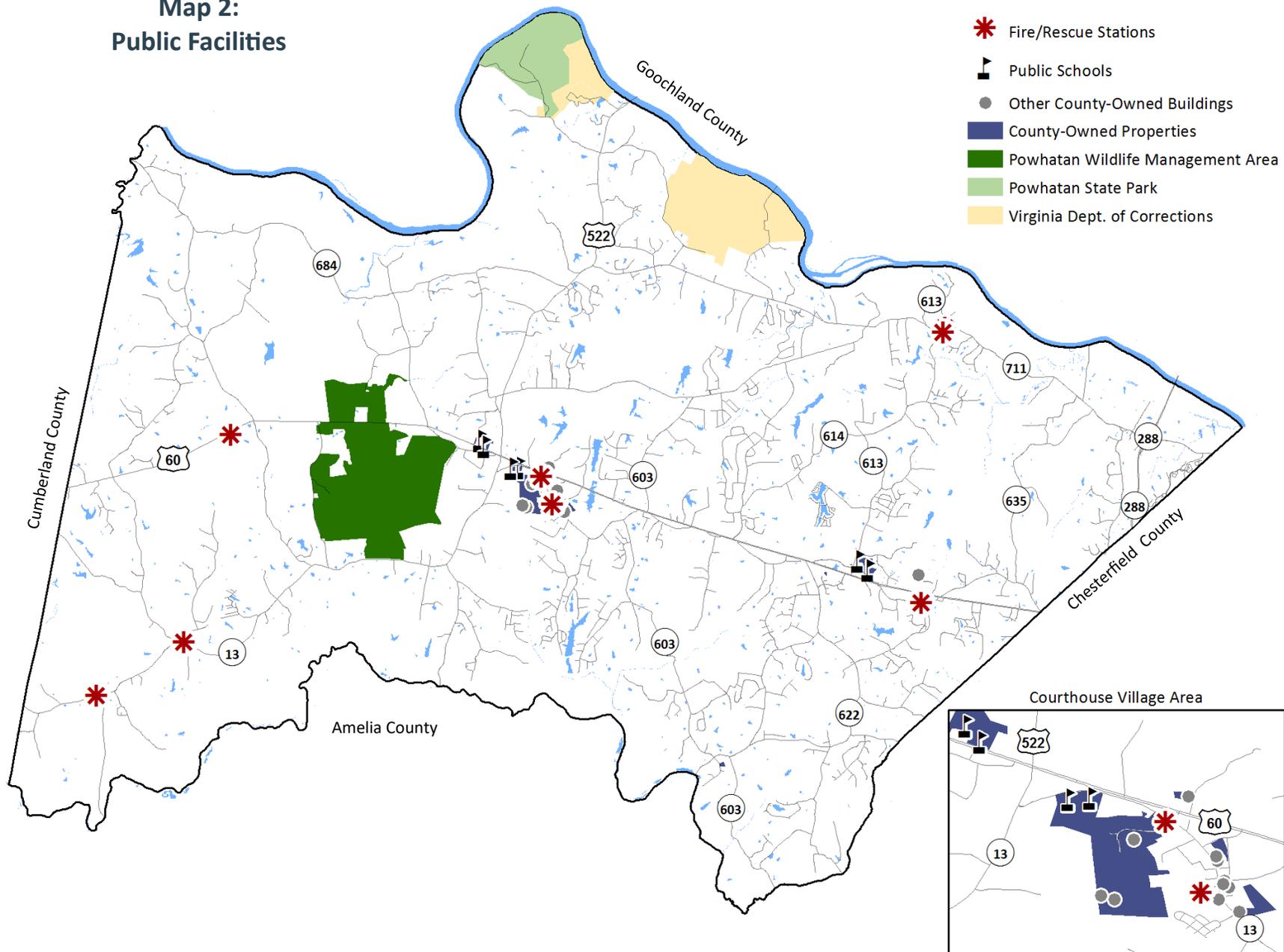


Flat Rock Elementary School
Source: BCWH



Strategies: Infrastructure and Community Facilities (Schools)	
<p>Strategy IF.ED.1 Develop a needs assessment to identify needed capacity and new locations for additional school facilities based on projected population growth.</p>	<p>Strategy IF.ED.6 Identify sites for schools based on the following locational standards:</p> <ul style="list-style-type: none"> • School sites should have adequate acreage to accommodate the type of school and the programmed facility. Sites in rural areas may be on the larger end of the scale, while sites within designated growth areas should be smaller and more compact. <ul style="list-style-type: none"> ◊ Elementary School: 15 – 20 acres ◊ Middle School: 20 – 40 acres ◊ High Schools: 40 – 60 acres • The acreage required for each school depends upon a number of variables, including program design, enrollment, and specific site issues. • Sites should be selected to provide recreational opportunities appropriate for school-aged children, including playgrounds, athletic fields, and open space. • Sites should be located within residential areas and away from major roadways to increase safety for students. High schools may be located on or closer to higher-volume roadways than elementary schools.
<p>Strategy IF.ED.2 Develop a school “level-of-service” analysis utilizing long-range impact analyses.</p>	
<p>Strategy IF.ED.3 Plan for an addition to Powhatan High School.</p>	
<p>Strategy IF.ED.4 Plan for maintenance and major capital improvements to existing school buildings and operating facilities, such as reroofing, expansions, or replacement of HVAC equipment.</p>	
<p>Strategy IF.ED.5 Evaluate and procure land for future schools in the near future, especially a fourth elementary school.</p>	

Map 2: Public Facilities



County Facilities

Most county facilities are centered within the main complex of buildings in the Courthouse Village area:

- The Sheriff's Office is located within the County Courthouse.
- Many county departments are housed nearby at the Powhatan County Administration Building.
- The county library is located in Fighting Creek Park near the Courthouse Village.

Additional space and facilities will be needed as demand for services increases. Details about existing facilities and their use, and projected need for additional county facilities, are included in the *Facilities Space Needs Assessment: Phase II*, prepared by Wiley Wilson in February 2009.

Strategies listed on this page offer general direction to help achieve the stated objectives.

Strategies: Infrastructure and Community Facilities (County Facilities)

Strategy IF.CF.1

Plan for financing to maintain existing facilities and build new facilities per the *Facilities Space Needs: Assessment Phase II*.

Strategy IF.CF.2

Maintain and repair existing county facilities on an ongoing basis in order to provide a safe environment and an attractive appearance.

Strategy IF.CF.3

Group county administrative functions near one another for maximum efficiency and locate in the Courthouse Village to support the commercial base in this growth area.

Strategy IF.CF.4

Develop a "technology master plan" integrating county agencies with appropriate access to information. The plan should recognize and incorporate all overlapping departmental tasks and interests.

Strategy IF.CF.5

Continue to work with county departments to promote information technology and research and implement the best and most cost-effective solutions to serve residents.

Parks and Recreation

There are three major recreational facilities in Powhatan County:

- *Fighting Creek Park* is a 220-acre facility at 2200 Mann Road. The park currently includes a baseball/softball complex with four fields, concessions, and restrooms; three soccer fields with concessions and restrooms; playgrounds; picnic shelters; trails; and one of the largest disc golf courses on the East Coast. The Elizabeth Randolph Lewis YMCA, the National Guard Armory, and the Powhatan County Library are also located on this site. This park is maintained by Powhatan County. A third phase of this park will provide additional playing fields, another concession stand, and expanded trails.
- *Powhatan Wildlife Management Area* covers 4,462 acres three miles west of the Courthouse Village. The area is open to hunting and fishing activities and has an 8.8-mile loop trail that features a lake. The Powhatan Wildlife Management Area is maintained by the Virginia Department of Game and Inland Fisheries.
- *Powhatan State Park* is operated and maintained by the Virginia Department of Conservation and Recreation. It is located in the northwest corner of Powhatan County along the historic James River at 4616 Powhatan State Park Road. There are three car-top boat slides accessing the river; a full-service campground; a canoe-in campground; multi-use trails; picnic shelters; a playground; and diverse wildlife habitat with open fields and hardwood forests. This park fills a need in Central Virginia for access to the James River with day-use as well as overnight facilities.

Strategies listed on this page address ways Powhatan County can meet increased demand for recreational facilities, improving quality-of-life and creating economic development opportunities.

Strategies: Infrastructure and Community Facilities (Parks and Recreation)

Strategy IF.PR.1

Utilize existing parkland by completing planned phases of existing master plans.

Strategy IF.PR.2

Fully utilize Fighting Creek Park by implementing Phase 3 of the master plan, including construction of additional ballfields and expansion of walking trails and other recreational amenities.

Strategy IF.PR.3

As locations and funding become available, acquire and develop additional property to expand trails; improve access to water and river activities; meet open space needs; and provide alternative recreational opportunities, such as a skate park.

Strategy IF.PR.4

Build a greenway network of trails and paths, which enables people to move about Powhatan County by means other than motorized transport. Require pathways for pedestrians and cyclists along major thoroughfares to connect parks and Civil War historic sites (in accordance with a master plan).

Strategy IF.PR.5

Secure funding to conduct a community recreational needs assessment and complete a recreation plan, which will address current and future recreational needs.

Strategy IF.PR.6

Work with Powhatan County Public Schools to effectively coordinate the use of existing recreational resources and work together to address the future needs and reuse of spaces owned by Powhatan County and Powhatan County Public Schools.

Strategy IF.PR.7

Work with public and private entities to implement recommendations identified in the *2017 Regional Rivers Plan* (Capital Region Collaborative) to improve public access to the James and Appomattox rivers (see p. 60-61 and p. 68-69 of that document for specific recommendations).

Strategy IF.PR.8

Establish funding mechanisms for parks and recreational opportunities, such as county general fund support, state matching funds, foundation grants, maintenance endowments, and user fees.

Libraries

Powhatan County Public Library connects citizens with a vast offering of educational, cultural, historical, and entertainment resources, as well as the latest technology. The public library system's role has expanded beyond its traditional function as a resource for information, particularly print materials. It now functions as a community gathering place and a meeting center for business entrepreneurs and workforce development opportunities.

Powhatan County Public Library currently has one facility, located within Fighting Creek Park at 2270 Mann Road. The 15,787-square-foot building opened in 2001.

Strategies listed on this page address ways Powhatan County may meet increased demand for library services as the population grows.

Powhatan County Library Usage (2018)



Strategies: Infrastructure and Community Facilities (Libraries)

Strategy IF.LB.1

Continue to provide a clean, comfortable, secure, and inspiring facility for users.

Strategy IF.LB.2

Evaluate the need for satellite and/or branch locations for library services throughout the county. This would be based on quantified community needs, such as population growth trends, in coordination with county staff, primarily within the economic and community development departments.

Strategy IF.LB.3

Consider including libraries as part of new neighborhoods and mixed-use areas within more densely-populated parts of the county.

Strategy IF.LB.4

Work with other departments and agencies (School Board, Parks and Recreation, and Fire/Rescue) to consider co-locating libraries with other county facilities.

Strategy IF.LB.5

Continue to improve the library's technological resources and work with other departments to improve broadband access countywide.



Powhatan County Public Library
Source: Powhatan County

Emergency Services

Fire/Rescue

Fire protection in Powhatan County is provided through five volunteer fire stations and Powhatan Volunteer Rescue Squad utilizing three locations. Two stations are owned by the county, while the remaining three fire stations and three rescue squad stations are owned by volunteer companies.

The county provides firefighting and emergency medical services (EMS) vehicles and most equipment. One station renovation and expansion is currently being developed (Powhatan Volunteer Fire) and locations for future stations are being considered.

These companies operate under the direction of a career Fire and Rescue Chief. Fire protection and EMS are provided on a volunteer basis, with volunteers supplemented by career staffing during weekday hours.

Fire protection and EMS have been challenged to keep up with growth. The Fire Department is working from a *Year 2015 Service Study* conducted by the Virginia Fire Service Board. With adoption of an updated land use plan, additional fire/EMS service facilities may be needed in areas of concentrated development.

Strategies listed on the following page relate to the services provided by Powhatan County's law enforcement and emergency response personnel.

Law Enforcement

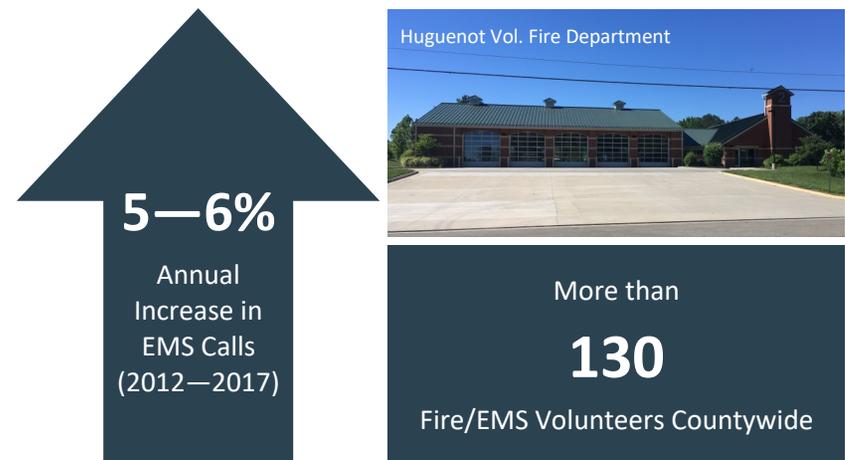
The Sheriff's Office is currently based in the County Courthouse.

911 Dispatch Center

The 911 Dispatch Center is planning to relocate to a larger facility in a new addition to the County Courthouse. This new facility will provide the space needed to upgrade technology. There are plans to replace and upgrade the public safety radio system and Computer Aided Dispatch (CAD) system, since both of these systems are past their service life. The 911 Dispatch Center has been part of Powhatan County Sheriff's Office, but it became an independent department in 2017. It continues to implement industry call-processing standards, which has already reduced the amount of time it takes to dispatch public safety responders. The new public safety radio system will improve performance of the 911 Dispatch Center and interoperability with surrounding counties.

Emergency Management

Emergency Management, under the Fire and Rescue Department, provides planning and preparation for large-scale and/or long-term emergencies. The Emergency Operations Center (EOC) is located within the Fire and Rescue Department Administration Offices in the basement of the Village Building.



Strategies: Infrastructure and Community Facilities (Emergency Services)

Strategy IF.ES.1

Prepare an emergency services master plan that would address the following components:

- Establish growth plans for police, fire, and EMS services that will provide a long-range level-of-service impact analysis on all emergency services throughout the county;
- Include the phased introduction/expansion of career (paid) fire and rescue staff;
- Identify upgrade, replacement, and acquisition schedule for vehicles and equipment; and
- Identify additional locations and/or co-locations for new communication towers.

Strategy IF.ES.4

Identify sites for additional public safety facilities based on the following criteria:

- Locate fire/EMS stations with good access to major arterial routes or at an intersection of two major routes to gain both east-west and north-south access.
- Locate fire/EMS facilities on five-acre sites to allow for future expansion capacity. Sites may be smaller when included in a special area; however, sites must be large enough to accommodate the maneuvering of the fire apparatus.
- Co-locate firefighting facilities and emergency medical services for maximum efficiency. Multi-use structures that can house satellite police facilities should be considered as the population of the county grows.
- Select and design sites to minimize the adverse impact of sirens and other noise on residential areas.

Strategy IF.ES.2

Identify where and when existing emergency response times are habitually the longest and evaluate ways to lower (a) response times; (b) number of calls responded by mutual-aid; and (c) number of unanswered calls resulting in 'self-response' (Related to *Chapter 8: Land Use and Community Character* with respect to locations and densities of future growth).

Strategy IF.ES.5

Build a public safety headquarters to house the Sheriff's Office, fire and rescue administration, centralized 911 Dispatch Center, and emergency operations center, as recommended by the *Facilities Space Needs Assessment: Phase II* (February 2009).

Strategy IF.ES.3

Investigate proffers for land acquisition for future police/fire/EMS stations against long-term growth trends, land use/development, and future estimated response times.

Strategy IF.ES.6

Secure a fire and EMS training facility to advance the training of all public safety personnel.

Solid Waste

Powhatan County currently operates a solid waste convenience center and recycling center north of Route 60 near the Courthouse Village. There is no landfill operation currently in Powhatan County. A contractor hauls household refuse collected at the convenience center to a landfill outside the county. Powhatan County is a participating member of the Central Virginia Waste Management Authority, which promotes the recycling of solid waste.

Strategies listed on this page address ways Powhatan County can manage solid waste generated by residents and businesses.

Strategies: Infrastructure and Community Facilities (Solid Waste)
<p>Strategy IF.SW.1 Provide facilities for citizens to dispose of household waste.</p>
<p>Strategy IF.SW.2 Determine the level-of-service of existing convenience center operated by the county as a member of the Central Virginia Waste Management Authority (CVWMA).</p>
<p>Strategy IF.SW.3 Monitor operations for vehicle counts, disposal volume, and recycle volumes to gauge performance against levels-of-service.</p>
<p>Strategy IF.SW.4 Establish additional convenience center locations and expand existing facilities as determined by current users and population growth patterns.</p>
<p>Strategy IF.SW.5 Monitor current recycling records provided by CVWMA and establish goals to increase levels.</p>
<p>Strategy IF.SW.6 Investigate placement of additional recycling bins in county or commercial locations.</p>
<p>Strategy IF.SW.7 Enforce ordinances related to remediating properties containing illegal dumps, either by reclamation or refuse removal.</p>
<p>Strategy IF.SW.8 Pursue alternative funding sources for abandoned garbage sites.</p>

Chapter 7: Natural and Cultural Resources

Overview

Powhatan County intends for growth and development to happen by choice, not by chance, as the result of intelligent planning and collaboration. A major component of that approach is the preservation of natural and cultural resources.

Powhatan County will experience significant residential and commercial growth over the next twenty years. As growth occurs, the county intends to retain its rural character and quality of life. Through effective growth management strategies and land use planning, Powhatan County anticipates and plans for the growth that will take place. By guiding growth and development for the next two decades, Powhatan County will establish itself as a model for other rural communities facing strong development pressure. Most new residential developments in suburban and rural areas should be clustered for maximum open space preservation and natural resource protection. The county's efforts will preserve valued wetland areas and broad forested buffers, which filter runoff and enhance biodiversity.

The focus on preserving natural areas includes both environmentally-sensitive land and wildlife habitats. Key natural resources to be protected include river corridors and riparian buffers; wetlands; large forested areas; major creeks; and corridors connecting habitats. Map 3 shows areas where Powhatan County will pay particular attention to environmental impacts when considering changes in land use.

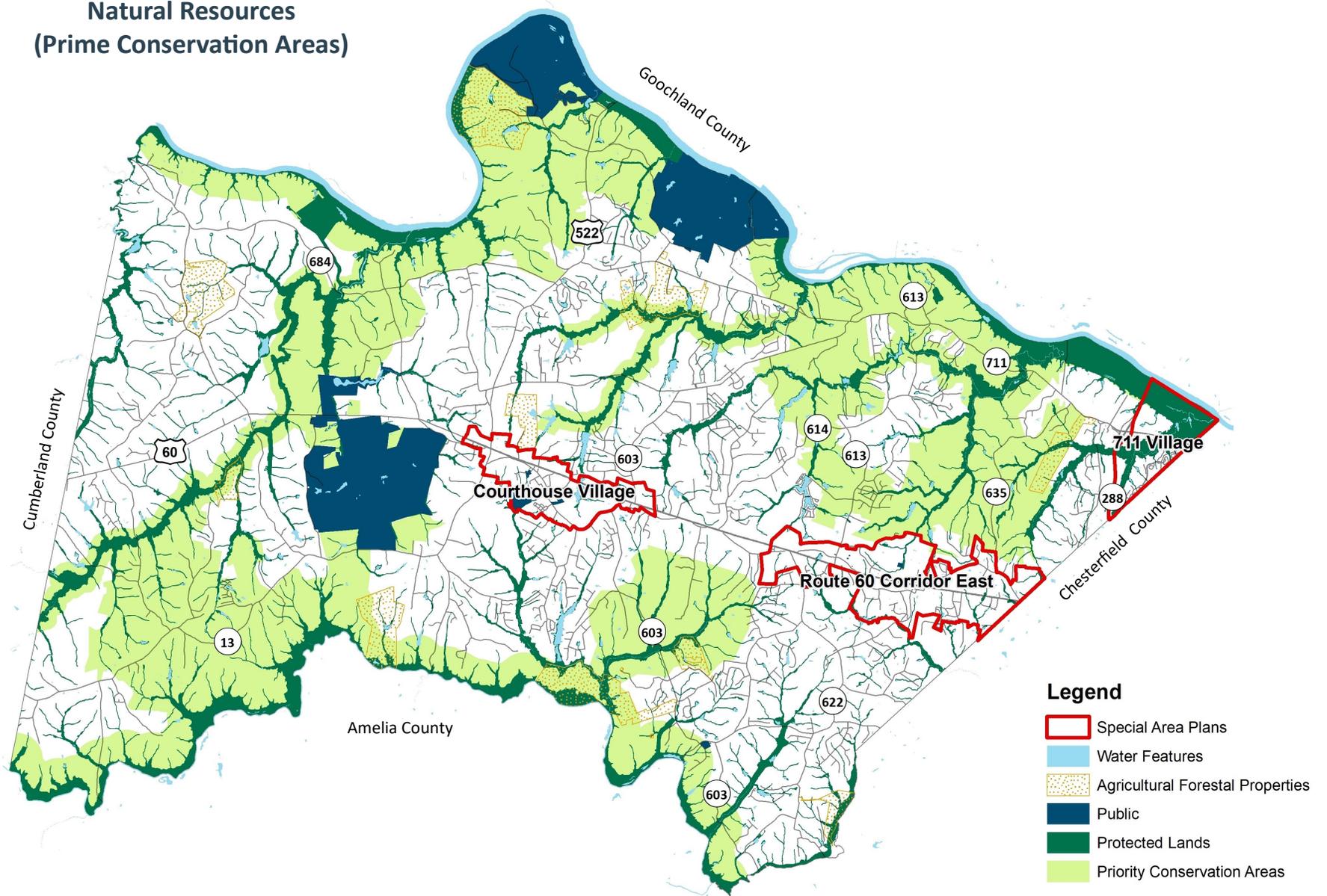
The cultural history of Powhatan County is rich, and preservation of historical assets is another important goal. The locations of key historical assets have been documented, and an objective of this comprehensive plan is to pursue mechanisms that will help assure that land use in areas encompassing or adjacent to recognized historical assets is appropriate. Map 4 shows historic resources countywide. The impacts of nearby land use changes to these sites should be studied and closely scrutinized.

Key Issues

Following are key issues needing attention:

- Preservation of open land, green space, and rural character
- Efficient use of land
- Sustainable agriculture
- Outdoor recreation
- Environmental quality
- Wildlife habitats
- Historic resources

Map 3: Natural Resources (Prime Conservation Areas)



Understanding Map 3: Natural Resources (Prime Conservation Areas)

As the 2010 Comprehensive Plan was being developed, the *Land Use and Land Preservation Citizens Working Group* identified critical environmental resources that should be protected.

Designations

- *Protected lands* include FEMA flood zones and floodplains; properties protected by conservation easements; and areas located within buffers required by local ordinance for the protection of riparian corridors and wetlands.
- *Priority conservation areas* include critical wildlife habitat, old-growth woodlands, wetlands, sensitive soils, and other features which contribute to the ecological health and beauty of Powhatan County. Preservation and conservation efforts should maintain these features.
- *Agricultural and Forestal Districts* are aggregations of tax parcels that, at the request of the landowner(s), are designated as rural conservation zones (see p. 51 for more information).

