ORANGE COUNTY, VIRGINIA
2023 COMPREHENSIVE PLAN

Adopted by the Board of Supervisors on October 24th, 2023
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VISION STATEMENT:

“Sustain the rural character of Orange County while enhancing and improving the quality of life for all its citizens.”
ACKNOWLEDGEMENTS

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Staff wishes to thank all the County departments and Constitutional Officers which contributed information for the Plan.
Established in 1734, Orange County is named in honor of William, Prince of Orange, who in that year married Anne, Princess Royal of England. It has the distinction of having been the largest Virginia county ever formed. Orange covered a vast territory extending from its present eastern boundary west to the Mississippi River and north to the Great Lakes. The states of Ohio, Illinois, Indiana, Kentucky, and West Virginia, plus the southern parts of Michigan and Wisconsin and the western end of Pennsylvania were at one time all part of Orange County.

In 1710 Lieutenant Governor Alexander Spotswood arrived to take charge of the Virginia colony. In 1714, he settled a group of Germans at the edge of the Rapidan River in what is now eastern Orange County. He named the settlement “Germanna,” combining the identity of its inhabitants with the name of England’s Queen Anne. In 1716, Spotswood led an expedition from Germanna west over the Blue Ridge Mountains, a venture that re-ignited the westward expansion of British America, ultimately to the Pacific. The people who accompanied Spotswood were dubbed by him “Knights of the Golden Horseshoe,” many of whom figured prominently in later Virginia history.

A wide variety of mineral deposits were discovered in the county, including iron ore, which Spotswood mined and smelted. That iron contributed significantly to the American Industrial Revolution. The clear-cutting of timber to feed the furnaces led to the regrowth of a temperate-zone jungle called the Wilderness. A visiting William Byrd II was impressed both by the iron operations and by Spotswood’s grand home, which he dubbed the “Enchanted Castle,” the name by which its ruins are known today. In the 1820s, gold was discovered and mined commercially, with one mine continuing to operate until 1937.

In 1722, England’s King George I awarded a patent of 8,500 acres to Col. James Taylor II, a former Knight of the Golden Horseshoe. Much of today’s Town of Orange lies within that tract. Taylor then built his home, “Bloomsbury.” The Bloomsbury house, privately owned, still stands. Two of Taylor’s great-grandsons became Presidents of the United States: Zachary Taylor and James Madison, the “Father of the Constitution.” Madison was instrumental in the drafting and ratification of the U.S. Constitution and in the drafting and adoption of its Bill of Rights amendments. His lifelong home “Montpelier” stands near the town of Orange and is now a National Trust property, open to the public.

The most significant actions of the American Revolution that took place in Orange County were a British cavalry raid that terrorized the present-day Antioch Church area for several days, and the Marquis de Lafayette’s marches through the county in 1781. One road Lafayette took is called the “Marquis Road.” During his 1824-25 return to America, Lafayette visited Orange County several times.
While the War of 1812 had little effect on the county, the American Civil War was an altogether different matter. Orange County and the surrounding area was the stage for many engagements and events, including a cavalry battle fought in the streets of the Town of Orange in 1862. Early on, the Confederate army began to develop a defensive line along Orange County’s Rapidan River boundary in order to protect both a major hospital facility at Gordonsville and the county’s strategic transportation network.

In November 1863, Union General George Meade and his Army of the Potomac crossed the Rapidan into eastern Orange County during the Mine Run Campaign. Confederate General Robert E. Lee’s Army of Northern Virginia blocked the threat, and Lee and his army then spent the winter of 1863-64 quartered in Orange County behind the Rapidan defensive line. The following May, the Union army, now accompanied by General U. S. Grant, again crossed the Rapidan into the Wilderness of eastern Orange County and into what became one of the war’s bloodiest battles. The Battle of the Wilderness was a tactical draw, but Grant employed his superior resources to continue attacking out of Orange County towards Richmond and, ultimately, to Appomattox.

With Orange County in the “Tobacco Belt,” slavery remained an important labor system right up to the Civil War. Even so, the “peculiar institution” characteristically involved only a few slaves per owner, with slave owners being a minority of the county’s population. Following the Civil War, many freed slaves remained in the county. Initially, many lived in “freedman’s villages,” and a few of those settlements survive to this day. Some former slaves became tenant farmers, others acquired their own land to farm or worked at various trades. The Gilmore Freedman’s Farm at Montpelier was the first such farmstead in the Nation to be restored and opened to the public.