Interpretation and Use

When reviewing proposed land use changes within *priority conservation areas*, Powhatan County should consider the following:

- Vegetated buffers at least 200 feet in width should be maintained along rivers, streams, and wetlands. Existing vegetation within these buffers should be maintained (and supplemented with native plantings, if necessary). The location of roads, utilities, and other infrastructure in these areas should be minimized.
- Properties zoned Agricultural-20 (A-20), Agricultural-10 (A-10), or Rural Residential (RR) that are located within these areas should not be rezoned to a higher-intensity zoning classification.
- Any residential development that occurs within these areas should be designed as conservation subdivisions, with lots clustered where land disturbance will have the least impact on environmental resources. Densities greater than one unit per ten acres should not be permitted (See *Chapter 8: Land Use and Community Character* for additional guidance regarding conservation subdivisions).

Recommendations: Natural Resources

Goal: Natural Resources

Powhatan County will preserve and protect natural resources and open spaces, including rivers, streams, creeks, forests, wildlife habitat, wetlands, floodplains, soil resources, and dark night skies.

Objectives and Strategies: Natural Resources

<p>Objective NR.1 Provide incentives for landowners to voluntarily protect rural lands.</p>	<p>Strategy NR.1.a Continue the Agricultural Forestal District (AFD) program to allow voluntary protection of agricultural and forestal land.</p>
<p>Objective NR.2 Protect the function, quality, and integrity of groundwater resources.</p>	<p>Strategy NR.2.a Maintain the minimum lot size in “by-right” subdivisions of ten acres within the A-10 zoning district to minimize impacts to groundwater resources in rural areas.</p> <p>Strategy NR.2.b Promote a village concept for new development in areas where sewer and water is available or will be available in the future.</p>

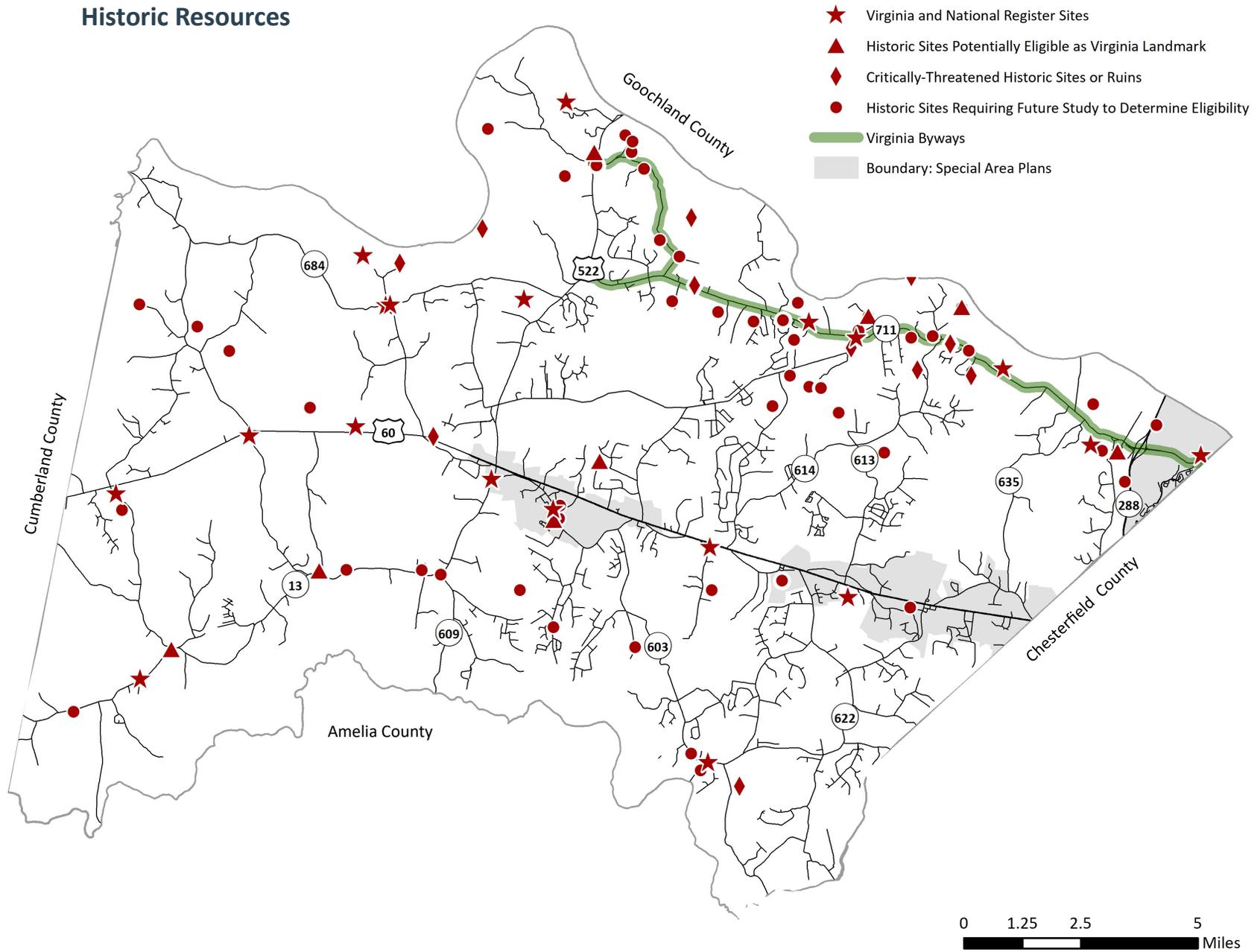
Objectives and Strategies: Natural Resources

<p>Objective NR.3 Preserve open land and green space with special emphasis on the protection of lands that are essential to the maintenance of the county’s biodiversity and overall economic health, including the following: environmentally-sensitive lands; prime farmland; inland game and fishery lands; wildlife management land; natural corridors, such as rivers, streams, and creeks, that provide habitat linkages throughout the county; and timberland.</p>	<p>Strategy NR.3.a Manage growth so that it happens in an orderly, focused, and predictable pattern.</p>
	<p>Strategy NR.3.b Establish growth boundaries for village, suburban, and rural development areas and plan for transition zones between each area.</p>
	<p>Strategy NR.3.c Require connectivity between open spaces of adjoining communities.</p>
	<p>Strategy NR.3.d Explore the use of residential mixed-use developments.</p>
	<p>Strategy NR.3.e Decrease fragmentation of green space and viewsheds.</p>
	<p>Strategy NR.3.f Encourage the creation of conservation easements.</p>
	<p>Strategy NR.3.g Encourage next-generation transfer of land strategies.</p>
	<p>Strategy NR.3.h Adopt zoning setback standards to require buffers and setbacks along roads between developed parcels.</p>
	<p>Strategy NR.3.i Continue to require minimum non-disturbance buffers from the edge of all wetlands and streams.</p>
	<p>Strategy NR.3.j Support the creation of wetland mitigation banks at appropriate locations.</p>
	<p>Strategy NR.3.k Encourage or require applicants to submit environmental impact studies for rezoning requests involving 100 or more acres.</p>

Objectives and Strategies: Natural Resources

<p>Objective NR.4 Incorporate open space in individual developments through conservation subdivision design pursuant to quality design standards. Promote linkage of open space between developments in an effort to establish larger greenways.</p>	<p>Strategy NR.4.a Provide cluster development options for landowners and developers, allowing homes to be clustered together on smaller lots, leaving a percentage of the remaining land available for open space or other appropriate uses. Develop a density bonus program to reward developers for choosing a cluster option.</p>
<p>Objective NR.5 Monitor and track open space and greenways in order to promote systematic linkages and connections.</p>	<p>Strategy NR.5.a Expand the scenic byway system to include additional significant corridors.</p>
	<p>Strategy NR.5.b Maintain and enhance the existing tree-lined median within Route 60.</p>
	<p>Strategy NR.5.c Work with the Richmond Regional Planning District Commission (RRPDC) and user groups to create a comprehensive walking/biking usability plan for the county (related to development of a greenspace master plan) and seek grants to aid in the creation and implementation of the plan.</p>
	<p>Strategy NR.5.d Require all new higher-density subdivisions (two dwelling units/acre or greater) to have pedestrian/bicycle facilities that connect to trails and sidewalks in neighboring subdivisions and thoroughfares.</p>
	<p>Strategy NR.5.e Encourage the construction of pedestrian and/or bicycle facilities whenever new thoroughfare roads are built or when existing thoroughfares are widened, in accordance with a master plan. Provide options for pedestrian and bicycle travel along scenic roads (See also Chapter 9: Transportation).</p>
<p>Objective NR.6 Promote environmentally-friendly development practices.</p>	<p>Strategy NR.6.a Increase usage of energy conservation measures and green building techniques by encouraging participation from builders in green certification programs, such as EarthCraft, LEED-ND (Leadership in Energy and Environmental Design for Neighborhood Development), LEED for Homes, and/or the National Association of Home Builders' National Green Building Program.</p>
	<p>Strategy NR.6.b Encourage the use of Low Impact Development (LID) techniques to protect water quality.</p>
	<p>Strategy NR.6.c Support alternative water supply and conservation projects, such as the collection and use of stormwater, reuse of gray water, and reclamation of wastewater, where practical.</p>

Map 4: Historic Resources



Index of Historic Landmarks

Virginia and National Register Sites

Beaumont	French's Tavern	Powhatan Courthouse Dist.
Belmead	Huguenot Memorial Church (orig. Manakin Church)	Provost
Belnemus	Keswick	Red Lane (Hill) Tavern
Blenheim	Mosby's Tavern	St. Luke's Church
Elmington	Norwood	Somerset
Emmanuel Church	Paxton	Rosemont
Fine Creek Mills Hist. Dist.		

Sites/Features Potentially Eligible as Virginia Landmarks

Ballsville	Calais	Huguenot Springs (Hotel Site)
Bienvenue	Center Hill	
Birdland	Goodwyn Farm	Hunter's Fare

Sites/Features Critically Threatened or in Ruins

Cherry Row	New Castle Farm	Sherwood
Elioch	Peterville Cemetery	Woodberry Mill
Jefferson Landing	St. Francis de Sales High School —Chapel	Woodlawn
Jude's Ferry Crossing		



Erin Hill

Source: Powhatan County

Sites Requiring Further Study

Courthope	Mill Quarter
Derwent	Millwood
Dispatch	Millview
Edgemont	Monacan
Erin Hill	Mulberry Hill
Fighting Creek	Pleasant Creek
Genito Ordinary	Poland
Glebe	Red Hill
Grace Episcopal Church	Rosenheath
Hickory Hill	Rudd House
Hobson's Memorial Chapel	Rural Shade
Holly Hill	St. Helens
Homestead	St. James Chapel
Hughes Creek	Shady Oaks
Kelona	Shiloh Baptist Church
Laurel Springs	Spring Valley
Macon Tavern	Stratton
Malvern	Sublett's Tavern
Massinacack	Terre Haute
Michaux Grant	Whitewood
Michaux Grant Cemetery	Windsor
Midway	

Source: Virginia Landmarks, National Register of Historic Places,
Land Use and Natural Resources Citizens Working Group

Recommendations: Cultural Resources

Goal: Cultural Resources	
Powhatan County’s cultural and historic resources will be preserved and protected.	
Objectives and Strategies: Cultural Resources	
<p>Objective CR.1 Conserve the county’s historically-significant sites for the cultural and educational benefits they provide to county residents.</p>	<p>Strategy CR.1.a Encourage property owners to preserve historic structures and landscapes. To encourage the voluntary preservation of historic properties, investigate state and federal tax credits for historic preservation and/or rehabilitation projects.</p> <p>Strategy CR.1.b Maintain a database identifying historic resources countywide.</p>
<p>Objective CR.2 Protect historic landscapes from development that may be out of character with their inherent rural attributes.</p>	<p>Strategy CR.2.a Encourage new development along major thoroughfares to utilize design techniques that blend in with historic and natural landscapes. Examples of appropriate design techniques include:</p> <ul style="list-style-type: none"> ● Landscaping (both new plantings and preservation of existing vegetation) that reduces the visual impacts of new development on adjacent roadways and properties; ● Building designs that appear as a collection of smaller buildings rather than a single large building; ● Building materials, colors, and siting that help large structures blend in with the natural landscape; and ● Placing parking behind buildings or in other low-visibility locations.

Agricultural/Forestal Districts

Powhatan County has used the Agricultural/Forestal District (AFD) program to help protect its natural and rural character. The AFD designation is a temporary and voluntary restriction to development placed on properties by consent of the property owner and the county. This program temporarily reduces the tax valuation for the land in exchange for the temporary relinquishment of development rights. There is a ten-year time limit on this designation. The intent of this plan is that the AFD would revert to the underlying land use recommendations indicated on Map 6: Countywide Land Use Plan; however, continued use of the AFD as an implementation measure for the preservation of agricultural and forested land is encouraged.



Millwood Farm

(Protected by a Conservation Easement Held by the Virginia Outdoors Foundation
and James River Association)

Source: Powhatan County

This page is intentionally left blank.

Chapter 8: Land Use and Community Character

Overview

This chapter includes recommendations for where growth should occur, how dense that growth should be, and where there are important natural resources that should be protected.

The chapter relates to other components of the plan, including infrastructure, economic development, and housing:

- *Infrastructure and Utilities (Chapter 6)*
Adequate utilities, public services, and other infrastructure should be provided within designated growth areas.
- *Economic Development (Chapter 4)*
The Countywide Future Land Use Map shows where commercial, industrial, and other employment-related uses should be located.
- *Housing (Chapter 5)*
The Countywide Future Land Use Map indicates where residential growth should occur and the types of housing appropriate for certain areas.

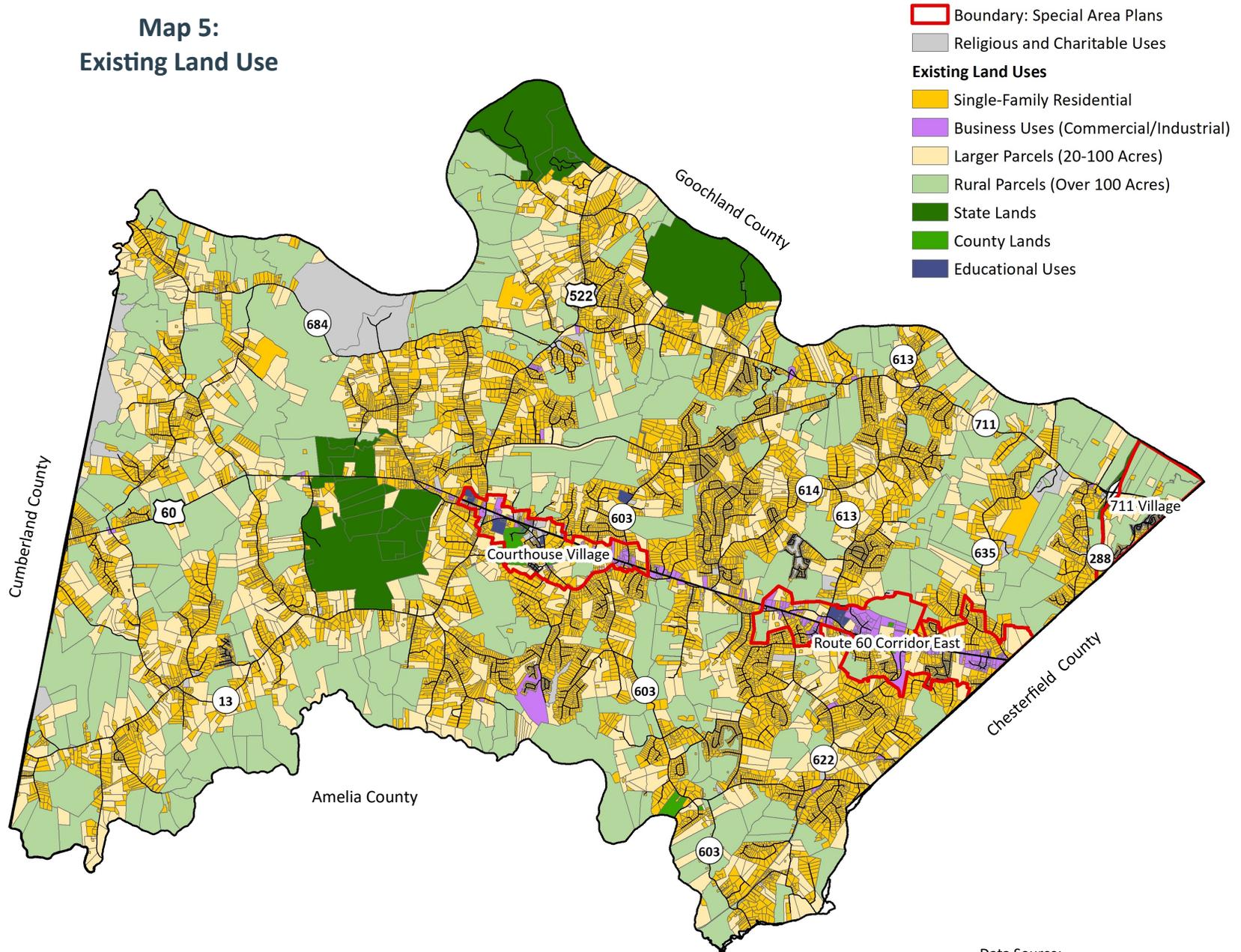
Background

The existing character and land use pattern of Powhatan County is one of a semi-rural community that has developed over two centuries, with the majority of growth occurring in the last few decades. The county's rolling landscape is interspersed with small farms, forests, and residential development. Over the last few decades, the county has experienced mostly suburban-style growth, with large-lot, single-family residential communities located in the east-central portion of the county.

The majority of commercial development has taken place along the Route 60 Corridor. Remnants of the county's historic development pattern remain in places like the Courthouse Village and Moseley community. In western portions of the county, large family farms and estates have occasionally been subdivided into smaller lots to accommodate additional single-family development. Map 5: Existing Land Use on the following page illustrates the development and land use pattern as it was in 2017.

The rural character of the community has been protected through conservation efforts, with focus in areas such as the Powhatan Wildlife Management Area in the west-central part of the county and along both the Appomattox and the James rivers. The Huguenot Trail/Route 711 Corridor is also one of the community's scenic byways and is recognized as such by both Powhatan County and the Commonwealth. Planning should be done to ensure that the character and land use patterns associated with these areas are protected in the future.

Map 5: Existing Land Use



Data Source:
Powhatan County Commissioner of the Revenue
(2017 Property Records)

Key Issues

The Countywide Future Land Use Plan is intended to reflect four key themes:

- **Protect Rural Character**

By designating areas appropriate for growth and other areas for rural preservation, the plan helps preserve the county's rural character. The plan identifies policies encouraging sensitive development and preservation within the rural areas.

- **Manage Growth**

The county has experienced unprecedented growth over the last several decades. The comprehensive plan recognizes that future growth is likely and identifies strategies to successfully manage that growth. Three designated growth areas are identified on the Countywide Future Land Use Map:

- ◇ Route 60 Corridor East
- ◇ Route 711 Village
- ◇ Courthouse Village

- **Maintain Fiscal Sustainability**

This chapter recommends growth in areas that can most responsibly be provided with infrastructure. While the Countywide Future Land Use Map cannot maintain fiscal sustainability on its own, the coordinated recommendations of a balance of residential and business uses, along with recommendations in other chapters of this plan, are intended to plan for fiscally-sustainable growth.

- **Provide Services to Current and Future Residents**

The focused nature of the recommended growth areas provides realistic service goals and expectations. The plan also strongly coordinates land use, transportation, and service demand during the planning process to provide benchmarks for service provision to current and future residents of the county.

How to Use This Chapter

This chapter is divided into two sections that describe recommendations for the future land use pattern and character of the county. The first section addresses land use countywide, which includes Map 6: Countywide Future Land Use Plan. Descriptions of each land use category include a vision statement and policies intended to guide the quality, character, and quantity of development appropriate in different areas. The countywide land use categories include the following:

- Public
- Natural Conservation
- Rural Preservation
- Rural Residential
- Crossroads
- Rural Enterprise Zone
- Village Residential
- Village Center
- Commerce Centers
- Economic Opportunity
- Industrial

The second section provides more detail and specific recommendations for three designated growth areas indicated on Map 6: Countywide Future Land Use Plan. These growth areas include the Route 60 Corridor East, the Courthouse Village, and the Route 711 Village. A more detailed map and narrative are provided for each of these areas (p. 117—123).

The recommendations in this chapter are intended to provide general direction regarding the quality, character, and general appearance of land uses appropriate in various areas of the county. For instance, within any of the given villages, there are multiple appropriate locations for single-family homes, townhouses, apartments, commercial uses, and, in some cases, industrial uses.

Map 6: Countywide Future Land Use Plan cannot regulate the phasing of growth, only the quality and quantity. Phasing of growth should be coordinated with land use using the Water and Sewer Service Areas on page 33.

To the users of this plan, it is best to first identify your property on Map 6: Countywide Future Land Use Plan. In the narrative for that countywide land use category, there are general policies and a series of specific land uses appropriate in that location. These policies provide general densities of development and indicate what uses are appropriate in specific locations. If your property is in one of the designated growth areas (special area plans), you can refer to the detail map and narrative for that area for more specifics.

If the property is located in the natural conservation, rural preservation, or rural residential areas, uses should be fairly agricultural or rural in character and are limited to single-family dwellings, agriculture, equestrian-related activities, and natural preservation. However, if the property is located within a crossroads or one of the designated growth areas (special area plans), other types of land uses are also appropriate. The special area plan associated with each growth area will identify whether the property is designated for residential, commercial, industrial, or preservation uses.

Recommendations

Goal: Land Use and Community Character

Powhatan County will have a land use pattern dominated by preserved rural character, with high-quality and economically-productive mixed-use development at clearly defined locations served or planned to be served by utilities and adjacent to transportation facilities.

Objectives: Land Use and Community Character

Objective LU.1

Maintain the rural character of the county as defined by existing features, such as the feeling of personal safety and privacy, quiet, natural habitats, forested land, rivers, streams and creeks, dark skies, and un-crowded conditions.

Objective LU.7

Identify crossroads as areas that can accommodate small amounts of residential, commercial, and institutional uses in a manner compatible with the surrounding rural area.

Objective LU.2

When development occurs in rural areas, the preferred form of development is conservation subdivisions, with smaller lots and preserved open space at an overall low-density consistent with a rural character.

Objective LU.8

Protect the rural character of the area around existing wildlife management areas and Powhatan State Park in order to discourage incompatible land uses that would conflict with recreational uses.

Objective LU.3

Use conservation subdivisions to protect environmental features, agricultural land, and minimize the visual impact of residential development along public roads. Establish and maintain a compact pattern of mixed uses, including residential and business development, at specific focal points along the Route 60 Corridor and along Route 711 east of the Route 288 interchange.

Objective LU.9

Coordinate land use planning with the provision of transportation facilities, infrastructure and community facilities, and economic development goals.

Objective LU.4

Accommodate new and diverse residential growth in a compact and mixed-use pattern along the Route 60 Corridor and along Route 711 east of the Route 288 interchange. In rural areas, single-family dwellings may be constructed on large parcels (ten acres per single-family dwelling) or in conservation subdivisions that preserve open space and rural character.

Objective LU.10

Promote sustainable growth that promotes “green” practices and the conservation of energy.

Objective LU.5

Implement improved rural and mixed-use design standards that further enhance the quality of development.

Objective LU.11

Work with various state agencies/facilities, especially correctional centers, to ensure cooperation and the compatibility of new development on adjacent properties.

Objective LU.6

Preserve and respect existing historic village patterns in rural areas as new development occurs.

Countywide Land Use

The following pages describe the desired future character of different parts of the county, designating areas to capture growth and areas that should retain their natural or agricultural character. The countywide land use categories describe the level of development that is appropriate, along with other natural and built features of the landscape. Each category includes a description of existing conditions, intent for the future, and a series of policies that should guide growth and development. Following these policies is a series of appropriate and specific land uses. The countywide land use categories are listed in Table 11.

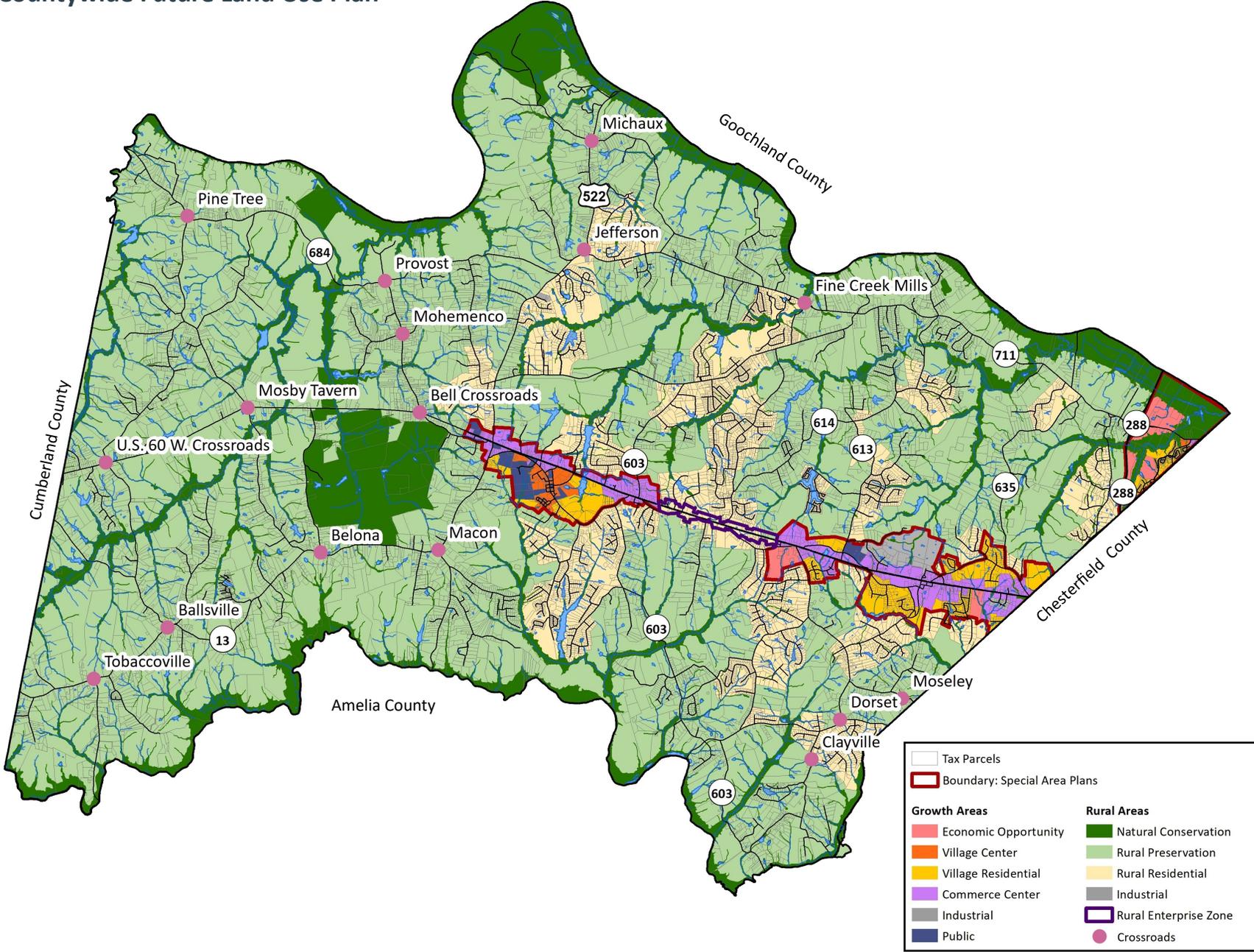
Table 11: Countywide Land Use Reference Table

Countywide Land Use Category	Page	Recommended Residential Density Range	
		Low	High
Public	60	Not Applicable	Not Applicable
Natural Conservation	64	Not Applicable	Not Applicable
Rural Preservation	68	0.10 units/acre (1 unit/10 acres)	0.12 units/acre (1 unit/8 acres) ¹
Rural Residential	74	0.10 units/acre (1 unit/10 acres)	0.20 units/acre (1 unit/5 acres) ¹
Crossroads	80	Varies	Varies
Village Residential	84	0.5 units/acre (1 unit/ 2 acres)	4 units/acre ²
Village Center	90	4 units/acre	8 units/acre ²
Commerce Center	96	Not Applicable	Not Applicable
Economic Opportunity	102	None	9 units/acre ³
Industrial	108	Not Applicable	Not Applicable
Rural Enterprise Zone	112	Underlying Land Use Designation	

Notes

1. Highest density recommended for use within conservation subdivisions.
2. Higher densities may be achieved within individual projects with special accommodations for amenities and open spaces, or if environmentally-friendly practices are incorporated into building and site design.
3. Projects with only residential uses are not appropriate.

Map 6:
Countywide Future Land Use Plan



Public

Description

Public land is designated for institutional, governmental uses, and publicly-owned lands, including but not limited to schools, administrative offices, parks, prisons, and other quasi-governmental uses. The pattern or development design of a public area varies from one location to another, but they often have a “campus-like” feel with moderate- to large-scale buildings located on large pieces of land. Public areas like parks or cemeteries may have few or no buildings, but instead may be a large landscaped area with open spaces and trees.

Intent

Public land should provide services and facilities for the operation of government and public operations in an efficient and sustainable manner.

Appropriate Specific Uses

- Government Offices
- Public Utilities and Facilities
- Public Safety Facilities
- Governmental Institutions
- Public Parks and Open Spaces

Appropriate Zoning Districts

Public facilities are permitted within most zoning districts.



The County Administration Building is located within the Courthouse Village Special Area Plan

Source: Powhatan County

Development Design

Siting	<p>Public land for governmental services should be located in the county to provide equitable service to the community.</p> <p>Observe locational standards for each facility type to determine substantial accordance with the recommendations of the land use plan (See Chapter 6: Infrastructure and Facilities).</p> <p>Work with the various state agencies/facilities, especially correctional centers, to ensure cooperation and compatibility.</p>
Environmental Design	<p>New public facilities should include sustainable and “green” design, including alternative building practices, energy conservation, and stormwater management.</p>
Community Character	<p>When possible, open space, natural resources, landmarks, and historic resources should be protected and incorporated into site plans for public facilities.</p>
Master Plan	<p>New public facilities should be located, designed, and developed in accordance with an approved master plan.</p>

Example Layout

Below is an aerial photo of an existing development that demonstrates the design features encouraged within *Public* areas.



- 1 Public facilities (e.g. elementary school) are located within designated growth areas.
- 2 Sidewalks and/or shared-use paths provide access to adjacent residential neighborhoods and other uses.
- 3 Riparian buffers, wetlands, and other natural and cultural resources are preserved.
- 4 Public facilities are located in close proximity to major thoroughfares.

This page is intentionally left blank.

Natural Conservation

Description

Natural Conservation indicates land with intrinsic natural features, such as perennial stream corridors, floodplains, floodways, wetlands, or steep slopes (over fifteen percent). As a secondary benefit, these same areas provide greenways for wildlife corridors. These areas are designated as “unbuildable” and should be maintained in a naturalized, undisturbed state. Local, state, and federal regulations apply to the conservation of these areas.

Intent

Areas designated as *Natural Conservation* should be left in an undisturbed state and protected to promote environmental stewardship in the county and provide a greenspace network as corridors for wildlife.

Appropriate Specific Uses

- Woodlands, Forests
- Undisturbed Naturalized Meadows and Fields
- Wetlands
- Nature Trails
- Camps or Retreats

Appropriate Zoning Districts

Areas designated as *Natural Conservation* may be located within any zoning district, provided that they are maintained in a naturalized, undisturbed state.



Powhatan Wildlife Management Area
Source: Virginia Department of Game and Inland Fisheries

Development Design

Project Size (Minimum)	Not Applicable
Residential Densities	Not Applicable
Mix of Uses	No disturbance or development should occur within areas designated <i>Natural Conservation</i> except activities that mitigate or repair damage done by development activities in adjacent areas.
Minimum Open Space	Not Applicable
Open Space Features	<p>Areas designated as <i>Natural Conservation</i> include natural water features (including lakes, ponds, rivers, streams, wetlands, and other riparian areas), riparian buffers, flood hazard areas, steep slopes (15% or greater slopes), wildlife habitat areas, and productive farmland should be preserved as open space.</p> <p>Land adjacent to <i>Natural Conservation</i> areas should be targeted for open space preservation through conservation easements or donation as park land, independently or as part of subdivision and development approval.</p>
Landscaping and Buffers	Riparian buffers along natural water features (including lakes, ponds, rivers, streams, wetlands, and other riparian areas) should be maintained and enhanced to help protect water quality.
Environmental Design	This land use designation is intended as a general guide, highlighting areas where environmentally-sensitive features may be located. Site-specific inventories of these resources should be conducted as part of the development review process for any activity near or adjacent to identified areas.
Transportation Network	New roads that cross <i>Natural Conservation</i> areas should be designed to minimize disturbance of critical natural and cultural resources.
Utilities and Infrastructure	New infrastructure that crosses <i>Natural Conservation</i> areas should be designed to minimize disturbance of critical natural and cultural resources.

Development Design

Community Character

Areas should not be sprayed or treated with herbicides, pesticides, or other chemicals in amounts harmful to natural systems and wildlife as determined by the regulating federal agency guidelines or regulations.

Agricultural and silvicultural land in or in close proximity to the natural conservation areas should be managed in accordance with the Department of Forestry and/or Department of Agriculture standards for croplands in close proximity to environmentally-sensitive features.

The Belmead Property located north of Cartersville Road along the James River is partially within a conservation easement. It has been designated *Natural Conservation* to imply that the primary use of the land will be preservation of natural landscapes and features. However, this location could accommodate a rural retreat or camp-type facility if designed in an environmentally-sensitive manner.

Example Layout

Below is an aerial photo of an existing development that demonstrates the design features encouraged within *Natural Conservation* areas.



- 1 Riparian corridors and other natural features are preserved.
- 2 Trails and shared-use paths designed in an environmentally-sensitive manner may be located within *Natural Conservation* areas.
- 3 New development is located outside of *Natural Conservation* areas and more than 100 feet from streams and wetlands.

Rural Preservation

Description

Rural Preservation indicates land areas where active agriculture, agribusiness, silviculture, or animal husbandry are the primary recommended uses. These areas strongly contribute to the appearance of the scenic Virginia countryside in Powhatan County. *Rural Preservation* areas should be used primarily for agricultural, agribusiness, silviculture, or animal husbandry, with very low-density single-family homes on lots no more dense than one unit per ten acres.

Rural Preservation areas have a substantial number of the county's historic, cultural, and environmental resources. There are many historic homes and sites in these areas, as well as scenic road corridors. The scenic Huguenot Trail corridor is located within *Rural Preservation* areas and offers views of hardwood forests and bucolic countryside. Numerous environmentally-sensitive resources, such as steep slopes, floodplains, wetlands, and forests, are located within or adjacent to rural preservation areas.

Rural Preservation areas are served primarily by rural-level infrastructure (meaning no sanitary sewer or public water service). All sewer and water needs must be met on-site. Public roads are designed to support very low-density residential development and agricultural activities and are typically paved without curbs, gutters, or sidewalks.

Conservation-style subdivisions are recommended as a by-right development option. This type of development encourages the clustering of residential lots to preserve open space, which helps maintain the rural character of the area. A base density of one unit per ten acres is recommended to preserve the rural character; however, with a conservation-style subdivision, a density bonus may be considered to provide incentives for open space preservation that exceeds minimum standards.

The county recognizes that the development review process alone will not achieve the long-term goals of substantial permanent open space preservation, and initiatives are needed that go beyond the zoning and subdivision processes. This approach is discussed in Part III (Implementation and Prioritization) of this plan.

Intent

Rural Preservation areas will be rural in character, with preserved natural, cultural, and historic resources, including farms, agribusinesses and tourism, permanently-preserved open spaces, permanent easement properties, hillsides, hilltops, floodplains, wooded and forested areas, historic landscapes, landmarks, and corridors. These areas will include active agricultural, silviculture, agribusiness, equestrian operations, and tourism, with new residential development designed in such a way as to be balanced with the natural and existing manmade environment in order to minimize degradation of the rural, natural, cultural, and historic environment.

Appropriate Specific Uses

- Agribusiness and Boutique Agriculture
- Agricultural/Rural Tourism-Related Businesses (Examples: Bed and Breakfasts, Camps, and Retreats)
- Agriculture, Silviculture, and Animal Husbandry
- Single-Family Residential Uses, primarily in the form of conservation subdivision design or large-lot (e.g. ten acre lot size or greater) subdivisions
- Institutional Uses (Examples: Schools, Churches, Public Safety Facilities, and Similar Uses)
- Parks and Recreational Uses

Appropriate Zoning Districts

- Agricultural-20 (A-20)
- Agricultural-10 (A-10)
- Agricultural/Animal Confinement (A-C)
- Rural Residential (RR)

Development Design

Project Size (Minimum)	Not Applicable (Large-scale development projects are not appropriate within <i>Rural Preservation</i> areas. Specific guidelines for conservation subdivisions are listed on p. 70).
Residential Densities	0.10 units/acre—0.12 units/acre (1 unit per 8—10 acres)
Mix of Uses	<p>These areas should be used primarily for agricultural operations and supporting businesses, with limited low-density residential development that does not detract from the rural character of <i>Rural Preservation</i> areas. Residential development within <i>Rural Preservation</i> areas should occur as part of conservation subdivisions (see p. 70).</p> <p>Existing agricultural uses are encouraged to remain, as agricultural operations and agribusinesses are recognized as economically-desirable businesses.</p> <p>Agribusiness and tourism uses that are compatible with the character of <i>Rural Preservation</i> areas should be encouraged, upon demonstration that proposed uses will not negatively impact surrounding properties. Examples of such uses are equestrian centers and boarding facilities, nurseries, boutique or unique agribusinesses, conference centers, retreat and training facilities, camps, heritage and rural tourism destinations, farmers' markets, and bed and breakfasts.</p>
Minimum Open Space	Not Applicable (Open space requirements for conservation subdivisions are described on p. 70.)
Open Space Features	Natural water features (including lakes, ponds, rivers, streams, wetlands, and other riparian areas), riparian buffers, flood hazard areas, steep slopes (15% or greater slopes), wildlife habitat areas, and productive farmland should be preserved as open space.
Landscaping and Buffers	<p>New residential subdivisions should not be visible from rural roadways or scenic byways:</p> <ul style="list-style-type: none"> Existing vegetation along rural roadways and scenic byways should be preserved and/or supplemented to create a wooded buffer that maintains the area's rural character. In open areas, native trees and shrubs should be planted in a naturalistic, informal pattern to screen new development. Buildings within new residential subdivisions should be located at least 200 feet from rural roadways and scenic byways to maintain a rural appearance.

Development Design

Environmental Design	The environmental integrity of stream corridors should be preserved. On-site development and land management practices should have minimal impact on water quality and the environmental health of surrounding areas.
Transportation Network	To maintain their capacity, access to major thoroughfares should be limited.
Utilities and Infrastructure	Residents within <i>Rural Preservation</i> areas should not expect urban services. Rural levels-of-service will not include public water, sanitary sewer, stormwater drainage facilities (other than ditches), or sidewalks.
Community Character: Conservation Subdivisions	<p>New residential development should occur within conservation subdivisions that protect at least 50% of the site as permanent open space. Conservation subdivisions should be at least 40 acres in size.</p> <p>Flexible design that maximizes the protection of natural resources within open space should be promoted. While overall density is limited, there should be flexibility regarding dimensional standards (lot width, lot area, setbacks, etc.). Density bonuses may be awarded if the amount of open space preserved exceeds minimum standards.</p> <p>The following guidelines should apply to all development within <i>Rural Preservation</i> areas, but are particularly important in the design of conservation subdivisions:</p> <ul style="list-style-type: none"> • <i>Location of Open Space</i>: Stream corridors, woodlands, landmarks and other historic sites, notable viewsheds, and other valuable natural or cultural resources should be protected. <ul style="list-style-type: none"> Open space should be located to maintain the visual character of scenic roads (e.g. “foreground meadows” or preserved agricultural fields adjacent to roads). Open space should be carefully located to provide a buffer between homesites and sensitive uses, such as working farms. • <i>Protection of Open Spaces</i>: Open spaces should be preserved through conservation easements or donations of land to qualified public agencies or non-profits. To create a contiguous network of open spaces, land adjacent to <i>Natural Conservation</i> areas and other protected areas should be prioritized. • <i>Use of Open Space</i>: Open space can be owned by a homeowners association or privately held. It may be used for compatible agricultural and horticultural operations, such as horse pastures, greenhouses, pick-your own operations, and community-supported agriculture.

Development Design

Community Character: Conservation Subdivisions (Continued)

The following guidelines should apply to all development within *Rural Preservation* areas, but are particularly important in the design of conservation subdivisions (continued from the previous page):

- *Open Space Management*: Open space management should promote the rehabilitation of degraded habitats.
- *Lot Placement*: Roadways and homesites should be located to reflect natural features. Homesites should be located near open space, with preserved areas directly abutting or across the street from each lot. Single-loaded streets (with lots only on one side) can be used to maximize the visibility of open space, increasing real estate values at minimal cost (since lots within conservation subdivisions can be narrower than those within conventional subdivisions). Homesites should be screened from view from adjacent roadways.
- *Stormwater Management*: Open space should be used as part of an integrated stormwater management approach to maintain natural drainage patterns, attenuate water quality impacts, replenish groundwater (through the use of bioretention facilities, such as infiltration trenches and rain gardens), and incorporate detention facilities (such as ponds) as visual and environmental amenities.
- *Septic Systems*: Common drainfields for on-site sanitary waste can be accommodated within dedicated open space to allow for the creation of smaller lots.
- *Roadways*: Roads within conservation subdivisions should be designed to standards that reflect the area's rural character. Narrower roadway widths are appropriate, along with gravel footpaths, drainage swales, and shade trees.
- *Signage*: Signage and other entrances features should incorporate native plantings in an informal pattern, decorative walls and/or fencing, and other features with an appropriate scale and design to reflect the rural character of the area.



Open Fields and Agricultural Buildings

Source: Powhatan County



Country Inn with
Traditional Architectural Features

Source: Mill at Fine Creek

Belmead on the James

A portion of the Belmead property, which is located north of Cartersville Road along the James River, is currently under a conservation easement. While the property's natural landscapes and features should be preserved, this location could accommodate a rural retreat or camp-type facility (if designed in an environmentally-sensitive manner).

Example Layout

Below is an aerial photo of an existing development that demonstrates the design features encouraged within *Rural Preservation* areas.



- 1 Residential development is clustered within a conservation subdivision, with more than 50% of the site preserved as permanent open space.
- 2 Significant wooded buffers (200—300 ft. wide) are preserved along major thoroughfares.
- 3 Access along major thoroughfares is limited.
- 4 Lots abut open space, and open space is visible from adjacent roadways and internal streets.
- 5 Riparian corridors are preserved as open space.

Solar Energy Farms

As demand for renewable energy increases, there will likely be greater interest in locating *solar energy farms* in Powhatan County. Since these facilities require large, open areas to operate, they will likely locate outside of designated growth areas. To help ensure their compatibility with surrounding rural landscapes and uses, the following features should be considered when siting and designing *solar energy farms*:

Proximity to Major Thoroughfares

While solar energy farms do not generate significant traffic once complete, large trucks and equipment will need to access the site during construction. Solar energy farms should be located in close proximity to major thoroughfares, which are best able to accommodate large volumes of truck traffic. Access points to adjacent roadways should be limited, and developers should coordinate with VDOT to help ensure that heavy truck traffic during construction does not damage road surfaces or create unsafe traffic conditions.

Screening and Buffering

To protect viewsheds from adjacent roadways and properties, solar energy farms should have significant perimeter buffers. Adjacent to roadways and residential properties, perimeter buffers at least 200 feet wide should be provided. Wider perimeter buffers may be appropriate in certain areas, depending on the characteristics of a specific site. Existing mature vegetation should be maintained and supplemented with native evergreen trees and shrubs planted in a naturalistic pattern.

Protection of Natural Resources

To help protect water quality, riparian buffers at least 200 feet wide should be provided adjacent to any wetlands and streams. All natural resources should be protected during construction. An environmental impact evaluation should be prepared (by a third party) to identify additional measures that should be implemented to protect critical environmental resources. Native plantings and “pollinators” should be incorporated into the site’s design to provide wildlife habitat, mimicking habitat required by species native to the area.

Protection of Cultural Resources

Appropriate buffers should be provided adjacent to any on-site cultural resources. Solar energy farms should be sited to minimize impacts on the views to and from historic sites.

Prohibition of Toxic Materials

Solar panels should not contain toxic materials, such as cadmium and GenX.

Project Size

To help these projects blend into the rural landscape, each solar energy farm should be less than 500 acres in area.

Rural Residential

Description

Rural Residential areas include existing residential subdivisions with lots ranging from two to seven acres in size. These areas exhibit moderately low-density rural/suburban development patterns, with small estates served by local roads. There is some retention of rural character; however, the development pattern is slightly more dense and suburban in character than what is common within *Rural Preservation* areas. This is the prevalent residential pattern in central portions of the county. Conservation subdivisions and uses recommended for *Rural Preservation* areas are also appropriate in the *Rural Residential* areas. New residential development may occur, but the maximum recommended density is one unit per five (5) acres.

Intent

Rural Residential areas should include semi-rural communities of single-family homes and small estate-type development. Subdivisions should be designed to respect natural features of the landscape and accommodate new residential growth. All future development within *Rural Residential* areas should follow the guidelines for conservation subdivisions, clustering lots on the most buildable land and preserving large areas of open space and natural features to help maintain a rural character.