The arrival of the Louisa Railroad at Gordonsville in 1840 had transformed that town into a transportation and commercial center. The subsequent arrival of the Orange & Alexandria Railroad in 1854 quickened the pace of that development, and Gordonsville dominated the regional economy until the early 1900s.

During World War II, Andrew Maples of Orange County became a Tuskegee Airman, one of the war’s famous African American fighter pilots, and over 40 of the county’s young men landed on Normandy’s Omaha Beach on D-Day 1944. During that time, Orange’s farms, factories, shops and stores were busier than they had ever been before - or since. The county leaders are now adding tourism to their economic development planning, and a viable local economy is emerging.

Orange County’s current contributions to our now large and populous Nation are comparatively more modest than those of its earlier days. Its heritage, its historic sites and venues, and its scenic beauty continue to make it interesting and attractive to present-day residents and visitors alike.
I. Introduction: Why a Comprehensive Plan?

In 1975, the Virginia General Assembly passed legislation requiring that each County create a planning commission, enact a subdivision ordinance, and adopt a comprehensive plan. The law also stipulated that the planning commission must review the comprehensive plan at least once every five years.

A. Statutory Authority

Sec. 15.2-2223 of the Code of Virginia states (in part):

"In the preparation of a comprehensive plan the commission shall make careful and comprehensive surveys and studies of the existing conditions and trends of growth, and of the probable future requirements of its territory and its inhabitants. The comprehensive plan shall be made with the purpose of guiding and accomplishing a coordinated, adjusted, and harmonious development of the territory which will, in accordance with present and probable future needs and resources, best promote the health, safety, morals, order, convenience, prosperity, and general welfare of the inhabitants." (Code of Virginia § 15.2-2223)

Orange County began work on its initial comprehensive plan in May 1974, and it was adopted by the Board of Supervisors in June 1977. Subsequent revisions of the plan occurred in 1984, 1990, 1999, 2006, and 2009. The plan was rewritten in 2013 and amendments to that plan occurred in 2015, 2018, and 2023.

The first plan adopted in 1977 set forth a policy that “there will be no major
In the Comprehensive Plan, it was noted that changes in the quantity or quality of land uses” and that residential and industrial growth will be concentrated in the “Wilderness Area”. That clear and consistent land use policy has remained in all subsequent versions of the Comprehensive Plan and is reflected in the vision adopted in 2010. The 2013 plan update and the 2023 update reflect these preexisting policies: “As directed by the County’s Vision, the Land Use Plan is a balance between retaining the characteristics of the various communities and resources that exist in the County and identifying specific areas that can accommodate the facilities and infrastructure required to expand our economy.”

B. Purpose of the Plan

As a policy document, it is to be used to communicate the preferred use of land in designated areas for achieving the vision of the County within the land use context. It is a tool that can be used by the County’s elected officials, staff, and citizens to evaluate various land use options and development proposals for compatibility, suitability, as well as sustainability.

This Plan uses the most current information available to define and document the existing land uses within the County, and their general locations. A key objective of this Plan update was to incorporate new information, from sources such as the 2020 U.S. Census and numerous studies and reports, to create an accurate picture of the County as it is today, and to use this information as the baseline for planning over the next 5 to 20 years (or 50 years for the Germanna-Wilderness Area (GWA)). The Plan describes the major priorities related to future land use that contribute to achieving our vision. Priorities such as protecting historical areas and natural resources, preserving our farmlands, supporting private enterprise which will expand our local economy to create jobs and revenues, retaining the character of our communities and meeting the requirements for public facilities.

C. Utilizing this Plan

Section II of this Plan briefly describes the County’s existing land uses. Using the most current information available, such as U.S. Census data, state data sources, and local land records, a picture of the broad diversity of land uses throughout the County emerges. By documenting these current conditions, the County can form a useful baseline for future planning.