Appropriate Specific Uses

- Residentially-Compatible Agribusiness, Silviculture, Boutique Agriculture, and Animal Husbandry (No Feed Lots)
(Examples: Non-Commercial Equine Facilities, Llamas/Alpacas, Vineyards, Orchards, and Other Specialty Crops)
- Agricultural/Rural Tourism
(Examples: Bed and Breakfasts, Camps, and Retreats)
- Single-Family Residential Uses, primarily in the form of conservation subdivision design or medium-lot (e.g. five-acre lot size or greater) subdivisions
- Institutional Uses
(Examples: Schools, Churches, Public Safety Facilities, and Similar Uses)
- Parks and Recreational Uses

Appropriate Zoning Districts

- Agricultural-20 (A-20)
- Agricultural-10 (A-10)
- Rural Residential (RR)
- Rural Residential-5 (RR-5)

Development Design

Project Size (Minimum)	<p>Not Applicable</p> <p>(Large-scale development projects are not appropriate within <i>Rural Residential</i> areas. Specific guidelines for conservation subdivisions are listed on p. 76).</p>
Residential Densities	<p>0.10 units/acre—0.20 units/acre</p> <p>(1 unit per 5—10 acres)</p>
Mix of Uses	<p>A mix of low-density residential uses and agricultural businesses is appropriate.</p> <p>New residential development should be accommodated on lots of at least five acres or on smaller lots within conservation subdivisions.</p> <p>Boutique agriculture and agribusinesses that are compatible with residential uses, such as equestrian facilities, are encouraged within <i>Rural Residential</i> areas.</p> <p>Existing agricultural, rural industrial, and rural commercial uses are scattered throughout <i>Rural Residential</i> areas. These are important businesses compatible with the area's rural character. They should be encouraged to remain; however, when these uses expand or intensify, their impact on surrounding properties and local road networks must be evaluated.</p>
Minimum Open Space	<p>Not Applicable</p> <p>(Open space requirements for conservation subdivisions are described on p. 76)</p>
Open Space Features	<p>Natural water features (including lakes, ponds, rivers, streams, wetlands, and other riparian areas), riparian buffers, flood hazard areas, steep slopes (15% or greater slopes), wildlife habitat areas, and productive farmland should be preserved as open space.</p> <p>Pedestrian/bicycle and equestrian trail systems are encouraged in <i>Rural Residential</i> areas to provide recreation and mobility options.</p>
Landscaping and Buffers	<p>New residential subdivisions should not be visible from rural roadways or scenic byways:</p> <ul style="list-style-type: none"> Existing vegetation along rural roadways and scenic byways should be preserved and/or supplemented to create a wooded buffer that maintains the area's rural character. In open areas, native trees and shrubs should be planted in a naturalistic, informal pattern to screen new development. Buildings within new residential subdivisions should be located at least 200 feet from rural roadways and scenic byways to maintain a rural appearance.

Development Design

Environmental Design	The environmental integrity of stream corridors should be preserved. On-site development and land management practices should have minimal impact on water quality and the environmental health of surrounding areas.
Transportation Network	When possible, new roads should connect one existing public road to another to improve the frequency of connections and to provide multiple routes in and out of a subdivision. Adjacent subdivisions should have interconnected streets, and stub roads should be provided to allow future connections.
Utilities and Infrastructure	Residents within <i>Rural Residential</i> areas should not expect urban services. Rural levels-of-service will not include public water, sanitary sewer, stormwater drainage facilities (other than ditches), or sidewalks.
Community Character: Conservation Subdivisions	<p>New residential development should occur within conservation subdivisions that protect at least 50% of the site as permanent open space. Conservation subdivisions should be at least 50 acres in size.</p> <p>Flexible design that maximizes the protection of natural resources within open space should be promoted. While overall density is limited, there should be flexibility regarding dimensional standards (lot width, lot area, setbacks, etc.). Density bonuses may be awarded if the amount of open space preserved exceeds minimum standards.</p> <p>The following guidelines should apply to all development within <i>Rural Preservation</i> areas, but are particularly important in the design of conservation subdivisions:</p> <ul style="list-style-type: none">• <i>Location of Open Space:</i> Stream corridors, woodlands, landmarks and other historic sites, notable viewsheds, and other valuable natural or cultural resources should be protected. Open space should be located to maintain the visual character of scenic roads (e.g. “foreground meadows” or preserved agricultural fields adjacent to roads). Open space should be carefully located to provide a buffer between homesites and sensitive uses, such as working farms.• <i>Protection of Open Spaces:</i> Open spaces should be preserved through conservation easements or donations of land to qualified public agencies or non-profits. To create a contiguous network of open spaces, land adjacent to <i>Natural Conservation</i> areas and other protected areas should be prioritized.

Development Design

Community Character: Conservation Subdivisions (Continued)

The following guidelines should apply to all development within *Rural Residential* areas, but are particularly important in the design of conservation subdivisions (continued from the previous page):

- *Use of Open Space*: Open space can be owned by a homeowners association or privately held. It may be used for compatible agricultural and horticultural operations, such as horse pastures, greenhouses, pick-your own operations, and community-supported agriculture.
- *Open Space Management*: Open space management should promote the rehabilitation of degraded habitats.
- *Lot Placement*: Roadways and homesites should be located to reflect natural features. Homesites should be located near open space, with preserved areas directly abutting or across the street from each lot. Single-loaded streets (with lots only on one side) can be used to maximize the visibility of open space, increasing real estate values at minimal cost (since lots within conservation subdivisions can be narrower than those within conventional subdivisions). Homesites should be screened from view from adjacent roadways.
- *Stormwater Management*: Open space should be used as part of an integrated stormwater management approach to maintain natural drainage patterns, attenuate water quality impacts, replenish groundwater (through the use of bioretention facilities, such as infiltration trenches and rain gardens), and incorporate detention facilities (such as ponds) as visual and environmental amenities.
- *Septic Systems*: Common drainfields for on-site sanitary waste can be accommodated within dedicated open space to allow for the creation of smaller lots.
- *Roadways*: Roads within conservation subdivisions should be designed to standards that reflect the area's rural character. Narrower roadway widths are appropriate, along with gravel footpaths, drainage swales, and shade trees.
- *Signage*: Signage and other entrances features should incorporate native plantings in an informal pattern, decorative walls and/or fencing, and other features with an appropriate scale and design to reflect the rural character of the area.

Example Layout

Below is an aerial photo of an existing development that demonstrates the design features encouraged within *Rural Residential* areas.



- 1 Residential development is clustered within a conservation subdivision, with more than 50% of the site preserved as permanent open space.
- 2 Historic homes and farm structures are maintained.
- 3 Native plantings and split-rail fencing screen the development from view.
- 4 Since the site is open, homes are set back 500 feet from the adjacent road. Existing trees and hedgerows are preserved.
- 5 Lots abut open space, and open space is visible from adjacent roadways and internal streets.
- 6 Homes utilize traditional materials and details that blend with rural areas.

This page is intentionally left blank.

Crossroads

Description

Small concentrations of rural businesses located at key intersections or crossroads have historically served as the primary service areas for rural residents and farmers. *Crossroads* serve an important role in the community and are compatible with the general rural character. *Crossroads* are typically collections of service, institutional, or commercial uses with a small (if any) residential population and housing stock that was typically built in the early 20th century. *Crossroads* usually evolved at the intersection of two roads or along important transportation corridors. Sixteen crossroad communities are interspersed throughout Powhatan County and are shown on **Map 6: Countywide Future Land Use Plan:**

Ballsville	Jefferson	Pine Tree
Bell Crossroads	Macon	Provost
Belona	Michaux	Tobaccoville
Clayville	Mohemenco	U.S. 60 West Crossroads
Dorset	Mosby Tavern	
Fine Creek Mills	Moseley	

These locations typically have a historic place name and often include small businesses, such as small grocery stores, feed stores, and institutions (churches, post offices, lodges, schools, community centers, etc.). *Crossroads* in Powhatan County are often home to a small grouping of residences, one or two small businesses, and one or two institutional uses.

Crossroads provide small but historic focal points within a rural landscape. For this reason, preserving the historic character and function of *crossroads* is an important goal of this plan. Further, *crossroads* can accommodate some (but not a great deal) of new growth in the county. The scale and magnitude of new development at these locations should be consistent with the scale and magnitude of existing structures, so it does overwhelm their historic character.

Crossroads can support heritage tourism by providing small-scale restaurants, bed and breakfasts, shops, and gas stations for visitors.

Intent

Crossroads should be semi-rural in nature and include uses that serve the local and tourist community. Development intensity at a *Crossroads* should maintain a modest scale, with five (5) to ten (10) buildings that are loosely clustered at the intersection of major roadways. Each *crossroads* should have a clear edge and transition into the surrounding rural landscape. Any new development should also be architecturally compatible with existing buildings.

Appropriate Specific Uses

- Detached Single-Family Residential
- Institutional Uses
(Examples: Post Offices, Schools, and Fire Stations)
- Small-Scale Services
(Examples: Gas Stations, Restaurants, Bed and Breakfasts, and Inns)
- Small-Scale, Rural-Oriented Commercial Businesses
(Examples: Markets, Convenience Stores, Feed and Seed, and Agricultural Supply Stores)

Appropriate Zoning Districts

- Crossroads (CR)

Development Design

Project Size (Minimum)	None (Only small-scale development should be permitted.)
Residential Densities	Varies (Appropriate density depends upon the historic character of a particular <i>Crossroads</i>).
Mix of Uses	<p>Small-scale, rural-oriented businesses and services may be appropriate at each designated crossroads, along with limited residential development. A collection of five (5) to ten (10) buildings or uses will maintain an appropriate scale at each location.</p> <p>The following mix of uses is preferred:</p> <ul style="list-style-type: none"> • Small-Scale, Rural-Oriented Commercial Businesses: 1—3 Buildings per Crossroads • Institutional Uses: 1—2 Buildings per Crossroads • Single-Family Dwellings: 5 – 8 Dwellings per Crossroads
Minimum Open Space	None
Open Space Features	Natural water features (including lakes, ponds, rivers, streams, wetlands, and other riparian areas), riparian buffers, flood hazard areas, steep slopes (15% or greater slopes), and wildlife habitat areas should be preserved as open space.
Landscaping and Buffers	<p>Existing trees should be preserved and maintained.</p> <p>Landscaping should incorporate native species and have an informal, natural appearance that reflects the area’s rural character.</p>
Environmental Design	Environmentally-friendly features should be incorporated into the design of new buildings and surrounding sites. Examples of such features include rain gardens, permeable pavement, green roofs, and native landscaping.

Development Design

Transportation Network

No local streets should be provided within a *Crossroads*. All lots should have frontage along an existing major thoroughfare; however, good access management practices should be implemented.

Utilities and Infrastructure

Most *Crossroads* will not be close enough to service areas for public water and sewer services. Sewer treatment will need to be provided on-site, and wells will be necessary for water. Lot sizes should be adequate to provide both for any proposed uses.

Community Character

Crossroads are a desirable development pattern that complements rural preservation and rural residential areas. They can be expected to accommodate a minor share of commercial and service demand in rural areas. Rural-oriented commercial uses, services, and institutions are encouraged to be located at *Crossroads*.

Development intensity at a *Crossroads* should maintain a modest scale, with five (5) to ten (10) buildings that are loosely clustered at the intersection of major roadways.

The historic character of *Crossroads* should be respected and preserved in new development. New development can be designed with modern amenities and features; however, it should respect the scale, configuration, building orientation, density, pattern, materials, building relationship to street, and general character of existing development.

New development in a *Crossroads* should be compatible with existing agricultural operations.

Boundaries between *Crossroads* and surrounding rural areas should be clear and distinct. *Crossroads* should continue to be a definable focal point of minor activity, without dominating the rural landscape.

Provost (one of the designated *Crossroads*) serves as a gateway to the historically-significant Belmead property. Any development activity in this area should respect this connection through design and mix of uses.

Example Layout

Below is an aerial photo of an existing development that demonstrates the design features encouraged within *Crossroads*.



- 1 There is a clear boundary between the *crossroads* and surrounding rural properties.
- 2 Buildings are loosely clustered around the focal intersection.
- 3 Small-scale new buildings incorporate traditional styles and materials.
- 4 Existing buildings should be reused and repurposed to accommodate commercial uses.

Village Residential

Description

Village Residential generally applies to large areas of land that could be developed under a unified planned development. *Village Residential* recommends thoughtful design to provide a variety of housing options in a layout that respects the low-intensity, single-family character of adjacent rural areas, while providing slightly more intense development. The gross density in these areas may vary within each growth area (special area plan) between one-half and four units per acre and could include single-family detached, single-family attached, and three- to four-unit multi-family buildings. The average lot size would range between one-fourth acre and two acres.

The primary location for *Village Residential* is near the courthouse in the Courthouse Village, Route 711 Village, and along eastern portions of the Route 60 Corridor. *Village Residential* represents the residential-only neighborhood component of a complete village and is often developed near a *Village Center*.

Intent

Areas designated *Village Residential* should include walkable neighborhoods with diverse housing options and integrated parks and public uses, which are compatible with the residential qualities of the neighborhoods.

Appropriate Specific Uses

- Single-Family Detached Residential with Accessory Residential Structures
- Two- to Four-Family Residential Structures (Examples: Apartments, Condominiums, Townhouses)
- Bed and Breakfasts
- Public and Institutional Uses (Examples: Schools, Churches, and Community Centers)
- Parks and Recreation
- Village Center uses may be appropriate as part of a master plan.

Appropriate Zoning Districts

- Village Residential (VR)
- Village Residential Planned Development (VR-PD)
- Single-Family Residential – 2 (R-2)

Development Design

Project Size (Minimum)	20 acres (Smaller projects may be appropriate if part of infill development.)
Residential Densities	0.5 units/acre—4 units/acre (See Special Area Plans for density recommendations within specific areas.)
Mix of Uses	Residential Uses: 100% of Project Area <i>Village Residential</i> areas should consist primarily of detached single-family dwellings. Up to 30% of residential units within a <i>Village Residential</i> project may consist of two- to four-family residential structures, such as apartments, condominiums, and townhouses. (Within master-planned developments, a concentration of <i>Village Center</i> uses may be appropriate.)
Minimum Open Space	20% or More of Project Area
Open Space Features	At least 40% of the open space set-aside should be dedicated to active recreational areas, such as pools, playgrounds, tennis courts, jogging trails, ballfields, and/or clubhouses. Natural water features (including lakes, ponds, rivers, streams, wetlands, and other riparian areas), riparian buffers, flood hazard areas, steep slopes (15% or greater slopes), and wildlife habitat areas should be preserved as open space. Parks and sidewalks should be provided within each phase of a development to create a pedestrian network that connects neighborhoods with commercial areas and public facilities, including parks and schools.
Landscaping and Buffers	Transitions from <i>Village Residential</i> to low-density residential and rural areas should be accomplished through heavily-landscaped buffers or the location of similarly-sized lots of single-family homes at the perimeter of the site. Landscaped areas should buffer residences from major thoroughfares and scenic roads. Existing plant material (especially mature trees) should be maintained and supplemented with evergreen and deciduous plantings (preferably native). Planting should occur in a staggered pattern, with smaller understory plants defining the edges of existing wooded areas. Decorative fencing and berms may supplement new and existing plantings. Existing mature trees should be preserved to maintain the character of the development's natural setting.

Development Design

Environmental Design

Environmentally-friendly features should be incorporated into the design of new buildings and surrounding sites. Examples of such features include rain gardens, permeable pavement, green roofs, and native landscaping.

Villages should have coordinated stormwater management plans. This includes ensuring stormwater impacts of individual developments are properly mitigated, while coordinating local stormwater management efforts with countywide projects.

Transportation Network

The street system should provide multiple routes for people to walk to local destinations.

Streets should be designed for lower speeds to allow for mixing of vehicular and pedestrian traffic.

Streets should create semi-regular blocks based on a grid or modified street grid network.

The street pattern should be consistent and coordinated between phases of projects.

New streets in *Village Residential* areas should include sidewalks or paths and moderately-narrow street widths that allow parking on at least one side.

Streets and pedestrian paths should connect with other *Village Residential* districts, *Village Centers*, and/or portions of *Commerce Centers*.

Utilities and Infrastructure

Public water and sewer should be available to support the increased density of development within *Village Residential* areas.

New infrastructure should be planned to be adequate for both the proposed development and any additional planned growth in the surrounding village. Level-of-service standards should be developed to ensure that adequate public facilities are provided in both the short- and long-term.

New development should pay for itself regarding necessary improvements to public infrastructure, including (but not limited to) new roads, water and sewer services, and schools.

New development should be coordinated and timed relative to public infrastructure. Infrastructure, particularly water and sewer service, and road improvements should be available concurrently with new development.

Development Design

Community Character

Houses should be designed to relate to the street. The fronts of buildings should be oriented to the street, and the transition from public to private spaces should be characteristic of traditional neighborhoods (street—sidewalk—front yard—front porch).

Front porches are encouraged.

Traditional-style homes with detached, side-loading, or rear-loading garages are preferred. If the garage is detached, it should be located in the side or rear yard only. If the garage faces the street, it should be set back from the primary façade of the home.

Small-scale multi-family buildings should resemble large single-family homes. Where provided, affordable and workforce housing should be blended with other units of varying styles, sizes, and prices throughout a given development. Affordable units should be indistinguishable on the exterior from other units.

Other Components

A master plan should be prepared for each project.

Village Residential areas should be located within short distances to amenities, with parks, schools, churches, and other public gathering places within a five- to ten-minute walk of residences (approximately ¼ mile).

Village Residential areas should be located within ¼ mile of *Village Centers* or services and retail in *Commerce Centers* to provide destinations for commercial activity and to create an integrated, comprehensive community.



Traditional-Style Single-Family Homes
Source: Wikipedia



Homes with Front Porches and
Rear-Loading Garages
Source: Powhatan County



Homes Overlooking Parks and
Natural Features
Source: DPZ & Co.

Example Layout

Below is an aerial image of an existing development that demonstrates the design features encouraged within *Village Residential* areas.



- 1 Homes relate to the street and incorporate traditional architectural features.
- 2 Sidewalks and trails create a walkable environment.
- 3 Wooded buffers (approx. 250 ft. wide) shield the development from major roads.
- 4 Interconnected streets create a pattern of blocks.
- 5 Many homes have rear-loading garages accessed by alleys.
- 6 While the neighborhood consists primarily of single-family homes, townhouses are integrated into the development.
- 7 Parks are incorporated throughout the site.

This page is intentionally left blank.

Village Center

Description

The *Village Center* designation indicates areas intended for future moderate- to high-intensity residential, commercial, office, and institutional growth. These areas are currently characterized by limited commercial and moderate-density residential development within the Courthouse Village and Route 711 Village. These areas should be intensified to take advantage of available water, sewer, and transportation infrastructure, and to create walkable mixed-use centers with a distinct identity. *Village Centers* are intended to create economic development opportunities that serve the surrounding area, but they may include larger office uses that could have a regional impact. Efforts should be made to encourage appropriate-scaled development in these areas.

The primary focus of these areas should include a mixture of retail, office, services, and civic uses, such as gathering spaces, recreation centers, and open spaces (plazas or greens). These features should be developed in a coordinated manner to provide a focus for neighborhood activities. Central areas should be pedestrian-friendly with connections via sidewalks and paths to surrounding *Village Residential* neighborhoods.

Village Centers typically have a moderate concentration of nonresidential uses to provide services and activities to the immediate vicinity (service radius of approximately one to three miles), but are still of a scale and intensity that is compatible with surrounding *Village Residential* neighborhoods. Individual buildings are typically small, with maximum footprints of around 15,000 square feet. Total concentrations of commercial building areas in an individual village center should range between 10,000 and 75,000 square feet total, with rest of the village center constructed with residential uses. There should be a mix of housing types, including detached single-family dwellings (on lots of less than ¼ acres), duplexes, townhouses, and medium-scale multi-family residential (apartments, condominiums, etc.).

Intent

Quaint *Village Centers* should be established in targeted growth areas of the county to accommodate local business growth and provide services and employment to the local population. *Village Centers* will serve as an integral component of complete communities within the county and be within walking distance of many *Village Residential* neighborhoods.

Appropriate Specific Uses

- Single-Family Detached Residential on Smaller Lots
- Townhouses (Attached Single-Family Residential)
- Medium-Scale Multi-Family Residential in Neighborhood Pattern
- Upper-Story Multi-Family Residential (Above Commercial Space)
- Small- to Medium-Scale Commercial, Retail
- Office
- Services (Including Restaurants)
- Vertically Mixed-Use Buildings
- Institutional Uses
(Examples: Schools, Churches, Public Safety Facilities, and Similar Uses)
- Plazas, Squares, Open Space

Appropriate Zoning Districts

- Village Center (VC)
- Village Center Planned Development (VC-PD)
- Commerce Center Planned Development (CC-PD)

Development Design

Project Size (Minimum)	40 acres (Smaller projects may be appropriate as infill development and/or an extension of the Courthouse Village)
Residential Densities	4 units/acre—8 units/acre (See Special Area Plans for density recommendations within specific areas.)
Mix of Uses	<p>A mix of commercial, office, service, public, and residential uses should be accommodated in <i>Village Centers</i> with vertical mixed-use buildings being the preferred form.</p> <p>The following mix of uses is preferred:</p> <ul style="list-style-type: none"> • Residential Uses: 30—70% of Project Area • Commercial and Office Uses: 30—70% of Project Area <p>The following mix of housing types is preferred:</p> <ul style="list-style-type: none"> • Single-Family Dwellings (Detached): 25—50% of Residential Units • Townhouses and Duplexes: 25—50% of Residential Units • Multi-Family Residential (Apartments and Condominiums): Up to 40% of Residential Units (Two- to Four-Family Buildings and/or Upper-Story Units Preferred)
Minimum Open Space	15% or More of Project Area
Open Space Features	<p>At least 40% of the open space set-aside should be dedicated to active recreational areas, such as pools, playgrounds, tennis courts, jogging trails, ballfields, and/or clubhouses.</p> <p>Natural water features (including lakes, ponds, rivers, streams, wetlands, and other riparian areas), riparian buffers, flood hazard areas, steep slopes (15% or greater slopes), and wildlife habitat areas should be preserved as open space.</p> <p>Open space, such as plazas, small parks, squares, and greens, should be dispersed throughout the project. These public spaces should be usable areas that include trees, landscaping, water features, and/or outdoor activities. These spaces may be naturalized or more formal in design.</p>
Landscaping and Buffers	<p>Landscape buffering should be provided adjacent to any existing low-density residential areas.</p> <p>Existing mature trees should be preserved to maintain the character of the development's natural setting.</p>

Development Design

Environmental Design

Environmentally-friendly features should be incorporated into the design of new buildings and surrounding sites. Examples of such features include rain gardens, permeable pavement, green roofs, and native landscaping.

Villages should have coordinated stormwater management plans. This includes ensuring stormwater impacts of individual developments are properly mitigated, while coordinating local stormwater management efforts with countywide projects.

Transportation Network

Streets should create semi-regular blocks based on a grid or modified street grid network, allowing people to walk to local destinations using a variety of routes.

The network of streets should extend beyond the *Village Center* to provide connections to adjacent developments, including *Village Residential* areas.

Streets should be designed for lower speeds to allow for mixing of vehicular and pedestrian traffic.

Complete streets, including on-street parking, street trees, and sidewalks, should be provided within *Village Centers*.

Curbs should be provided where on-street parking is permitted within *Village Centers*; however, open-channel drainage may be appropriate in some areas, especially where bioswales and other low-impact development (LID) practices are used to manage stormwater.

The street pattern should be consistent and coordinated between phases of projects.

Utilities and Infrastructure

Public water and sewer should be available to support the increased density of development within *Village Centers*.

New infrastructure should be planned to be adequate for both the proposed development and any additional planned growth in the surrounding village. Level-of-service standards should be developed to ensure that adequate public facilities are provided in both the short- and long-term.

New development should pay for itself regarding necessary improvements to public infrastructure, including (but not limited to) new roads, water and sewer services, and schools.

Development Design

Community Character

Village Centers should be planned with a well-defined character that promotes walkability. Projects should have a coordinated architectural form and spatial feel, which should relate to surrounding developments.

A central focal point, square, or “Main Street” should be established as the heart of the *Village Center*, with development intensities decreasing further from this central focal point.

Commercial and civic centers are most appropriate near intersections of a collector or arterial street.

The scale and massing of buildings should maintain a small-town feel. Windows, wall offsets (projections and/or recesses), and other architectural features should be used to visually break long facades.

Buildings should address the street:

- The fronts of buildings should be oriented to the street.
- The progression of public to private spaces should be created based on traditional neighborhood models.
- Non-residential and mixed-use buildings should be built to the sidewalk, and awnings and covered sidewalks are encouraged.

Townhouses and larger apartment buildings (4–12 units per structure) with an average density of 4–8 units/acre may be accommodated (see *Note VC.a: Residential Density in Village Centers*).