The next section of this Plan outlines the key goals and strategies that give focus to the planning process. Section IV, “Future Land Use,” describes a set of preferred land use categories and the general locations/areas for each. This section also highlights any expected changes from current uses and, most importantly, identifies areas where changes are not planned or generally supported. In addition to being a tool to aid in judging land use proposals, this section serves to communicate the expectations and preferences of the County to all stakeholders involved in the land use process in Orange County.
The section related to public facilities describes the location of the various components of existing public resources and facilities. The Capital Improvements Plan (CIP) section gives a summary of how budgeting and planning for capital projects is impacted by the Comprehensive Plan. The last part of the body of the plan is a technical supplement that provides additional detail about the County, its people, and its economy.

The Germanna-Wilderness Area Plan (see Appendix B) is intended for use as a stand-alone planning document, but still within the larger context of the goals and objectives of the Comprehensive Plan.
D. The Vision for Orange County

The vision for the County, as adopted by the Board of Supervisors on October 19, 2010, is to:

*Sustain the rural character of Orange County while enhancing and improving the quality of life for all its citizens.*

Underlying this vision are several principles that are used to guide in the planning of the County’s future. Principles such as these directly impact the decisions and priorities described in the future land use section. The underlying principles of this vision are that:

1. We wish to retain the characteristics that give identity to the mix of communities that exist within the County.
2. We understand that a vibrant economy contributes to the sustainability of our community and our quality of life.
3. Wise resource planning and land use decisions directly impact our ability to attract and support a business base, while maintaining the rural nature of the County.

II. Existing Land Uses

A. Overview

The land area of Orange County is 341 square miles, or 218,240 acres. It should be noted the total area of the County changed slightly in 2020 with changes to the shared Orange/Spotsylvania boundary and Orange/Greene boundary. For the purposes of this plan, the above acreage is used for consistency. According to the U.S. Census Bureau’s 2020 data, Orange County’s population was 36,254 residents, resulting in an average density of 107 persons per square mile.
Chart 1 below illustrates parcel distribution data based on parcel information containing acreage data obtained from the Commissioner of Revenue’s tax records.

<table>
<thead>
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<th>% of Parcel Total 2013</th>
<th>2023</th>
<th>% of Parcel Parcels (#) 2013</th>
<th>2023</th>
<th>Acreage (Total) 2013</th>
<th>2023</th>
<th>% of Acreage % of Acreage Total 2013</th>
<th>2023</th>
</tr>
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<td>1,068.24</td>
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<td>215,039.09</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

Parcel data from the Orange County Commissioner of Revenue.
Note: 2013 data was incomplete when obtained in 2013.

B. Forest and Woodlands

More acres in Orange County are forested than any other single feature. A 2016 report by the Virginia Department of Forestry found that 141,586 acres (62.7% of the total) are in public and private forests. Of that acreage, approximately 4% (5,851 acres) are public forests, and the remaining 96% (135,736 acres) are privately owned.

C. Agricultural

Approximately 115,500 acres in the County are enrolled in the agricultural land use taxation program as of 2023, or approximately 53% of the total acreage in the County. The 2017 Census of Agriculture County Profile indicated a total of 95,246 acres in actual farms with 42% of that total identified as cropland, 30% as pastureland, and 22% as woodland (the remaining acreage is undefined).

D. Residential

The Population Density map (please see Appendix) shows the 2020 U.S. Census population data by the County census block location. As can be seen, concentrations of residential land are located near the towns of Orange and Gordonsville as well as on the Rt. 3 corridor. A significant number of individual homes also exist throughout the County in the 200+ named subdivisions around communities like Barboursville, Rhoadesville, Unionville and Mine Run, typically adjacent to primary or secondary roads.
E. Conservation Easements and Conserved Lands

Although not a separate land use category that can be added to the above totals, approximately 19% (41,466 acres) of the County land area has been conserved through various means, which is an increase from the 15%/32,900 acres figures contained in the 2013 version of this Plan. Most of this area consists of conservation easements which total 39,707 acres. The remainder has been conserved through other means, including ownership by the federal government (e.g. the Fredericksburg and Spotsylvania National Military Park), ownership by the state (e.g. Department of Wildlife Resources and Department of Historic Resources), and ownership by a conservation-oriented nonprofit organization (e.g. the Memorial Foundation of the Germanna Colonies).
III. Goals, Objectives, and Strategies for Plan Implementation

Vision Statement:

*Sustain the rural character of Orange County while enhancing and improving the quality of life for all its citizens.*

As presented in this Plan’s introduction, the vision for Orange County emphasizes two primary planning objectives. The first is to develop plans and policies that work to retain the rural areas of the County, while the second objective is to develop plans and policies that lead to improvements in the quality of life for all citizens, which includes promoting beneficial economic growth and development.

Turning this vision into reality requires an understanding of where Orange County is today, and the issues that face the County in the future. Based on that analysis, realistic and attainable goals must be established to move us toward achievement of that vision. The County’s four main policy goals for the next 5 to 20 years, as well as implementation strategies, are found below.

Goal 1: Promote and preserve our unique historic and environmental resources.

**Objective A: Promote preservation of significant historical areas, sites, and buildings.**

**Strategies for Implementation:**

- Consider the potential impact of land use decisions on significant historic resources, particularly those listed on the National Register, or that are of regional significance.
- Promote the development of historic and environmental overlays.
- Require utility lines to be located underground for new development in historically significant areas.
- Consider transfer of development rights and conservation easements where appropriate.
Objective B: Sustain and enhance agricultural and forestal uses.

Strategies for Implementation:
- Develop plans to protect the County’s prime, class I & II, farm lands such as those with Davidson and Rabun-Davidson soils.
- Maintain the agricultural, forestal, and open space land use taxation programs.
- Support the Cooperative Extension Service and the Virginia Tech Agricultural Experiment Station in their efforts to promote alternative crop production and sustainable agricultural techniques.
- The rural areas of the County should remain agricultural and forestal in character and density. Development of rural areas should preserve agricultural areas for agricultural use, as well as other accessory and residential uses in conjunction with agriculture activities.
- Permit and encourage agricultural and forested uses, outdoor recreational uses, uses based on cultural, natural or historic resources or open spaces, and accessory uses in direct support of these uses.

Objective C: Develop plans to protect the quality and supply of surface water and groundwater and other valuable environmental resources.

Strategies for Implementation:
- Promote the use of low impact design techniques in new development.
- Promote Best Management Practices in all land uses to minimize surface and groundwater pollution.
- Promote groundwater protection measures (e.g. Everona Limestone Spur) through educational partnerships with regional and state agencies and commissions, such as the Culpeper Soil and
Water Conservation District, the Rappahannock-Rapidan Regional Commission, and the Department of Conservation and Recreation.

- Work with Rappahannock Rapidan Regional Commission and other agencies to implement Total Maximum Daily Load (TMDL) plans for improving water quality within the County.
- Engage in regional water supply planning to ensure short-, medium-, and long-term potable water needs are met.
- Require both above-and below-ground storage tanks to have containment measures that prevent contamination of surface and groundwater due to leaks and spills.
- Consider developing and implementing resource protection overlays as and where needed.

Goal 2: Ensure the county is a competitive location for economic development opportunities.

**Objective A:** Provide adequate adult training resources to ensure a marketable and sustainable local labor force.

**Strategies for Implementation:**
- Collaborate and coordinate with regional institutions of higher learning, Orange County schools, and businesses to expand Career and Technical Education (CTE) programs to meet the needs of existing and prospective local business and industry.
- Encourage the development of a work force entry program with the middle and high schools.

**Objective B:** Utilize the recommendations contained in the 2021 Orange County Economic Development Strategic Plan and target the following industries:
- Agribusiness, Food Processing & Tech.
- Business and Financial Services.
- Transportation and Logistics.
- Health Services.
- Light Manufacturing.

**Objective C:** Evaluate the County’s overall approach to retaining and attracting business and industry.

**Strategies for Implementation:**
- Continue implementation of the Economic Development Business Retention and Expansion Program (BRE) as part of the County’s Economic Development Existing Industry Plan.
Utilize resources available through the Central Virginia Partnership for Economic Development, the Virginia Partnership for Economic Development, and the Rappahannock Rapidan Regional Commission to enhance economic development opportunities.

Update the Zoning Ordinance, as well as other relevant ordinances, to communicate the type and scale of businesses preferred and promote timely processing of applications.

Encourage agricultural, commercial, and industrial enterprises that are compatible with Orange County’s unique features.

Evaluate a range of alternatives (such as a Community Development Authority (CDA); Special Taxing Districts; or Virginia Resource Authority) for improving infrastructure capabilities as and where needed.