Where provided, affordable and workforce housing should be blended with other units of varying styles, sizes, and prices throughout a given development. Affordable units should be indistinguishable on the exterior from other units.

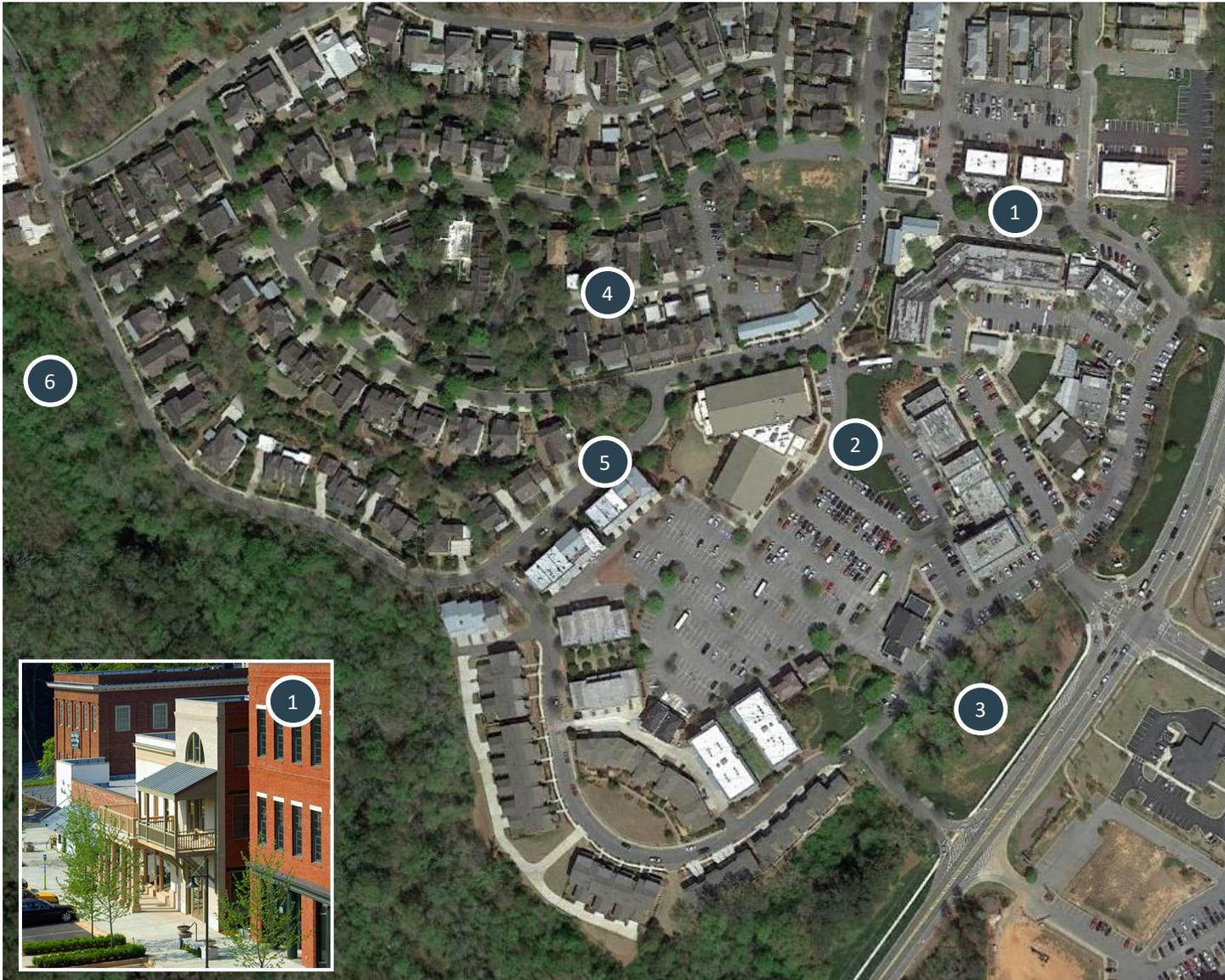
Signage and lighting should be designed to reduce impacts on surrounding residential areas.

Other Components

A master plan should be prepared for each project.

Example Layout

Below is an aerial photo of an existing development that demonstrates the design features encouraged within *Village Center* areas.



- 1 Commercial buildings with traditional architecture are oriented to the street with parking areas behind buildings.
- 2 Pocket parks, squares, plazas, and other open spaces are distributed throughout the development.
- 3 Existing mature trees along major thoroughfares are preserved and supplemented with new plantings.
- 4 Residential units, including single-family homes and townhouses, are within walking distance of commercial areas, with many dwellings served by rear alleys.
- 5 Townhouses serve as a transition to *Village Residential* areas.
- 6 Riparian areas are preserved, with homes facing preserved areas.

Notes*VC.a: Residential Density in Village Centers*

The residential density in a *Village Center* is not based on the same basic density assumptions as a purely residential area, because village centers are intended to include a mix of uses with some uses being stacked vertically in mixed-use structures. The recommendation of four units per acre is a gross density recommendation for the whole village center, meaning if a 100-acre site was considered for a village center, the maximum residential unit yield would be 400 residential units. Those units could be developed in a combination of large-lot single-family homes, attached units, and units located above ground floor commercial or office. They would not necessarily all be accommodated on 10,000 square foot lots. An increase of up to eight units per acre gross density could be appropriate in these areas.



Vertically Mixed-Use Buildings with Traditional Architecture

Source: Wikipedia



Townhouses Oriented around a Pocket Park

Source: Congress for New Urbanism



New Offices with Traditional Architecture and Covered Sidewalk

Source: Congress for New Urbanism

Commerce Center

Description

Commerce Centers are designed to accommodate large-scale uses, such as warehouses or manufacturing facilities that need extensive floor areas. The blocks in these areas are typically based on a campus-like design with significant open spaces, landscaping, and water detention areas surrounding large structures with accessory surface parking. The *Commerce Centers* are appropriate where nonresidential uses should be somewhat segregated from residential uses due to potential impacts from noise, dust, or heavy traffic. Although larger in scale than other land use classifications, and more accommodating of automobile traffic, pedestrian areas are still an important component in commerce centers.

Commerce Centers include a wide range of office, business, light industrial, research and development uses, and ancillary uses such as restaurants that offer services to the employees of the other businesses. These centers can best be described as a business version of a “subdivision.” The term “campus” is used often in that it implies a sense of integration and coordination of uses and a certain quality and character of development. *Commerce Centers* are generally large, unified, and integrated; like a residential subdivision, they are usually developed by a single entity, and as such can be designed in a coordinated way. As a general consideration, a commerce center would typically need to be at least thirty to fifty acres to accommodate several large-format businesses.

Commerce Centers involve a significant number of vehicle trips, particularly in the morning and evening peak hours. They involve a mixture of passenger vehicle and heavy truck traffic. Access to multi-modal transportation such as rail or water may be an influencing factor on the location of a commerce center. They are typically located near highway access, such as along Route 60.

Intent

Commerce Centers should be established at targeted locations along the Route 60 Corridor to accommodate business and industrial development in a location conducive to both the local and regional markets. *Commerce Centers* should be well designed to accommodate these uses in a manner that has limited impact on the surrounding development, including but not limited to sustainable stormwater management practices, local roads, and open spaces.

Appropriate Specific Uses

- Offices
- Large-Scale Commercial/Retail
- Services
- Clean Manufacturing
- Distribution
- Warehousing
- Institutional Uses
(Examples: Schools, Churches, Public Safety Facilities, and Similar Uses)
- Parks, Open Space, Recreation

Appropriate Zoning Districts

- Commerce Center (CC)
- Commerce Center Planned Development (CC-PD)
- Light Industrial (I-1)

Development Design

Project Size (Minimum)	30 acres (Smaller projects may be appropriate if part of infill development. See <i>Note CC.a: Small-Scale Development within Commerce Center</i> for more details.)
Residential Densities	Not Applicable (No Residential Uses Permitted)
Mix of Uses	Commercial and/or Light Industrial Uses: 100% of Project Area
Minimum Open Space	15% or More of Project Area
Open Space Features	<p>Open space, such as plazas, small parks, squares, and greens, should be dispersed throughout the project. These public spaces should be usable areas that include trees, landscaping, water features, and/or outdoor activities. These spaces may be naturalized or more formal in design.</p> <p>Walking trails are encouraged. Trails should connect to regional trail networks (if nearby).</p> <p>Natural water features (including lakes, ponds, rivers, streams, wetlands, and other riparian areas), riparian buffers, flood hazard areas, steep slopes (15% or greater slopes), and wildlife habitat areas should be preserved as open space.</p>
Landscaping and Buffers	<p>Site configuration, landscaping, and maintenance of existing tree cover and topography should be used to buffer <i>Commerce Centers</i> from adjacent development and major thoroughfares.</p> <p>Existing vegetation along Route 60 and other major thoroughfares should be preserved and supplemented to create a wooded buffer that maintains the area's natural character.</p>
Environmental Design	<p>Environmentally-friendly features should be incorporated into the design of new buildings and surrounding sites. Examples of such features include rain gardens, permeable pavement, green roofs, and native landscaping.</p> <p>Projects should have coordinated stormwater management plans. This includes ensuring stormwater impacts of individual developments are properly mitigated, while coordinating local stormwater management efforts with countywide projects.</p>

Development Design

Transportation Network

Vehicular access should be designed to maximize efficiency and minimize negative impacts on levels-of-service of adjacent roads. Impacts to major thoroughfares can be reduced by minimizing access points, providing a network of on-site internal streets, providing shared entrances, and/or providing entrances from side streets with a lower functional classification.

Local roadways should be designed to separate retail/commercial passenger traffic flows with delivery and distribution truck traffic generated in mixed retail/industrial areas.

Local roadways should be designed and built to standards to accommodate heavy truck traffic, including load bearing and turning radius dimensions.

Vehicular and pedestrian connections should be provided between various uses to provide allow travel between adjacent development, helping reduce impacts on nearby major thoroughfares.

The street pattern should be consistent and coordinated between phases of projects.

Utilities and Infrastructure

Public water and sewer should be available to support the increased intensity of development within *Commerce Centers*, along with appropriate communication technology and utility services.

Commerce centers should be subject to land use impact review and mitigation through the proffer system for topics such as traffic, stormwater, lighting, fiscal impact, noise, and odors. Commerce centers should be approved only upon a demonstration that adequate public facilities exist or will be established by the time of opening.

Community Character

Projects should have a coordinated architectural form and spatial feel, which should relate to surrounding developments. There should be cohesive signage, lighting, and landscaping.

Expect new developments to employ site and building design techniques that reduce their visual presence and scale. Design techniques include:

- High-quality landscaping (including wooded buffers and/or berms);
- Building designs that appear as collections of smaller buildings rather than a single large building;
- Building colors and siting that help large structures blend in with its surroundings; and
- Low-visibility parking locations.

Commerce centers should be encouraged to reuse existing industrial properties and integrate existing mining or industrial operations.

Example Layout

Below is an aerial photo of an existing development that demonstrates the design features encouraged within *Commerce Center* areas.



- 1 Existing mature trees provide a buffer between commercial and residential development.
- 2 Connections to adjacent residential neighborhoods provide routes for vehicular and pedestrian movement.
- 3 Buildings are oriented to the street, with most parking to the side or rear of the buildings.
- 4 Sidewalks and shared-use paths provide pedestrian connectivity.
- 5 Access to existing major thoroughfares is limited, with an interconnected internal street network providing circulation.
- 6 Plazas, parks and open spaces are scattered throughout the development.
- 7 Buildings utilize traditional materials.



Notes

CC.a: Small-Scale Development with Commerce Centers

While large-scale, campus-style development is preferred within areas designated *Commerce Center*, consolidating existing small parcels along the U.S. Route 60 corridor may be difficult. Smaller-scale development may be appropriate, if projects:

- Provide multiple vehicular connections to adjacent properties (preferably though an internal street network), while limiting access to adjacent major thoroughfares;
- Incorporate high-quality architectural features that are compatible with nearby buildings, with designs and materials that reflect those traditionally found in Powhatan County;
- Include landscaping, wooded buffers, and other site elements that limit the appearance of “strip development” along major thoroughfares and retains (or enhances) the natural, wooded character of Powhatan County;
- Limit signage to monument signs with materials similar to those used on the primary building;
- Distribute parking throughout the site, so there is not a continuous strip of parking lots along major thoroughfares;
- Minimize the visibility of outdoor storage areas from major thoroughfares;
- Provide pedestrian linkages to adjacent properties; and
- Incorporate other design elements recommended for *Commerce Centers* (p. 97 and p. 98).

With interparcel connectivity and coordinated architecture, small-scale developments adjacent to one another can be cohesive and functional.

For smaller projects, the Commerce Center (CC) zoning district is the most appropriate classification. Commerce Center Planned Development (CC-PD) is only appropriate for larger projects.



Retail/Pharmacy Use with Traditional Architecture



Office Building with Traditional Architecture and Relegated Parking



Office Building with Traditional Materials, Relegated Parking, and Outdoor Seating Areas

This page is intentionally left blank.

Economic Opportunity

Description

Powhatan County's proximity to the Richmond Metropolitan Area creates economic development opportunities. Different types of businesses may be interested in relocating to areas with adequate infrastructure and highway access, while new residents are looking for housing options convenient to jobs, services, and amenities.

Economic Opportunity highlights areas where there are opportunities to create large, cohesive master-planned developments that incorporate commercial, light industrial, and/or residential uses. These areas include large, contiguous parcels close to major highways, utilities, and other infrastructure, making them suitable for projects that could support regional employers and major businesses.

This land use designation is intended to be flexible, encouraging innovative design that:

- Utilizes high-quality architectural features (building design, landscaping, lighting, etc.) as part of a cohesive, master-planned community;
- Incorporates environmentally-friendly design techniques;
- Provides parks and open space accessible to residents, workers, and visitors;
- Accommodates motorists, pedestrians, and cyclists as part of an interconnected transportation network; and
- Can adapt to changing market demand.

High-quality design should minimize negative impacts on surrounding uses and create communities with lasting value.

Development should occur as part of a unified master plan that covers approximately 100 acres or more (in one or more parcels). Since these areas are located near

major gateways and projects are intended to be large, they will have a significant impact on the identity and regional perception of Powhatan County and surrounding special areas (Route 60 Corridor East, Route 711 Village, Courthouse Village, etc.). Because of this, it is important to ensure new developments are well-designed, creating functional communities that are economically sustainable and provide residents with a high quality of life.

A variety of commercial and light industrial uses should be permitted, including (but not limited to) retail stores, restaurants, hotels, offices, warehouses, distribution centers, research and development facilities, data centers, and light manufacturing. In addition to these businesses, mixed-use projects may also include higher-density residential uses, including townhouses, apartments, condominiums, and single-family homes on smaller lots (¼-acre or less). Projects with only residential uses are not appropriate.

Large-scale development may generate a significant number of vehicles trips, particularly in the morning and evening peak hours. There may be a mixture of passenger vehicle and heavy truck traffic. The number of access points to major thoroughfares should be limited to maintain adequate capacity and level-of-service. There should be vehicular connections between adjacent parcels, allowing movement between different destinations without having to drive on major thoroughfares. Sidewalks, shared-use paths, and/or other types of infrastructure for pedestrians and cyclists should connect different uses, providing workers, residents, and visitors with transportation options and recreational opportunities.

Intent

Areas identified as *Economic Opportunity* should be established at targeted locations near major highways to accommodate commercial, light industrial, and/or residential uses within master-planned developments. New developments will utilize innovative design techniques, including high-quality architectural features and environmentally-friendly practices, which minimize negative impacts on surrounding uses and create communities with lasting value.

Appropriate Specific Uses

- Offices
- Commercial/Retail
- Services
- Hotels and Lodging
- Light Industrial
- Clean Manufacturing
- Distribution Centers
- Warehousing
- Research and Development
- Single-Family Detached Residential on Smaller Lots (¼-acre or less)
- Townhouses (Attached Single-Family Residential)
- Multi-Family Residential (Apartments and/or Condominiums)

Appropriate Zoning Districts

- Village Center Planned Development (VC-PD)
- Commerce Center Planned Development (CC-PD)
- Light Industrial (I-1)



First-Floor Retail with Offices Above in a Master-Planned Community

Source: Daniel Island



LEED-Certified Research Building with Parking in Rear

Source: TGCE



First-Floor Retail with Multi-Family Housing Above

Source: DDR

Development Design

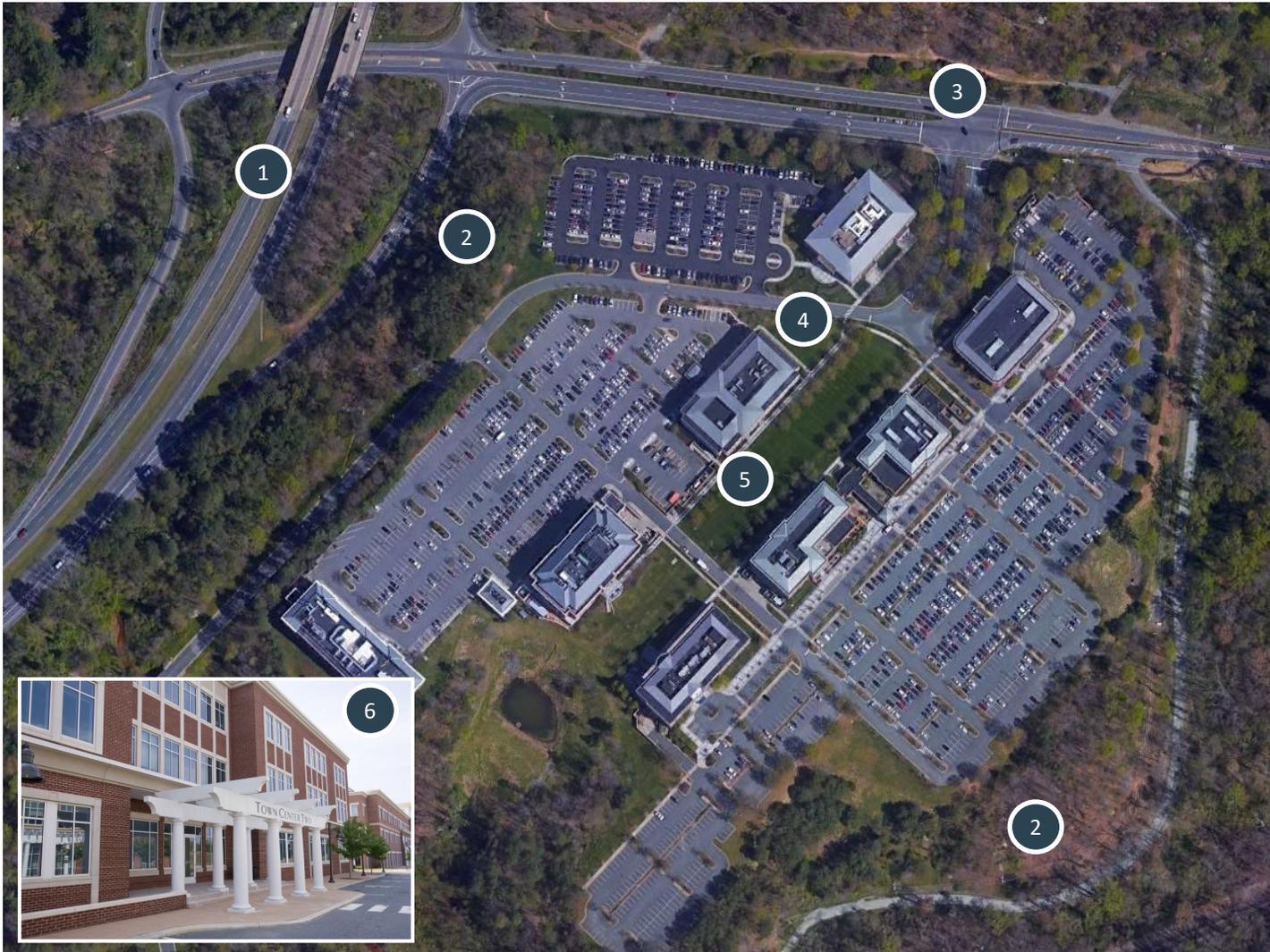
Project Size (Minimum)	100 acres
Residential Densities	0 units/acre—9 units/acre
Mix of Uses	<p>A variety of commercial and light industrial uses should be accommodated in <i>Economic Opportunity</i> areas. Limited higher-density residential uses may be incorporated into these projects, but projects with only residential uses are not appropriate.</p> <p>The following mix of uses is preferred:</p> <ul style="list-style-type: none"> • Commercial, Office, and Light Industrial Uses: 70—100% of Project Area • Residential Uses: Up to 30% of Project Area <p>Industrial uses should be permitted, provided operations are conducted within a building and generate little or no off-site nuisances (noise, dust, light pollution, etc.). Outdoor storage areas should be screened from adjacent roadways and properties.</p>
Minimum Open Space	15% or More of Project Area
Open Space Features	<p>Open space, such as plazas, small parks, and other amenities, should be dispersed throughout the project. These public spaces should be usable areas that include trees, landscaping, water features, and/or outdoor activities. These spaces may be naturalized or more formal in design.</p> <p>Walking trails are encouraged. Trails should connect to regional trail networks (if nearby).</p> <p>Natural water features (including lakes, ponds, rivers, streams, wetlands, and other riparian areas), riparian buffers, flood hazard areas, steep slopes (15% or greater slopes), and wildlife habitat areas should be preserved as open space.</p>
Landscaping and Buffers	<p>Projects located along Route 60 or Route 711 should maintain a wooded buffer at least 50 feet wide along these roadways, where existing vegetation is preserved and supplemented with additional plantings to lessen the visual impact of large-scale development.</p> <p>Site configuration, landscaping, and maintenance of existing tree cover and topography should be used to buffer projects from adjacent development.</p>

Development Design

Environmental Design	<p>Environmentally-friendly features should be incorporated into the design of new buildings and surrounding sites. Examples of such features include rain gardens, permeable pavement, green roofs, and native landscaping.</p> <p>Projects should have coordinated stormwater management plans. This includes ensuring stormwater impacts of individual developments are properly mitigated, while coordinating local stormwater management efforts with countywide projects.</p>
Transportation Network	<p>Vehicular access should be designed to maximize efficiency and minimize negative impacts on levels-of-service of adjacent roads. Impacts to major thoroughfares can be reduced by minimizing access points, providing a network of on-site internal streets, providing shared entrances, and/or providing entrances from side streets with a lower functional classification.</p> <p>Local roadways should be designed to separate retail/commercial passenger traffic flows with delivery and distribution truck traffic generated in mixed retail/industrial areas.</p> <p>Vehicular and pedestrian connections should be provided between various uses to allow travel between adjacent development and to create a multi-modal transportation network, helping reduce impacts on nearby major thoroughfares.</p> <p>The street pattern should be consistent and coordinated between phases of projects.</p>
Utilities and Infrastructure	<p>Public water and sewer should be available to support the increased intensity of development within <i>Economic Opportunity areas</i>, along with appropriate communication technology and utility services.</p> <p>New development should be subject to land use impact review and mitigation through the proffer system for topics such as traffic, stormwater, lighting, fiscal impact, noise, and odors. Rezoning requests should be approved only upon a demonstration that adequate public facilities exist or will be established by the time of opening.</p>
Community Character	<p>Architecture, building materials, landscaping, and signage should be cohesive throughout master-planned projects, creating a campus-like environment.</p>

Example Layout

Below is an aerial photo of an existing development that demonstrates the design features encouraged within *Economic Opportunity* areas.