Objective D: Assure that sufficient land, in desirable locations, is designated for economic development uses.

Strategies for Implementation:

- Develop “small area” plans for the designated Economic Development areas to determine whether lands within the areas are of adequate size, properly zoned, and have access to needed infrastructure and transportation systems.
- Encourage the development of technological and public infrastructure planning and implementation necessary for economic development efforts.
- Incorporate components of the preferred development plan recommended by the Wilderness Battlefield Gateway Study (November 2012) into a more detailed Rt. 3 Corridor Development Plan (see Appendix B).
- Consider the creation of Technology Zones to facilitate the start-up and growth of technology business ventures within the County.
Objective E: Promote tourism as a viable component of the County’s economy.

Strategies for Implementation:
- Update the plan for marketing tourism as an industry in the County and through strengthened alliances with the towns of Gordonsville and Orange.
- Develop a media strategy to market the rural characteristics and historic resources of Orange County to promote our agricultural and heritage tourism industries.
- Develop plans to celebrate major historic milestones such as the Battle of Wilderness Sesquicentennial and the Germanna Colony Tricentennial.
- Encourage start-up businesses which capitalize on the County’s history, culture, and the unique talents of citizens.
- Preserve historic and agricultural resources with adequate buffers from incompatible commercial, residential, and industrial activities.
- Encourage and support improvements that enhance the assets of Orange County as a visitor destination.
- Encourage the protection of transportation corridors to assure pleasing and aesthetic views to visitors.
- Promote and expand farm-related recreational activities as well as farm enterprise and farmer’s market opportunities.
- Support and promote the equestrian industry.

Objective F: Promote health services as a viable component of the County’s economy.

Strategies for Implementation:
- Target specific medical and wellness service industries to locate in Orange County.
- Identify partnering opportunities between regional medical facilities, regional post-secondary educational facilities and potential local businesses for health services.
- Promote economic partnerships between various medical and wellness businesses such as testing laboratories, therapy clinics, doctor/dentist offices, and other health providers.
Objective G: Develop and implement a comprehensive telecommunications strategic initiative that ensures the community’s current and future broadband and fiber optic needs are met.

Strategies for Implementation:

- Work with internet service providers to expand the existing fiber optic network to serve our economic development needs.
- Work with public and private interests to provide County-wide internet connectivity solutions for residential and business users to reduce reliance on dial-up internet connections and serve areas without internet service.

Goal 3: Provide for adequate public services and facilities to serve the needs of County citizens.

Objective A: Promote effective and efficient government.

Strategies for Implementation:

- Evaluate public facility and space needs of all County agencies through implementation and routine updates of the Capital Improvements Plan.
- Develop and fund an operations and maintenance plan for each County facility.
- Communicate with citizens about services and opportunities available to them through their County government.

Germanna Community College, Locust Grove Campus
Objective B: Ensure quality education for all County citizens.

Strategies for Implementation:
- Work with the Orange County School Board to develop a long-term strategic plan for continuous improvement of education in the County.
- In support of the County’s vision of maintaining rural characteristics, the County will support agricultural education programs in schools.
- Maintain modern facilities to allow utilization and application of current technological developments in every classroom through the school facility planning in the Capital Improvements Plan.
- Plan for the growth of the student population by taking into account the projected capacity of the schools when reviewing development proposals.

Objective C: Consider the health and human services needs of County citizens.

Strategies for Implementation:
- When health service and facility needs of the County’s citizens are identified, strive to develop a plan to meet those needs.
- Develop a plan that addresses the needs of the elderly, disadvantaged, and disabled in terms of medical care, when feasible.
- Promote adequate health care and facilities.

Dogwood Village of Orange County
**Objective D:** Encourage affordable housing development.

**Strategies for Implementation:**
- Consider residential development to include a portion of low-to-moderate income dwellings.
- Participate, when feasible, in available housing rehabilitation and home ownership programs for protected populations.
- Encourage the provision of transitional housing for the elderly, disabled, and homeless, when feasible.

**Objective E:** Provide for public safety through adequate emergency services and law enforcement.

**Strategies for Implementation:**
- Identify long-range fire and rescue needs for the County in a 20-year window.
- Implement the Hazard Mitigation Plan.
- Strive to maintain a maximum fifteen-minute emergency response time 80% of the time to all parts of the County.
- Identify the need for and locate public safety station locations to better serve the population centers of the County.
- Implement a County-wide GIS system capable of coordinating a wide range of users, from emergency management, law enforcement, E-911, planning and zoning, legal, building, health, and other County agencies providing public safety services.

**Objective F:** Ensure adequate infrastructure.

**Strategies for Implementation:**
- Develop level of service standards for public facilities and services, including airports, schools, water and sewer systems, libraries, parks and recreation, fire and rescue service, public health services, solid waste management, and transportation.
- Identify growth areas with adequate infrastructure to support and sustain major residential subdivisions, commercial, and industrial development.
- Coordinate efforts of private providers of public services (water, sewer, telephone, cable, electricity, cable television and solid waste management) with current and future public planning efforts.
- Promote the cooperative development of public facilities between the County and the towns of Orange and Gordonsville.
- Coordinate with private vendors, regional, state, and federal agencies to develop plans addressing the provision of adequate technological infrastructure to all County citizens, e.g. high-
speed internet availability and whitespace.

- Seek funding to extend the sewer lines on Route 20 from the eastern corporate limits of the Town of Orange to the Route 20 and Porter Road area where poor soil conditions necessitate the extension of sanitary sewer service for the health, safety, and welfare of the County’s citizens.

**Objective G: Serve the parks and recreation needs of County residents.**

**Strategies for Implementation:**
- Develop a comprehensive park system to serve the recreation needs of County residents.
- Develop a plan for enhancing the recreational value of and improving public access to the Rapidan River, including evaluating Scenic River designation.
- Incorporate the goals and needs identified by the Parks and Recreation Plan into land use decisions.
- Continue strengthening interagency partnership with Parks and Recreation and Planning.

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**Goal 4: Provide the citizens of Orange County with the safest and most efficient transportation system based on state, local and regional future land use and transportation plans.**

**Objective A: Provide a safe and efficient transportation network for Orange County.**

**Strategies for Implementation:**
- Pursue improvements to the following major arterial roadways as necessary to ensure their safety and efficiency:
  - Route 20
  - U.S. 522
  - Routes 3 and 20 intersection
  - Route 3
  - U.S. 33
- Continue to work with VDOT to create a service road system plan along Route 3 to create an interconnecting parkway to serve all developments.
- Ensure future developments incorporate on-site transportation improvements required by VDOT and Orange County.
- Pursue VDOT SmartScale and Revenue Sharing Program funds to implement planned road projects. Consider developing a transportation master plan for the Germanna Wilderness Area.
Objective B: Coordinate regional transportation needs with surrounding localities, including phased implementation of an intermodal transportation network, by coordinating planning efforts with the Towns of Orange and Gordonsville, as necessary.

Strategies for Implementation:

- Partner with the towns of Gordonsville and Orange in pursuit of viable passenger rail service access in Orange County.
- In cooperation with the Rappahannock-Rapidan Regional Commission, Virginia Department of Transportation (VDOT), Virginia Department of Aviation (VDOA), and the Virginia Department of Rail and Public Transportation (VDRPT), and other public transportation-related agencies, identify transportation improvement projects that are compatible with the future land use policies contained in the following which are incorporated by reference into this plan:
  - Virginia Department of Transportation Six Year Improvement Program
  - VTRANS (Commonwealth Transportation Board’s multimodal long-range transportation plan)
  - Route 20 Corridor Study (Phases I and II)
  - RRRC Regional Long-Range Transportation Plan (RLRP)
  - Airport Plan
  - Route 3 Arterial Preservation Plan
- Coordinate planning efforts with surrounding jurisdictions and VTRANS for potential trail connectivity through Orange County.
- Encourage the development of a privatized van service to meet the transportation needs of the elderly.
- Encourage the coordination, location, and development of various sites in the County to accommodate car-pooling.
- Encourage commuter and local passenger bus service through Orange County.
Objective C: Encourage a system of non-motorized recreational trails throughout the County.