- 1 Projects are located near major highways.
- 2 Wooded and landscaped buffers are maintained along adjacent roadways.
- 3 Access to adjacent roadways is limited.
- 4 Sidewalks and shared-use paths provide pedestrian connectivity.
- 5 Plazas, parks and open spaces are scattered throughout the development, creating a campus-like environment.
- 6 Buildings incorporate high-quality architectural designs and materials.

This page is intentionally left blank.

Industrial

Description

Manufacturing, warehousing, mining, and other industrial operations provide jobs and other economic benefits to Powhatan County. While these businesses are an important part of the economy, some industrial operations create noise, dust, and/or odors that may negatively impact nearby residential and commercial uses. Areas designated as industrial include existing industrial operations and are intended to exclude non-compatible uses.

A variety of industrial uses, including warehousing, manufacturing, research and development, and mining may be permitted, either by-right or with a conditional use permit. Residential uses are inappropriate within industrial areas.

Industrial operations may generate a significant number of vehicle trips, particularly in the morning and evening peak hours. There may be a mixture of passenger vehicle and heavy truck traffic. The number of access points on Route 60 and other major thoroughfares should be limited to maintain adequate capacity and level-of-service. There should be vehicular connections between adjacent parcels (especially industrial uses), allowing movement between different destinations without having to drive on major thoroughfares; however, heavy truck traffic should be routed away from residential neighborhoods and public facilities (schools, libraries, parks, etc.). Sidewalks, shared-use paths, and/or bicycle lanes should connect different areas, providing workers with transportation options and recreational opportunities.

Large-scale development should occur as part of a unified master plan. If small-scale development occurs, sites should be at least twenty (20) acres in size and designed to be harmonious with surrounding properties. If feasible, there should be vehicular connections between adjacent parcels, especially if they have industrial uses. All development, including outdoor storage areas, should be designed with appropriate setbacks, providing adequate area for buffering and/or screening from abutting properties and roadways. Buildings, parking lots, and storage areas should be designed to minimize the amount of noise, dust, odors, and light that reaches adjacent properties.

Intent

Areas designated as Industrial should be established at targeted locations near major highways to accommodate a variety of industrial uses, including warehousing, manufacturing, research and development, and mining, which may not be compatible with residential or some commercial development due to noise, dust, and/or odors. New development should be well designed to limit impacts on surrounding development, including but not limited to sustainable stormwater management practices, local roads, and open spaces.

Appropriate Specific Uses

- Manufacturing
- Distribution Centers
- Warehousing
- Research and Development
- Mining Facilities
- Open Space

Appropriate Zoning Districts

- Light Industrial (I-1)
- Heavy Industrial (I-2)
- Commerce Center (CC)
- Commerce Center Planned Development (CC-PD)

Development Design

Project Size (Minimum)	50 acres
Residential Densities	Not Applicable (No Residential Uses Permitted)
Mix of Uses	Industrial Uses: 100% of Project Area Residential and commercial uses are not appropriate, since they may be negatively impacted by adjacent industrial operations.
Minimum Open Space	10% or More of Project Area
Open Space Features	<p>Open space, such as plazas, small parks, and other amenities, should be incorporated into the project, provided that they are located away from areas with excessive noise, dust, odor, and heavy truck traffic. These public spaces should be usable areas that include trees, landscaping, water features, and/or outdoor activities. These spaces may be naturalized or more formal in design.</p> <p>Walking trails are encouraged. Trails should connect to regional trail networks (if nearby) and be located away from areas with excessive noise, dust, odor, and heavy truck traffic.</p> <p>Natural water features (including lakes, ponds, rivers, streams, wetlands, and other riparian areas), riparian buffers, flood hazard areas, steep slopes (15% or greater slopes), and wildlife habitat areas should be preserved as open space.</p>
Landscaping and Buffers	<p>Site configuration, landscaping, and maintenance of existing tree cover and topography should be used to buffer projects from adjacent development, especially residential neighborhoods and commercial areas.</p> <p>Wooded buffers at least 100 feet wide should be maintained along adjacent roadways to screen industrial uses from view. If there is not sufficient existing vegetation, new plantings, berms, decorative fencing, and/or other features should be installed to create a landscape buffer with a naturalistic appearance.</p> <p>Outdoor storage areas should be screened from view with evergreen trees and shrubs, berms, and/or decorative fencing.</p>

Development Design

Environmental Design

Environmentally-friendly features should be incorporated into the design of new buildings and surrounding sites. Examples of such features include rain gardens, permeable pavement, green roofs, and native landscaping.

Projects should have coordinated stormwater management plans. This includes ensuring stormwater impacts of individual developments are properly mitigated, while coordinating local stormwater management efforts with countywide projects.

Transportation Network

Vehicular access should be designed to maximize efficiency and minimize negative impacts on levels-of-service of adjacent roads. Impacts to major thoroughfares can be reduced by minimizing access points, providing a network of on-site internal streets, providing shared entrances, and/or providing entrances from side streets with a lower functional classification.

Local roadways should be designed to accommodate heavy truck traffic, including load bearing and turning radius dimensions.

Vehicular and pedestrian connections with different uses may be appropriate, provided that heavy truck traffic is not directed into residential areas or near public facilities (schools, libraries, parks, etc.).

The street pattern should be consistent and coordinated between phases of projects.

Utilities and Infrastructure

Public water and sewer should be available to support the needs of industrial users, along with appropriate communication technology and utility services.

Industrial uses should be subject to land use impact review and mitigation through the proffer system for topics such as traffic, stormwater, lighting, fiscal impact, noise, and odors. Industrial uses should be approved only upon a demonstration that adequate public facilities exist or will be established by the time of opening.

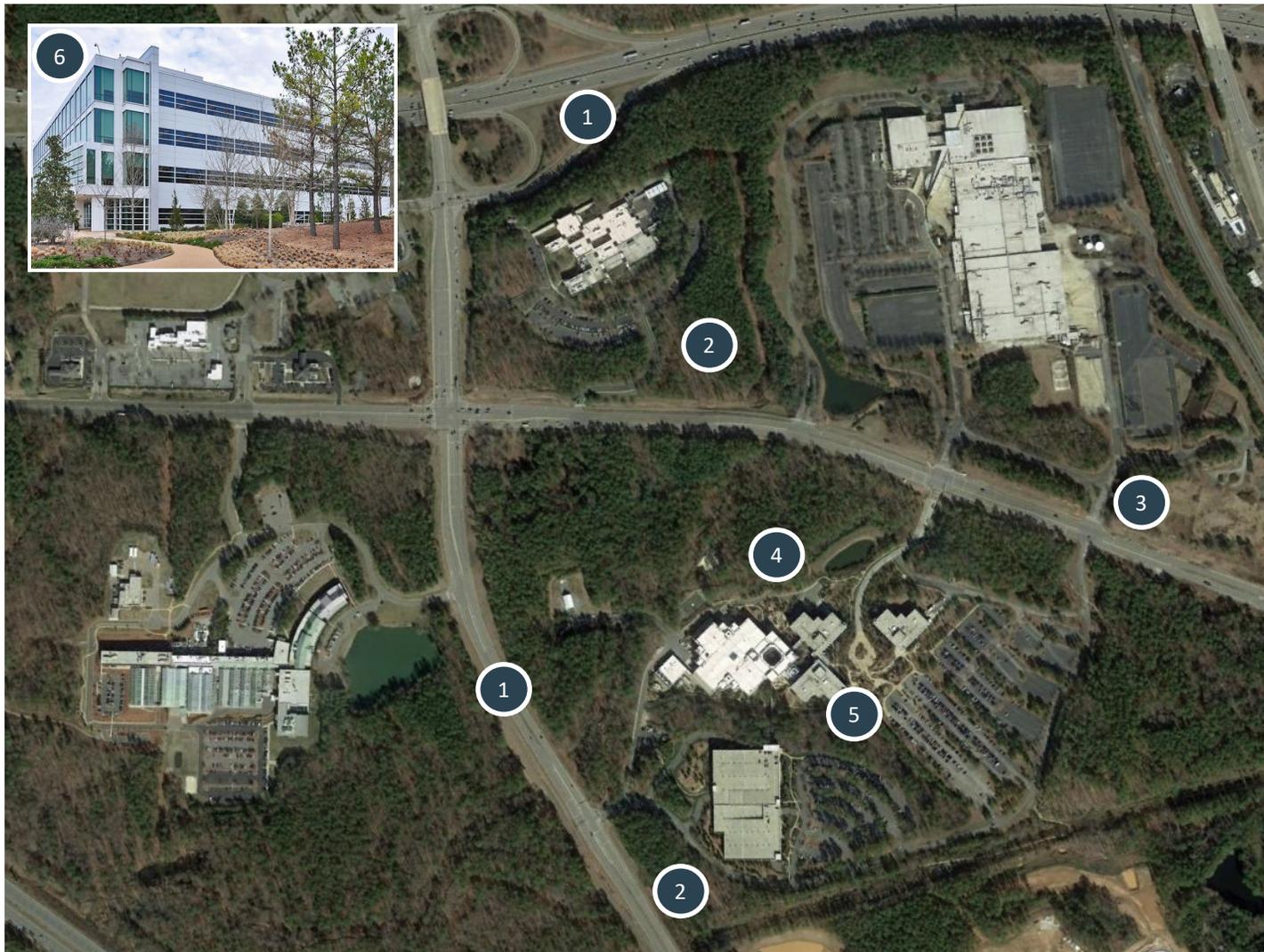
Community Character

Architecture, building materials, landscaping, and signage should be cohesive throughout master-planned projects, creating a campus-like environment.

The reuse of existing industrial properties is encouraged. Redevelopment may integrate and/or be compatible with existing industrial and mining operations.

Example Layout

Below is an aerial photo of an existing development that demonstrates the design features encouraged within *Industrial* areas.



- 1 Projects are located near major highways.
- 2 Wooded and landscaped buffers are maintained along adjacent roadways.
- 3 Access to adjacent roadways is limited.
- 4 Sidewalks and shared-use paths provide pedestrian connectivity and serve as an amenity for workers.
- 5 Plazas, parks and open spaces are scattered throughout the development, creating a campus-like environment.
- 6 Buildings incorporate high-quality architectural designs, materials, and landscaping.

Rural Enterprise Zone

Description

The *Rural Enterprise Zone* includes portions of U.S. Route 60 between the Route 60 East Corridor and the Courthouse Village. This area is intended to maintain its rural character, while accommodating low-intensity commercial and light industrial uses that need proximity to regional transportation corridors.

Development within the *Rural Enterprise Zone* should be designed to reflect the area's rural character:

- Parking areas should be located to the side or rear of buildings;
- Existing mature vegetation along U.S. Route 60 should be maintained, screening development from view;
- Buildings should be designed with smaller footprints (10,000 square feet or less). Larger buildings may be appropriate, if they are designed to appear like a collection of smaller buildings and/or incorporate high-quality architectural design and materials; and
- Buildings should incorporate architectural features that are commonly found in rural Virginia, such as porches and pitched roofs.

The *Rural Enterprise Zone* overlays areas designated *Rural Residential* on the Countywide Future Land Use Map. If residential development occurs, it should be designed to reflect design recommendations made for *Rural Residential* areas.

Intent

The *Rural Enterprise Zone* includes properties along U.S. Route 60 located outside of Special Area Plans that could support low-intensity commercial and light industrial uses that do not generate significant traffic volumes and are compatible with the rural character of the surrounding area.

Appropriate Specific Uses

- Small- and Medium-Scale Offices
- Small- and Medium-Scale Manufacturing
- Small-Scale, Rural-Oriented Commercial Businesses (Example: Agricultural Supply Stores)

Appropriate Zoning Districts

- Commerce Center (CC)
- Light Industrial (I-1)

Development Design

Project Size (Minimum)	5 acres
Residential Densities	Not Applicable (Residential development should occur in accordance with the underlying land use designation.)
Mix of Uses	A mix of low-intensity commercial and light industrial uses are appropriate.
Minimum Open Space	None
Open Space Features	Natural water features (including lakes, ponds, rivers, streams, wetlands, and other riparian areas), riparian buffers, flood hazard areas, steep slopes (15% or greater slopes), wildlife habitat areas, and productive farmland should be preserved as open space. Pedestrian/bicycle and equestrian trail systems are encouraged to provide recreation and mobility options.
Landscaping and Buffers	Site configuration, landscaping, and maintenance of existing tree cover and topography should be used to buffer commercial and industrial uses from adjacent development and major thoroughfares. Existing vegetation along Route 60 and other major thoroughfares should be preserved and supplemented to create a wooded buffer that maintains the area's natural character. In open areas, native trees and shrubs should be planted in a naturalistic, informal pattern to screen new development.
Environmental Design	Environmentally-friendly features should be incorporated into the design of new buildings and surrounding sites. Examples of such features include rain gardens, permeable pavement, green roofs, and native landscaping. Projects should have coordinated stormwater management plans. This includes ensuring stormwater impacts of individual developments are properly mitigated, while coordinating local stormwater management efforts with countywide projects.

Development Design

Transportation Network

Vehicular access should be designed to maximize efficiency and minimize negative impacts on levels-of-service of adjacent roads. Impacts to major thoroughfares can be reduced by minimizing access points, providing a network of on-site internal streets, providing shared entrances, and/or providing entrances from side streets with a lower functional classification.

Utilities and Infrastructure

Sewer treatment will need to be provided on-site and wells will be necessary for water, if public utilities are not available at the time of development. New and existing development should connect to public water and/or sewer, if it becomes available.

Community Character

Projects should have a coordinated architectural form and spatial feel, which should relate to surrounding developments. There should be cohesive signage, lighting, and landscaping.

Expect new developments to employ site and building design techniques that reduce their visual presence and scale. Design techniques include:

- High-quality landscaping (including wooded buffers and/or berms);
- Building designs that appear as collections of smaller buildings rather than a single large building;
- Building colors and siting that help large structures blend in with its surroundings;
- Architectural features, such as porches and pitched roofs, that are traditionally found in rural Virginia; and
- Low-visibility parking locations.

Example Layout

Below is an aerial photo of an existing development that demonstrates the design features encouraged within the *Rural Enterprise Zone*.



- 1 Development incorporates smaller-scale buildings.
- 2 Parking is distributed throughout the site (as opposed to large parking areas between the building and adjacent thoroughfares).
- 3 Mature vegetation along major thoroughfares is maintained.
- 4 Access is limited and entrances from major thoroughfares are improved with auxiliary (turn) lanes.
- 5 Buildings incorporate styles and materials traditionally used in Piedmont Virginia, such as brick, wood, and standing-seam metal roofing.

This page is intentionally left blank.

Special Area Plans

On Map 6: Countywide Land Use Plan, three areas are identified for special area plans as locations to capture the majority of residential and commercial growth in Powhatan County. These designated growth areas are close to services and offer the greatest opportunities for development. Locations within special area plans are expected to accommodate higher-density development than rural areas and offer support services and economic development opportunities.

Because of the level of detail regarding land use for these areas, larger-scale “special area plan maps” are provided to illustrate the micro details of the recommendations. These are the same recommendations illustrated on Map 5: Countywide Land Use Plan, but at a different scale for readability.

Growth in the special area plans should be phased in coordination with the Water and Sewer Service Areas Map (page 33) to prevent sprawl, promote efficient development patterns, and maximize the use of existing infrastructure.

The following descriptions and maps illustrate a concept for each of the three designated growth areas:

- Route 60 Corridor East
- Courthouse Village
- Route 711 Village

More detailed land use and transportation plans should be prepared for these areas to help guide investment and land use decisions.

Route 60 Corridor East Special Area

Community Character

The Route 60 Corridor East Special Area is located in the eastern portion of the county, stretching along Route 60 from Chesterfield County west to the Flat Rock area.

This area provides opportunities for commercial and residential growth within master-planned developments. To retain the rural character of Route 60, new development should not be “stripped” along the roadway, but located within distinct districts. Existing vegetation along Route 60 and other major thoroughfares should be preserved and supplemented to create wooded buffers that maintain the area’s character.

Land Use

This growth area can accommodate a variety of development types:

- *Commerce Centers*
Commerce Centers are the appropriate locations for offices, higher-intensity retail, and some industrial development (clean manufacturing, distribution centers, warehouses, and similar light industrial uses). These areas are located near Route 60.
- *Economic Opportunity*
Areas designated as *Economic Opportunity* can accommodate large, cohesive master-planned developments that incorporate commercial, light industrial, and/or residential uses. These developments should incorporate innovative designs that utilize high-quality architectural features. Projects with only residential uses are not appropriate.
- *Industrial*
A variety of industrial uses, including warehousing, manufacturing, research and development, machining, and mining may be permitted, either by-right or with a conditional use permit. Residential uses are not appropriate in industrial areas, but complimentary commercial uses may be permitted. Areas designated as *Industrial* include the existing Luck Stone mining

operation and existing industrial development along Carter Gallier Boulevard.

- *Public*
Powhatan High School and Flat Rock Elementary School are located northeast of the Route 613 (Judes Ferry Road)/Route 677 (Batterson Road) intersection.
- *Village Residential*
Village Residential areas are adjacent to *Commerce Centers*, and are situated away from Route 60. These areas should include detached single-family dwellings and two- to four-family residential structures (apartments, condominiums, townhouses, etc.) within developments designed as traditional neighborhoods.

Mobility

Roadways will need to be improved to accommodate increased densities. An interconnected network of local streets should be constructed as development occurs, allowing people to access different destinations without having to travel on Route 60.

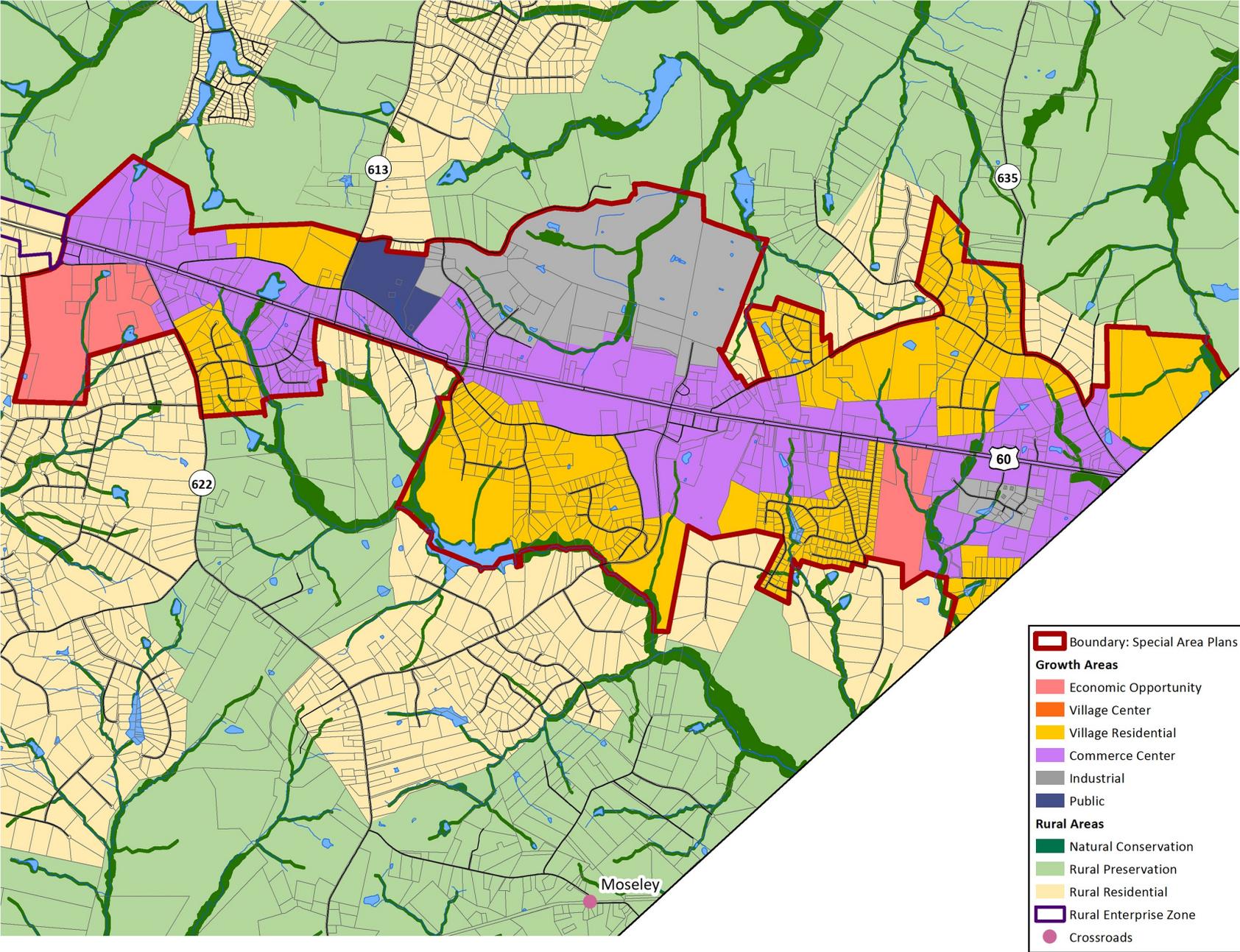
To maintain the capacity of Route 60, the number of access points from adjacent properties should be minimized. Shared driveways and access points are encouraged.

New development should include sidewalks, shared-use paths, and/or other accommodations for pedestrians and cyclists, providing different travel options and recreational opportunities.

Utilities

Water and sewer are available along Route 60, but utilities do not currently extend to all parts of this growth area. Phasing of growth in the Route 60 Corridor East Special Area should be managed by the Water and Sewer Service Areas Map included on page 33.

Map 7: Route 60 Corridor East Special Area Plan



Courthouse Village Special Area

Community Character

The Courthouse Village is both the historic and government center for Powhatan County. This growth area accommodates a mix of uses, creating a walkable community in close proximity to public facilities (schools, parks, government services, etc.).

New development in the Courthouse Village area, especially in areas south of Route 60, should be sensitive to the character and scale of the Powhatan Courthouse Historic District. Public and private entities can capitalize on the village's historic character and status as the county seat to establish a cultural center in the area, creating the potential for tourism and other economic development opportunities.

To help new development blend with existing structures, new buildings should reflect architectural features and styles commonly found in Powhatan County prior to 1900, including pitched roofs; covered porches and stoops; and brick and/or wood siding (or similar materials) on the exterior.

Land Use

Within the Courthouse Village area, there are several future land use designations that can accommodate a variety of development types:

- *Village Centers*
A mix of commercial and residential uses may be located within *Village Centers*. The area surrounding the Historic Courthouse is designated *Village Center*. Townhouses, small multi-family buildings, and small-scale, vertically mixed-use structures are appropriate.
- *Commerce Centers*
Commerce Centers are located along Route 60 and are suitable locations for offices and higher-intensity retail. Some industrial development (clean manufacturing, distribution centers, warehouses, and similar light industrial uses) may be appropriate in *Commerce Centers* located north of Route 60.

- *Public*
The historic Powhatan County Courthouse anchors the Courthouse Village. County administrative offices are located nearby, as are other government facilities, including Powhatan County Public Library and Powhatan County Fire Department. Several schools are located within this growth area, and Fighting Creek Park provides residents with recreational opportunities.
- *Village Residential*
Village Residential areas are located along the Route 13 Corridor, accommodating new housing near village and commerce centers.

Mobility

Vehicular and pedestrian connectivity between different uses is important in creating a walkable community. An interconnected network of local roads should be established for the entire growth area to create an integrated village. Sidewalks, shared-use paths, and other accommodations for pedestrians and cyclists provide residents, workers, and visitors with different travel options.

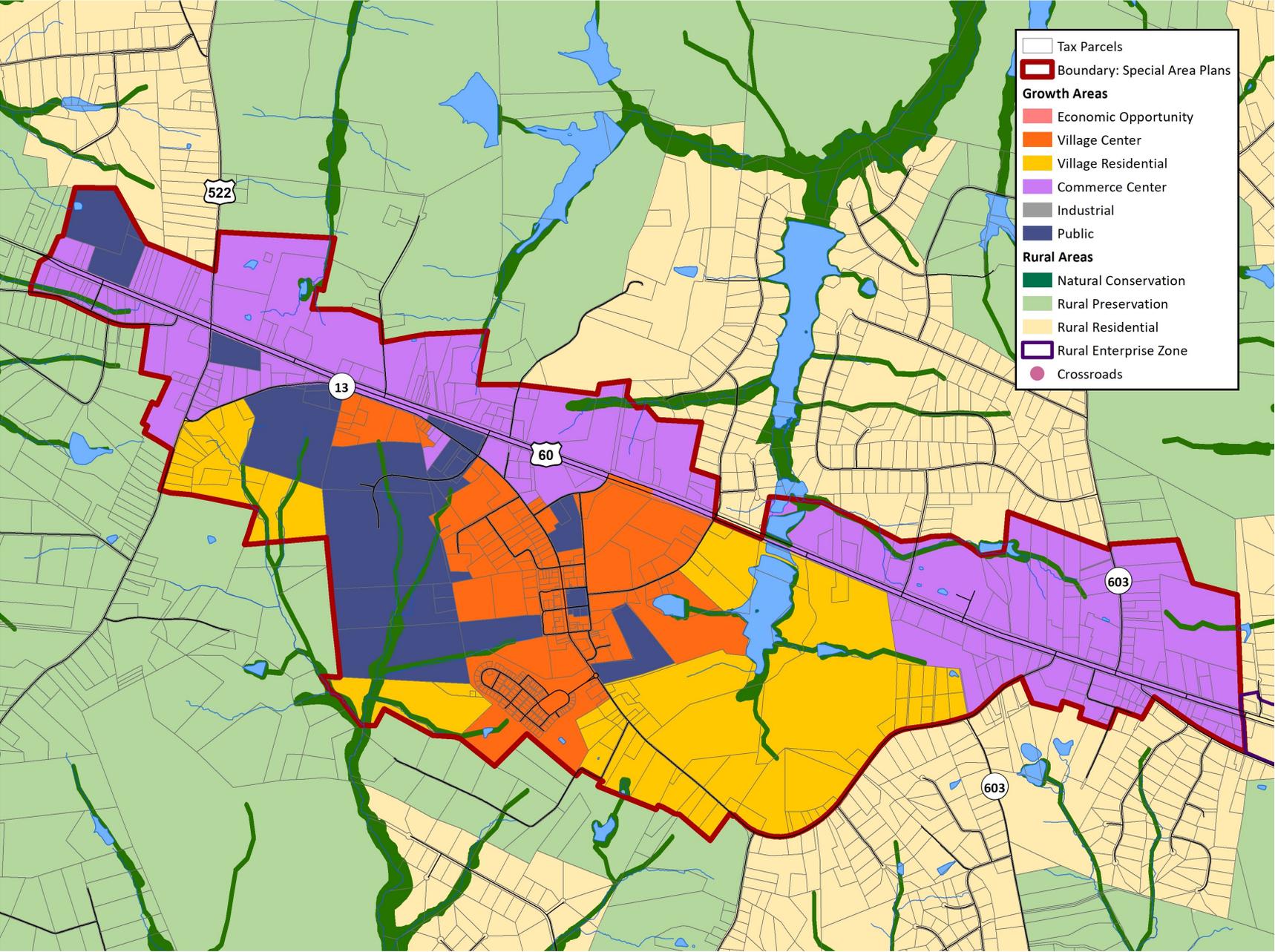
Utilities

Phasing of growth in the Courthouse Village should be moderated by the Sewer and Water Phasing Plan included on page 33.



Historic Buildings in the Courthouse Village Special Area
Source: Powhatan County

Map 8: Courthouse Village Special Area Plan



Route 711 Village Special Area

Community Character

The Route 711 Village is located in the northeastern part of the county, surrounding the Route 288/Route 711 (Huguenot Trail) interchange. It stretches from Founders Bridge (a planned development anchored by a golf course) northward to the James River.

Route 711 (Huguenot Trail) has been designated a *Virginia Byway* by the Commonwealth Transportation Board (CTB), due to its scenic character. New development should include landscaping and architectural features that blend with the rural landscapes and historic properties found along the Route 711 corridor. High-quality building materials (brick, stone, etc.), architectural treatments, and landscaping have been incorporated into the design of existing developments; new projects should include similar features.

Land Use

Within the Route 711 Village, different future land use designations can accommodate a variety of development types:

- *Village Center*
A village center is planned at the southwest corner of the Route 711 (Huguenot Trail)/Route 714 (Winterfield Road) intersection. A mix of residential (single-family and multi-family units) and commercial uses are planned at this location as part of the Winterfield Place development.
- *Economic Opportunity*
Areas designated as *Economic Opportunity* can accommodate large, cohesive master-planned developments that incorporate commercial, light industrial, and/or residential uses. These developments should incorporate innovative designs that utilize high-quality architectural features. Projects with only residential uses are not appropriate.

- *Village Residential*
Areas designated *Village Residential* are located along the Route 714 (Winterfield Road) corridor and include existing residential development within Founders Bridge and Bel Crest.
- *Natural Conservation*
Parts of the Route 711 Village have limited development potential, since they are located within the floodplain adjacent to the James River and Bernards Creek and/or are encumbered by a conservation easement.

Mobility

Vehicular and pedestrian connectivity between different uses is important in creating a walkable community. Sidewalks, shared-use paths, and other accommodations for pedestrians and cyclists provide residents, workers, and visitors with different travel options.

Route 711 (Huguenot Trail) is currently being widened to four lanes within this growth area. To maintain the roadway's capacity and scenic character, the number of access points from adjacent properties should be minimized. Shared driveways and access points are encouraged.

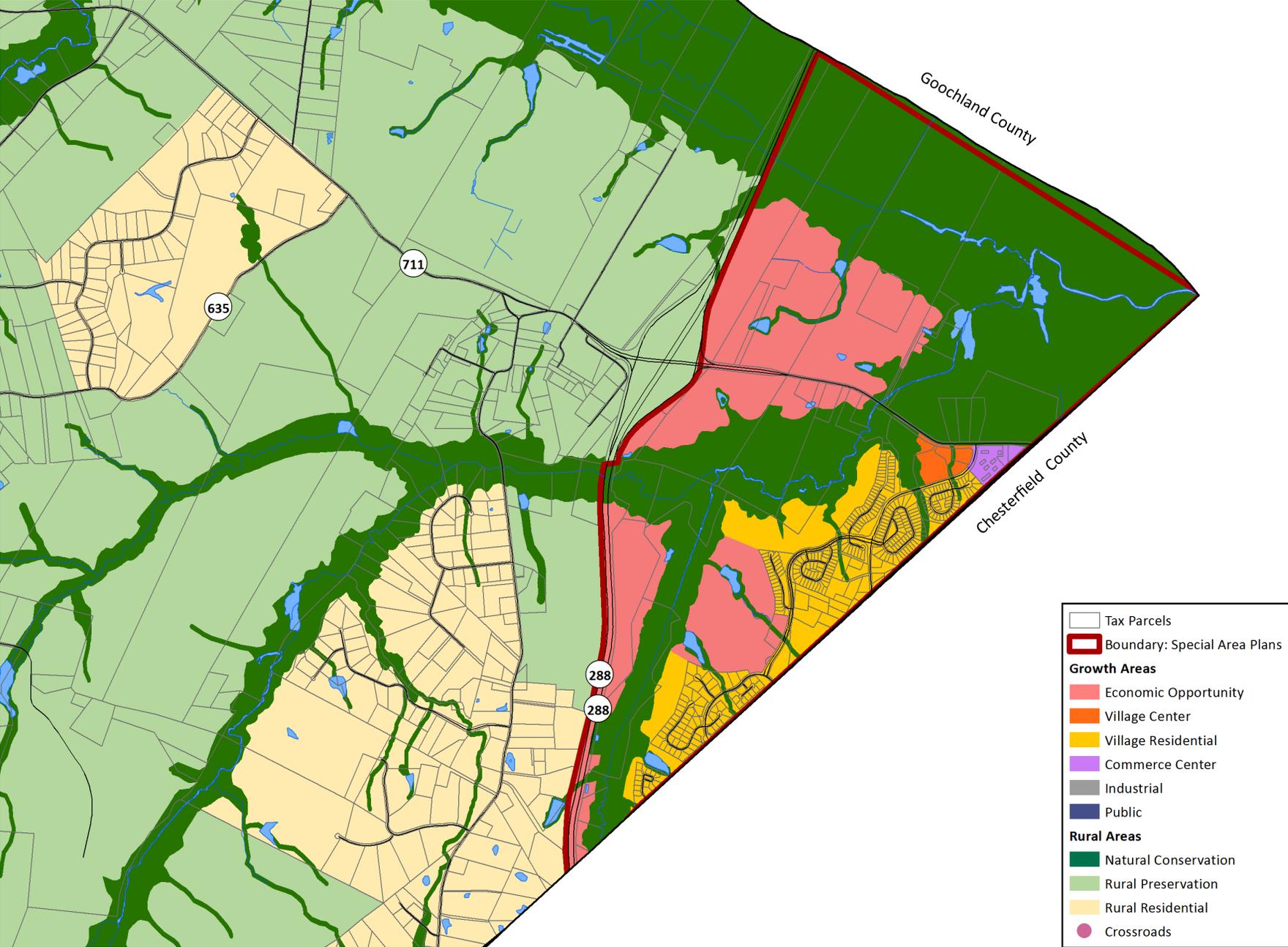
Utilities

Phasing of growth in the Route 711 Village should be moderated by the Sewer and Water Phasing Plan included on page 33.



Commercial Buildings with Traditional Architectural Features
(Including Pitched Roofs; Dormers; Brick and Stone Facades; and Windows with Muntins)
Source: Powhatan County

Map 9: Route 711 Village Special Area Plan



Examples of Appropriate Development by Land Use Category

The following pages show images of different buildings and development types that reflect elements recommended by Land Use Policies within this chapter. As developers and landowners consider improvements to their properties, these images are intended to provide examples of building forms and designs appropriate in each Countywide Land Use Category. Notes under each image identify a Land Use Policy that relates to elements shown. Additional images are included within descriptions on the previous pages.

Natural Conservation



Meadow in Powhatan Wildlife Management Area

Rural Preservation



Historic Farm under Conservation Easement



Canoe/Kayak Launch on the James River



Small-Scale Country Inn with Traditional Architecture

Rural Residential



Source: Powhatan County

Single-Family Dwelling with Traditional Architecture on a Large Lot

Crossroads



Source: Maidstone Dental

Medical Office in Small-Scale Building

Village Residential



Source: DPZ & Co.

Traditional-Style Single-Family Homes Relate to the Street



Source: Powhatan County

Common Area within Rural Residential Subdivision



Source: Fine Creek Brewing Co./Heather Slagle

Micro-Brewery with Traditional Architecture



Source: DPZ & Co.

Four-Unit Residential Buildings Resemble Large Single-Family Homes

Village Center



Vertically Mixed-Use Buildings
Set to the Sidewalk

Commerce Centers



Commercial Building with Traditional Architecture
and Parking to the Rear

Economic Opportunity



Commercial Building Adjacent to Sidewalk with
Parking to the Rear



Townhouses Relate
to the Street



Commercial Development Oriented around
Landscaped Pedestrian Promenade



Office Building with Parking to the Rear

Industrial



Industrial Building with Architectural Detailing to Break Up Building Massing

Rural Enterprise Zone



Small-Scale Commercial Building with Traditional Architecture and Parking to the Side and Rear



Landscaped Pedestrian/Bicycle Trail Connecting Different Uses



Small-Scale Commercial Building with Traditional Architecture

This page is intentionally left blank.

Chapter 9: Transportation

Overview

Land use and transportation are closely linked. Development has occurred where there is access to local roads and regional highways. As the county continues to grow, stakeholders will have to work together to address the safety, capacity, and efficiency of the transportation network. Since funding is limited, the county must set clear investment priorities.

Powhatan County's rural heritage has influenced development of its transportation system. The county's roadway system is dominated by two-lane rural roads that were not designed or intended to carry high volumes of traffic. As the Richmond Metropolitan Area has grown, Powhatan County (especially the eastern portion of the county) has felt the pressures of growth on its roadway network. The primary challenge for the future will be finding the appropriate balance between preserving the county's rich rural heritage and quality of life and meeting the mobility needs of a growing population.

One of the most effective ways of finding this balance is by recognizing the connections between land use and transportation policies. An important component of this comprehensive plan is development of an updated Countywide Future Land Use Plan, which identifies future growth areas. Realization of the Countywide Land Use Plan will have significant impacts on transportation infrastructure and will necessitate development of new roads.

A Major Thoroughfare Plan has been prepared to accompany and coordinate with the *Countywide Land Use Plan* in Chapter 8: *Land Use and Community Character*. The Countywide Future Land Use Plan (Map 6) envisions how land will be developed over the next twenty to thirty years, while the Major Thoroughfare Plan identifies roadway improvements that are needed to support projected growth. The Major Thoroughfare Plan and recommended transportation strategies are consistent with the updated land use plan and other policies identified in the comprehensive plan.

Key Issues

Following are key transportation issues needing attention:

Route 60

Route 60 (Anderson Highway) is the main transportation corridor in Powhatan County. It carries high volumes of traffic, with motorists traveling to local and regional destinations. Approximately 34,000 vehicles per day use Route 60 at the Chesterfield County line (Virginia Department of Transportation: 2016 Traffic Counts). Wide tree-lined medians contribute to the county's rural identity and character.

As growth continues, new development will likely request access to Route 60. Providing access to adjacent properties while maintaining capacity and adequate levels-of-service will require management by the county and the Virginia Department of Transportation (VDOT). To minimize curb cuts along Route 60, streets in and around growth areas should be designed as loop roads that are integrated into developments (rather than parallel frontage roads). Possible roadway configurations will need to be explored as part of future planning efforts.

In 2016 and 2017, Powhatan County worked with VDOT and other agencies to complete a series of studies that looked at mobility and future land uses along the Route 60 corridor:

- Route 60 Corridor Study: Maidens Road to Cumberland County Line (August 2016);
- Route 60 East Corridor Advance Planning Study (October 2016); and
- Route 60 Corridor: East Special Area Plan (March 2017).

These studies identified ways Powhatan County can increase roadway capacity, while maintaining the roadway's character.

Route 711

Route 711 (Huguenot Trail) is a historic and highly-attractive corridor, which has been designated a *Virginia Byway* by the Commonwealth Transportation Board (CTB). Safety improvements are needed along the corridor.

Connections between Route 60 and Route 711

There is a need to consider and plan for opportunities for minor connectors between Route 60 and Route 711.

Transportation Funding

There are major concerns about funding for roadway improvements. Prioritization of projects is important and necessary.



Two-Lane Roadway in Powhatan County
Source: Powhatan County

Recommendations

Eight transportation objectives have been developed to guide action and decisions related to transportation, mobility, and access in Powhatan County. The objectives include a focus on existing regional and local transportation partnerships and maximizing limited funding resources for major transportation improvements. The objectives also recognize the importance of developing viable alternatives to driving,

to both relieve congestion and provide valuable recreation and health benefits to the community. Specific strategies appear under each objective. A main mechanism for action on these objectives is implementation of the Major Thoroughfare Plan, which follows. Another key component of implementation is pursuit of land use recommendations that are highlighted in *Chapter 8: Land Use and Community Character*.

Goal: Transportation	
Powhatan County will have a transportation system that is coordinated with land use patterns and community character, with an acceptable level-of-service that supports economic development and maintains a high-quality of life.	
Objectives and Strategies: Transportation	
Objective TR.1 Maintain the long-term safety and capacity of the county's major road corridors to preserve residents' quality of life and enhance economic well-being.	Strategy TR.1.a Implement the county's <i>Major Thoroughfare Plan</i> according to the recommended project prioritization, as funds are available.
	Strategy TR.1.b Pursue small area and corridor studies that may overlap jurisdictional boundaries to promote orderly growth, provision of infrastructure and services, and coordinated planning.
Objective TR.2 Foster development of an interconnected road network that provides all residents with safe and convenient access and mobility.	Strategy TR.2.a Identify opportunities for future regional transit service into the county
	Strategy TR.2.b Work with regional partners to enhance Travel Demand Management (TDM) programs targeted at commuters to reduce single-occupant vehicle trips during peak travel times.
	Strategy TR.2.c Promote connectivity of secondary roadways as shown on the Major Thoroughfare Plan to reduce the traffic load on major arterials throughout the county.
Objective TR.3 Achieve a functional road network with a context-sensitive design that reinforces the county's rural character and helps preserve natural and historic resources.	Strategy TR.3.a Employ context-sensitive roadway design solutions for all Major Thoroughfare Plan projects to preserve rural character and protect valuable environmental, historic, and cultural resources.

Objectives and Strategies: Transportation	
Objective TR.4 Promote improved safety and capacity along travel corridors.	Strategy TR.4.a Consider local financing of lower-cost transportation improvements (e.g. access management, intersection improvements, targeted safety improvements, and similar projects) through the county’s Capital Improvement Program (CIP) or other local initiatives.
Objective TR.5 Promote “complete street” designs that incorporate pedestrian- and bicycle-friendly facilities and are compatible with land use objectives, including distinctions between rural character and strategically-located mixed-use districts.	Strategy TR.5.a Encourage pedestrian and bicycle improvements, especially in new developments, to enhance walkability and provide valuable recreation and health benefits.
	Strategy TR.5.b Where appropriate, “complete street” designs should be implemented on new roads and improvements to existing roads.
	Strategy TR.5.c Work with VDOT to include pedestrian and bicycle facilities on major roadway improvement projects.
	Strategy TR.5.d Create multi-modal connections (transit/bicycle/pedestrians) at strategic transportation hubs throughout the county.
Objective TR.6 Continue to pursue alternative funding sources for transportation projects of countywide significance.	Strategy TR.6.a Require developers to fund transportation improvements and mitigations related to development of their projects.
Objective TR.7 Preserve Route 711 as a scenic corridor.	Strategy TR.7.a Ensure that any future improvements to Route 711 are sensitive to its rural and historic character.
	Strategy TR.7.b Where appropriate, consider alternative methods of intersection control (e.g., roundabouts) that can mitigate congestion and potentially serve as community gateways.
Objective TR.8 Continue to develop Route 60 as the county’s primary commercial and economic development corridor, and provide transportation improvements to meet future travel demands for various types of trips and users.	Strategy TR.8.a Require comprehensive traffic impact analyses for new development.
	Strategy TR.8.b Continue to implement the county’s access management standards.

Major Thoroughfare Plan

The Major Thoroughfare Plan for Powhatan County is shown in Map 10 (p. 135) and recommended projects are detailed in Table 13. The Major Thoroughfare Plan is a system plan intended to improve roadway conditions countywide and along different types of roads. This plan was developed through an iterative process that involved:

- Analysis of existing and projected traffic volumes and roadway capacities;
- Examination of the functional classification system;
- Analysis of environmental issues and other constraints;
- Discussions with the development community; and
- Detailed participation by the TSG and other stakeholders.

Purpose

The purpose of the county's Major Thoroughfare Plan is to promote development of the most appropriate roadway system to meet existing and future travel needs. A thoroughfare plan is a long-range vision that describes a functional hierarchy of major roads that permits travel between origins and destinations with directness and safety. Although all of the recommended improvements are anticipated to be needed in the future, it is recognized that not all of these projects can be built in the short-term and that projects will need to be better defined as they approach implementation. The Major Thoroughfare Plan identifies needs and lays the groundwork for future, more detailed, studies that more precisely delineate corridor alignments, evaluate environmental and other impacts, and identify appropriate funding sources.

The Major Thoroughfare Plan has several objectives, including:

- Ensuring consistency with the Countywide Land Use Plan;
- Providing for the orderly development of an adequate roadway network as land development occurs or as traffic increases;
- Preserving the county's quality of life and rural heritage while reducing impacts on the environment, historic sites, parks, neighborhoods, and other valuable assets; and

- Creating common expectations among county officials, the development community, and residents and property owners.

Key Elements of the Major Thoroughfare Plan

Focus on Major Routes

The county's major transportation corridors (Route 60, Route 522, and other major and minor arterials) will absorb much of the new traffic growth, including new through traffic and local traffic generated by new development. The prioritization plan provides a reasonable implementation strategy to address these major concerns.

Funding for New Projects

The plan assumes that most proposed new roadways (shown with dashed lines on the Major Thoroughfare Plan) by and large will be developer-driven, particularly in the targeted growth areas.

Safety and Capacity Improvements

The majority of proposed improvements are projects such as pavement widening, roadway straightening, turn lane additions, and intersection improvements that are aimed at improving safety and enhancing capacity. Many of these are "spot" improvements – a corridor may be defined for improvement but actual improvements would be made at key and targeted locations. Some corridors may require safety improvements along the entire corridor.

Intersection Improvements

Some intersection improvements are proposed to enhance safety and increase capacity. Given limited transportation funding, intersection improvements can be an effective way of addressing immediate needs without the major costs of roadway widening and new construction. Some of these proposed projects are incorporated in the Major Thoroughfare Plan as part of other corridor improvements.

Table 12: Minimum Recommended Right-of-Way Width

Road Type	Minimum Right-of-Way Width (Feet)
Major Arterial	100
Minor Arterial	100
Rural Collector	70

Route 711

The Major Thoroughfare Plan recommends that Route 711 remain two lanes west of Route 635 (Manakintown Ferry Road), with improvements focusing on safety and spot intersection capacity improvements. Implementing access management measures will be important to minimize additional degradation of capacity and roadway character. Keeping Route 711 as a two-lane road west of Route 635 (Manakintown Ferry Road) will require improvements to secondary roads, and potentially construction of a limited number of key new connectors, between Route 711 and Route 60.

Route 711 has already been widened to four lanes from State Route 624 (Venita Road) to a point 0.4 miles east of Route 288. In 2017, construction began to widen Route 711 from the Chesterfield County line to the existing four-lane segment (0.4 miles east of Route 288).

Route 60

As the county's major east-west route, Route 60 will continue to handle the majority of through traffic going in and out of Chesterfield County, as well as a significant number of local trips. The Major Thoroughfare Plan recommends widening improvements to Route 60 that are consistent with ongoing regional planning efforts. Future roadway improvements in the proposed growth areas will feed into the Route 60 system and other adjacent roadway networks.

Project Prioritization

Table 13 details each of the recommended roadway projects that are part of the Major Thoroughfare Plan and prioritizes each as either short-, medium-, or long-term projects. It is important for future planning purposes to prioritize projects to maximize limited funding opportunities and ensure that the highest-impact projects receive first focus. Priorities are determined by anticipated need, projected impacts of nearer-term projects, projected impact of the project on the overall county roadway network, and potential funding sources.

- *Short-Term Projects*

These are projects expected to be completed within ten years. Proposed improvements are included within the Six-Year Improvement Program, or they are other safety improvement

projects that could be funded with local or state funds (as they become available). Some are developer-driven projects that are anticipated to be completed within this timeframe.

- *Medium-Term Projects*

These are projects anticipated to be completed within the ten- to fifteen-year time horizon. Most of these projects are developer-driven, so their implementation timeframe will be dependent on the timeframe of development (i.e., some projects may be built in the short-term if development happens sooner than expected, and some may be longer term).

- *Long-Term Projects*

These projects are anticipated to be built in a fifteen- to twenty-year (or longer) timeframe. The anticipated need is long-term and funding sources have not been identified.

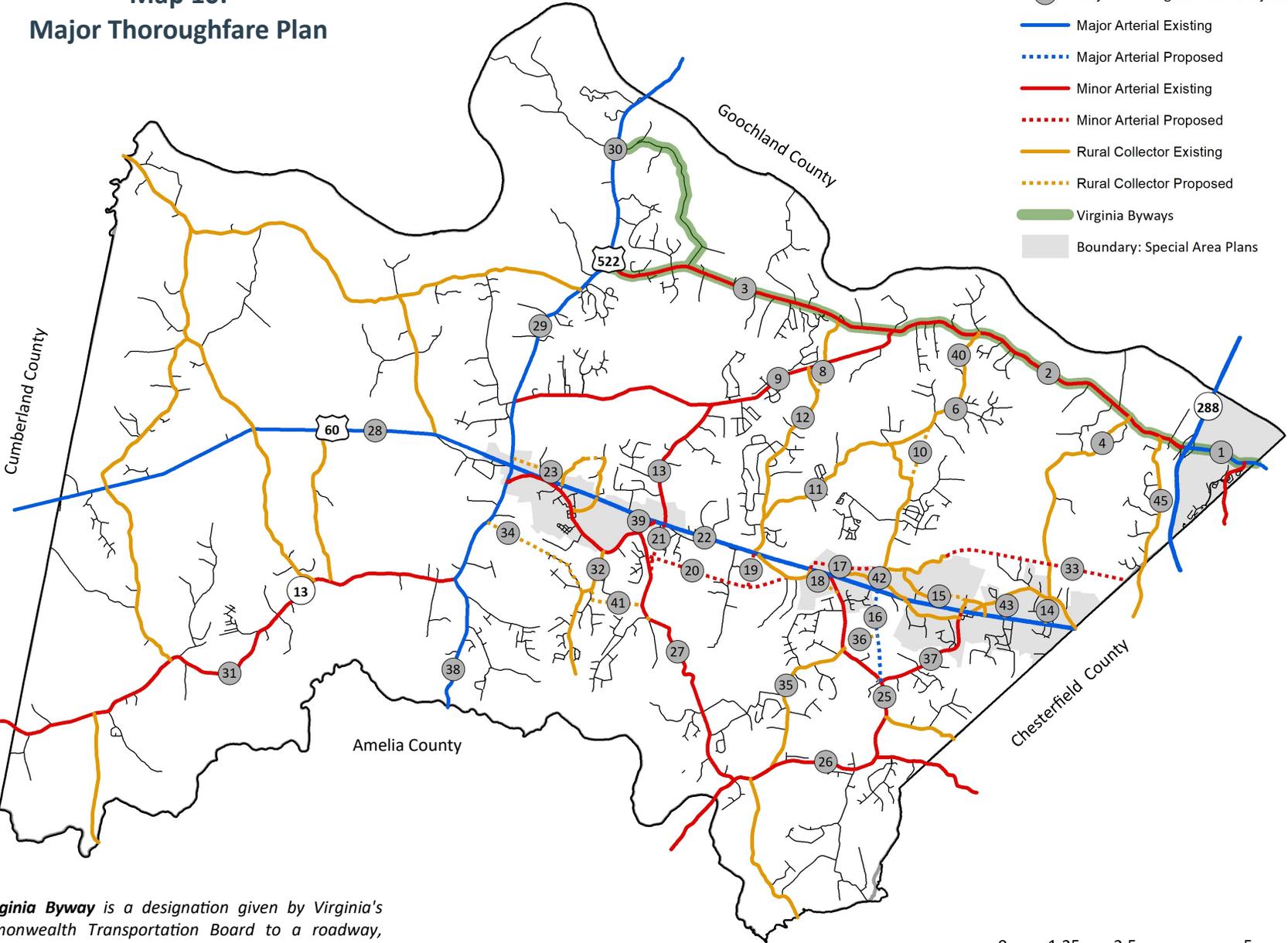
Bicycling

Bicycling, for both commuting and recreational purposes, is an important component of the county's transportation system. Because most of the county's roadways were developed as rural roads, they typically are not well suited for safe and convenient bicycle travel. Currently, U.S. Bike Route 1 runs through the southeastern portion of the county along Genito Road, and three other roads have "Share the Road" signs. No striped bicycle lanes or formal multi-use or greenway trails exist in the county.

The county has been an active participant in regional bicycle and pedestrian planning efforts. The *2004 Richmond Regional Bicycle and Pedestrian Plan* includes an assessment of existing bicycle and pedestrian conditions in the county and plans for potential improvements. The county is also participating in the planning of the James River Heritage Trail, a statewide trail network running through the state along the James River. It is anticipated that the James River Heritage Trail will traverse the northern portion of Powhatan County.

Powhatan County should continue to participate in regional bicycle and pedestrian planning efforts. The needs of bicyclists and pedestrians should also be accounted for in new development and in the development of roadway improvements.

Map 10: Major Thoroughfare Plan



Note

A **Virginia Byway** is a designation given by Virginia's Commonwealth Transportation Board to a roadway, which is of historic significance and/or scenic interest or links areas of historic significance and/or scenic interest.



Table 13: Major Thoroughfare Plan Project List

Route No.	Road Name	From	To	Length (mi.)	Description	Plan Reference ^e	Priority ^f	Cost ^g	Map ID
711	Huguenot Tr.	Route 288 interchange	Chesterfield Co. Line	1.9	Widen road (4+L) and replace bridge	L RTP, STIP, SYIP (Construction Began in 2017)	S	\$20,411,653	1
711	Huguenot Tr.	Route 288 Interchange	Three Bridge Rd.	6.9	Widen pavement, straighten, realign intersections and add turn lanes as necessary ^a		S	\$39,157,931	2
711	Huguenot Tr.	Three Bridge Rd.	Route 522	6.1	Widen pavement, straighten, realign intersections and add turn lanes as necessary ^a	RL RTP*	S	\$34,617,881	3
615	Judes Ferry Rd	Norwood Creek Rd.	0.25 mi S of Federal Hill Farms Rd	0.8	Widen pavement, straighten, realign intersections and add turn lanes as necessary		S	\$4,540,050	6
615	Three Bridge Rd	Huguenot Tr.	Academy Rd.	4.2	Widen pavement, shoulders, realign intersections and add turn lanes as necessary	RL RTP*	S	\$23,835,263	9
614	Mill Rd	Red Lane Rd.	Judes Ferry Rd.	3.4	Widen pavement, straighten, realign intersections and add turn lanes as necessary		S	\$19,295,213	11
603	Academy Rd	US 60	Three Bridge Rd.	2.9	Widen pavement, straighten, realign intersections and add turn lanes as necessary		S	\$16,457,681	13
604	Genito Rd	Amelia Co. Line	Chesterfield Co. Line	4.7	Widen pavement, straighten, realign intersections and add turn lanes as necessary		S	\$26,672,794	26

Route No.	Road Name	From	To	Length (mi.)	Description	Plan Reference ^e	Priority ^f	Cost ^g	Map ID
603	Rocky Ford Rd.	Old Buckingham Rd.	Genito Rd.	6.2	Widen pavement, straighten, realign intersections and add turn lanes as necessary		S	\$1,394,524	27
522	Maidens Rd.	1/4 mi S of Old River Trl.	1/4 mi N of Old River Trl.	0.5	Add turn lanes, shoulders and realign intersection to accommodate state park traffic	SYIP (Construction to Begin in 2017)	S	\$3,082,750	30
620	Mill Quarter Rd.	Old Buckingham Rd.	Dead End	2.8	Widen pavement, straighten, realign intersections and add turn lanes as necessary		S	\$1,106,297	32
610	Schroeder Rd.	Genito Rd.	Dorset Rd	3.3	Widen pavement, straighten, realign intersections and add turn lanes as necessary		S	\$18,727,706	35
634	Stavemill Rd.	Dorset Rd.	Urbine Rd.	2.3	Widen pavement, straighten, realign intersections and add turn lanes as necessary		S	\$13,052,644	37
609	Giles Bridge Rd.	Amelia Co. Line	Old Buckingham Rd.	2.8	Widen pavement, straighten, realign intersections and add turn lanes as necessary	RLRTP	S	\$15,890,175	38
613	Judes Ferry Rd.	Huguenot Tr.	Norwood Creek Rd.	1.9	Widen pavement, straighten, realign intersections and add turn lanes as necessary		S	\$10,782,619	40
--	New Collector 5	Route 60	Page Rd.	0.5	Construct 2L collector on new alignment	L RTP, SYIP	S	\$3,405,038	43

Route No.	Road Name	From	To	Length (mi.)	Description	Plan Reference ^e	Priority ^f	Cost ^g	Map ID
60	Anderson Hwy.	Route 522	Chesterfield Co. Line	12	Realign intersections, modify signals, and add turn lanes, as necessary		M	\$2,107,480	22
635	Manakin Town Ferry Rd.	Huguenot Tr.	1.7 mi S of Huguenot Tr.	1.7	Widen pavement, straighten, realign intersections and add turn lanes as necessary		M	\$12,244,123	4 ^d
628	Red Lane Rd.	Route 60	0.6 mi S of Three Bridge Rd.	3.8	Widen pavement, straighten, realign intersections and add turn lanes as necessary		M	\$27,369,215	12
635	Manakin Town Ferry Rd. Ext.	Page Rd.	Route 60	0.6	Extend as 2L collector on new alignment		M	\$5,185,746	14
1343	Carter Gallier Boulevard Ext.	Luck Stone Rd.	0.2 mi. east of South Creek One	1	Extend 2L collector on new alignment		M	\$7,641,557	15
613	Judes Ferry Rd. Ext.	Route 60	Dorset Rd.	1.8	Extend as 2-4L (possibly divided) major arterial on new alignment		M	\$33,989,841	16
612	Old Church Rd. Ext.	Judes Ferry Rd.	Route 60	1.7	Extend as 2L minor on new alignment		M	\$14,692,947	17
678	Rocky Oak Rd.	Route 60	Dorset Rd.	1	Extend and realign road as 2L minor arterial		M	\$8,642,910	18

Route No.	Road Name	From	To	Length (mi.)	Description	Plan Reference ^e	Priority ^f	Cost ^g	Map ID
628	Red Lane Rd. Ext.	Route 60	New Minor Arterial 1	0.7	Extend as 2L minor arterial on new alignment		M	\$6,050,037	19
--	New Collector 2	Route 522	Branchway Creek Dr.	2.1	Construct 2L collector on new alignment		M	\$15,125,093	23
622	Dorset Rd.	Genito Rd.	Route 60	4.2	Widen pavement, straighten, realign intersections and add turn lanes as necessary; may include closure of intersection with US 60 in conjunction with #17 & #18		M	\$36,300,222	25
60	Anderson Hwy.	Route 522	Cumberland Co. Line	8.9	Widen to 4L with grassy median, realign intersection and add turn lanes, as necessary	RLRTP	M	\$110,120,034	28
522	Maidens Rd.	Goochland Co. Line	Route 60	8.8	Widen to 4L with grassy median, realign intersection and add turn lanes, as necessary	RLRTP, STHP	M	\$108,882,730	29
13	Old Buckingham Rd.	Cumberland Co. Line	Route 60	16.9	Widen pavement, straighten, realign intersections and add turn lanes as necessary	RLRTP	M	\$121,720,982	31
--	New Minor Arterial 3	Chesterfield Co. Line	Judes Ferry Rd.	4.0+/ 1.3	Construct 4L divided arterial on new alignment. Extend to Huguenot Springs Rd; upgrade existing road to 4L divided.		M	\$100,081,199	33
--	New Collector 3	Mill Quarter Rd.	Old Buckingham Rd.	2.4	Construct 2L collector on new alignment		M	\$17,285,820	34

Route No.	Road Name	From	To	Length (mi.)	Description	Plan Reference ^e	Priority ^f	Cost ^g	Map ID
610	Schroeder Rd. Ext.	Dorset Rd.	Judes Ferry Rd. Ext.	0.8	Extend as 2L collector on new alignment		M	\$6,914,328	36
603	Rocky Ford Rd. Ext.	Old Buckingham Rd.	Route 60	0.4	Extend as 2L minor arterial on new alignment and align with existing median break; includes closure of adjacent intersection of Old Buckingham Rd at US 60		M	\$3,457,164	39
--	New Collector 4	Mill Quarter Rd	Rocky Ford Rd.	1.3	Construct 2L collector on new alignment		M	\$9,363,153	41
613	Judes Ferry Rd.	Route 60	Old Church Rd.	0.5	Widen to 4L divided in conjunction with #15, #16, #17 and/or #33.		M	\$7,423,823	42
607	Huguenot Springs Rd.	Huguenot Tr.	Chesterfield Co. Line	2.8	Widen pavement, straighten, realign intersections and add turn lanes as necessary		M	\$20,166,790	45
628	Red Lane Rd.	Three Bridge Rd.	0.6 mi S of Three Bridge Rd.	0.7	Reconfigure intersection with Three Bridge Rd to align with Lees Landing Rd		L	\$6,768,038	8
613	Judes Ferry Rd Ext	0.4 mi N of Hancock Rd.	0.25 mi S of Federal Hill Farms Rd.	1.2	Extend as 2L collector on new alignment		L	\$11,602,350	10
--	New Minor Arterial 1	Old Buckingham Rd.	Rocky Oak Rd.	3.6	Construct 2L minor arterial on new alignment		L	\$91,406,340	20

Route No.	Road Name	From	To	Length (mi.)	Description	Plan Reference ^e	Priority ^f	Cost ^g	Map ID
VA 603	Academy Rd	US 60	New Minor Arterial 1	1.2	Extend as 2L minor arterial on new alignment	PNL*	L	\$30,468,780	21

* One or more projects are planned and/or programmed along this corridor but additional improvements are warranted. Please refer to the indicated plan(s) for additional details on existing projects.

^a To remain consistent with the Virginia Byway designation, it is anticipated that the road will remain with two travel lanes with improvements focusing on safety and spot intersection capacity improvements.

^b Project alignment is subject to change based on future land use designations; this project may conflict with the Agricultural Forest Designation and rural preservation land use designations.

^c Project may conflict with the rural preservation land use designation.

^d Projects #5, #7, #24, #44, from drafts were removed.

^e STIP = State Transportation Improvement Program; SYIP = Six-Year Improvement Program; LRTP = Richmond Regional Transportation Planning Organization (TPO) *plan2040* (Regional Long-Range Metropolitan Transportation Plan); RL RTP = Richmond Regional Planning District Commission (RRPDC) 2035 Rural Long-Range Transportation Plan; PNL = Regional Priority Needs List; STHP = VDOT 2035 Surface Transportation Plan

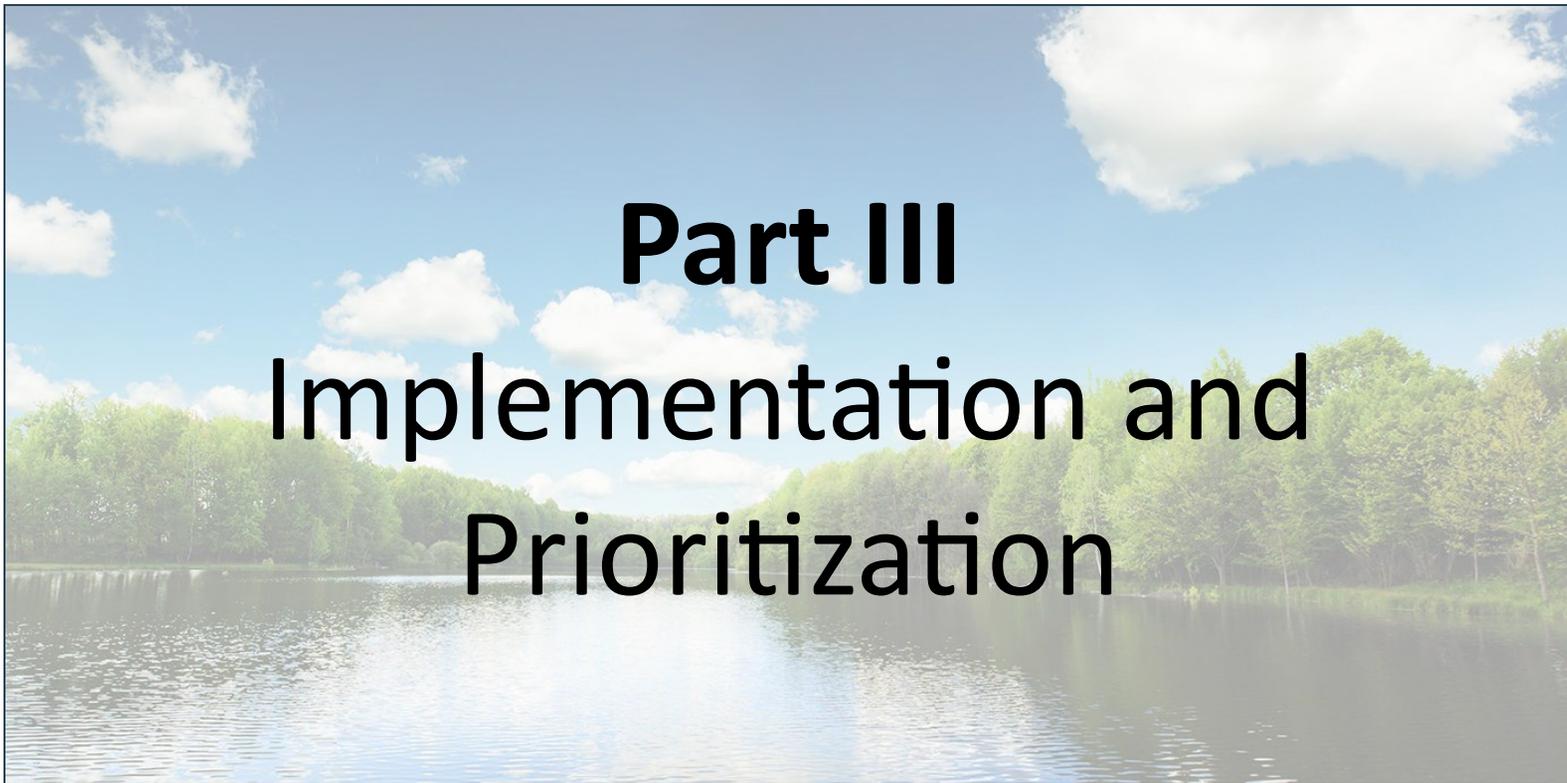
^f S = Short-term (0-10 years); M = Medium-term (10-15 years); L = Long-term (>15 years)

^g Cost estimates are planning –level cost estimates. Costs are inflated to estimated construction year based on short-, medium-, and long-term designations. Where available, actual VDOT cost estimates are used.

^h See Route 60 Corridor: East Special Area Plan (VDOT: March 2017).

- Cost estimates were increased 12.1 percent from estimates provided in the 2010 Long-Range Comprehensive Plan, since inflation between 2010 and 2017 was 12.1 percent.
- New location projects are generally assumed to be developer-driven, particularly in the special area plans.
- Unless otherwise indicated, pavement widening is for safety purposes only. Widening could include gravel or paved shoulders; shoulder wedge projects; or widened travel lanes.
- Projects in Table 13 include projects on paved roads only. As part of the Six-Year Improvement Program process, unpaved roads in need of paving and/or improvement are identified. Paving projects currently identified include Kool Lane (Route 655). Projects should continue to be identified through this process as needs are identified and funds are available.

This page is intentionally left blank.



This page is intentionally left blank.

Chapter 10: Action Prioritization

The updated comprehensive plan builds upon the county's successes and provides guidance for creating a sustainable and unique community. The plan recommends that the county revise and update zoning and subdivision regulations to achieve the vision expressed in the plan. It is inevitable in the face of change that there will be a

period of transition from the established regulations to the completion of a full update. The following action prioritization indicates which efforts the county should undertake first and which efforts may be addressed over a longer timeframe.

Action	Department/Agency*	Short-Term (Year 1)	Mid-Term (Years 2-5)	Long-Term (Years 6-10)
Fiscal Impact Analysis	Finance Economic Development Planning	Begin Assessment Identify Feasibility of Impact Fees	Implement Impact Fees or Other Requirements Monitor and Update Analysis	Monitor and Update
Zoning and Subdivision Ordinance Amendments	Planning Planning Commission Board of Supervisors	Begin Zoning Diagnosis Begin Ordinance Updates	Adopt Revised Regulations Implement New Regulations	Monitor and Update
Capital Improvement Plan	Planning Finance Planning Commission County Administrator Board of Supervisors	Review CIP and Update in Accordance with Recommendations from Other Efforts	Carry Out Improvements Monitor and Update	Monitor and Update
Topical and Strategic Plans	Planning Economic Development Other Agencies Planning Commission Board of Supervisors	Route 60 East Master Plan (Coordinate with Zoning) Route 711 Village Master Plan (Coordinate with Zoning)	Courthouse Village Master Plan (Coordinate with Zoning)	Other Strategic Plans
Monitor and Update Plan Amendments	Planning Planning Commission	Ongoing	Ongoing	Ongoing

*The first agency listed is the lead agency for this item.

This page is intentionally left blank.

Chapter 11: Implementation Tools

Overview

This comprehensive plan contains the goals for the future of the county and an extensive set of recommendations to reach those goals. The recommendations range in their specificity and the level of effort required in achieving them. There are many tools localities can use to realize the plan's goals. The Virginia Chapter of the American Planning Association (APA) maintains a comprehensive guide to the tools available entitled *Managing Growth and Development in Virginia: A Review of the Tools Available to Localities*, which is kept up to date with changes in State Code and laws.

Implementation Tools

One or more of these tools may assist in the implementation of recommendations made in this plan:

- Development Regulations
 - ◊ Zoning Ordinance
 - ◊ Subdivision Ordinance
 - ◊ Environmental Regulations
 - ◊ Utilities
 - ◊ Overlay Districts
 - ◊ Design Guidelines
- Urban Development Areas (UDAs)
- Proffers
- Incentives
- Development and Facility Provision Coordination
- Capital Improvement Plan (CIP)
- Strategic Plans
- Conservation Easements
- Agricultural/Forestral Districts (AFDs)
- Land Use Taxation
- Regional Cooperation and Collaboration

Using the Subdivision and Zoning Ordinances as Implementation Tools

Localities throughout Virginia utilize their subdivision and zoning ordinances (which are regulatory tools) to help realize the vision set forth in their comprehensive plans. In recent years, Powhatan County has adopted significant revisions to its subdivision and zoning ordinances to realize recommendations made in the 2010 Long-Range Comprehensive Plan:

- A complete rewrite of the zoning ordinance was completed in 2014. New zoning districts were created that align with land use designations shown in the 2010 Long-Range Comprehensive Plan (Countywide Future Land Use Plan), and new development standards were created to reflect concepts presented in recommended land use policies.
- A complete rewrite of the subdivision ordinance was completed in 2017, incorporating design standards recommended in the 2010 Long-Range Comprehensive Plan.
- In 2019, the Board of Supervisors eliminated the R-C zoning district, which (contrary to recommendations made in the 2010 Long-Range Comprehensive Plan and this document) enabled strip-style commercial development to occur along Route 60, one of the community's major transportation corridors. This change helped the zoning map better align with Countywide Future Land Use Plan and recommendations within the document that call for more clustered commercial and mixed-use development at strategic locations.

POWHATAN COUNTY

2019 Long-Range Comprehensive Plan

Adopted June 24, 2019