Strategies for Implementation:
- Develop an Orange County Alternative Transportation Plan which identifies a multi-use trail (defined herein as pedestrian, bikeway, and other non-motorized modes of transportation) network providing connectivity with residential development, educational facilities, recreational uses, commercial and employment centers, and historic and cultural destinations. Proposed trail segments should accommodate equestrian users, including horse-drawn carriages.
- When feasible, all proposed trails should be designed to accommodate emergency medical service vehicles.
- Work with community and volunteer groups to identify potential trails in existing rights-of-way.
- When feasible, include multi-use trails or components thereof, in road improvement projects in accordance with the County’s Alternative Transportation Plan.
- Pursue grant funding opportunities for County multi-use trail projects, which would include planning, survey and engineering design, easement acquisition and construction.
- Coordinate with the Towns of Gordonsville and Orange to develop a multi-use trail (including equestrian and horse-drawn carriages when feasible) system connecting the towns, in addition to providing linkages, such as “hub points,” to cultural, recreational, commercial, and historical resources within any proposed trail corridor.

IV. Land Use

The Land Use section of the Comprehensive Plan identifies current and future land uses with general language and a recommended land use map.

A. Introduction

This chapter presents the Land Use Plan for the next 5 to 20 years (the Germanna-Wilderness Area Plan (GWAP) was created as a 50-year vision) and is the primary land use element of the comprehensive plan. The Plan is based on existing patterns of land use, the priorities associated with the County Vision Statement and its related goals, and an analysis of the future needs of residents and an expanding economy. As directed by the County’s vision, the Land Use Plan is a balance between retaining the characteristics of the various communities and resources that exist in the County and identifying specific areas that can accommodate the facilities and infrastructure required to expand our economy. One purpose of this plan is to communicate to the array of stakeholders (including landowners,
residents, elected officials, investors and developers) the preferred land uses and development patterns across the County.

To more accurately describe existing land uses and more clearly communicate future plans, the County’s land use categories were revised and refined in 2013. An analysis of the patterns of existing uses, based on information such as current land records, newly released census data, and various reports from state and regional agencies, resulted in a grouping of land uses into five (5) categories. A 6th category, the Germanna-Wilderness Area, was added in 2015 with the development of the GWAP. Chart IV-1 details the purpose and general characteristics of each land use category.

The Land Use Map (please see Appendix A and the maps contained within the GWAP in Appendix B) shows the general locations of these categories, illustrating existing development patterns for use in guiding future growth across the County. The maps, text, vision, and goals collectively represent the Comprehensive Plan and the context and interpretation that will guide future land use decisions. In considering development proposals, the Planning Commission and Board of Supervisors should be guided, not bound, by these maps.

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>PURPOSE</th>
<th>DEFINITION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agricultural 1 (A1)</td>
<td>Protect the rural, agricultural, historic and conservation areas of the County by preserving open space, limiting population and allowing little or no development other than agricultural and forestal enterprises, farm markets, homesteads and larger estates.</td>
<td>Parcels of specific historic relevance; parcels in conservation or other public/private easements, parcels containing unique physical characteristics and highly dispersed residential land use;</td>
</tr>
<tr>
<td>Agricultural 2 (A2)</td>
<td>Protect the characteristics of those areas of the County that feature a mix of agricultural activities, residential neighborhoods, and small-scale commercial uses.</td>
<td>Pockets of residential development interspersed between large areas of farmland and along primary and secondary highways; Scattered community commercial uses such as auto repair shops and established rural convenience stores; Public uses include airports, solid waste collection sites (including landfills), and fire and rescue stations.</td>
</tr>
<tr>
<td>Village (V)</td>
<td>Retain small village and community living and identity, with local services for convenience.</td>
<td>Concentration of residential development with adjacent areas of commercial services for residents and businesses near primary intersections.</td>
</tr>
<tr>
<td>Town-Suburban (T-S)</td>
<td>Allow mixed development in close proximity to town service and employment resources.</td>
<td>Areas adjacent to town boundaries. Moderately intensive residential and commercial development.</td>
</tr>
<tr>
<td>Economic Development (ED)</td>
<td>Moderately aggressive development to provide jobs, shopping, higher density residential and expand tax base.</td>
<td>Existing and potential areas identified for an expanded mix of economic activity (industrial, office, and commercial) and higher density residential uses.</td>
</tr>
</tbody>
</table>
**B. Land Use Map**

The Land Use Map (please see Appendix A and the maps contained within the GWAP in Appendix B) illustrates the forward-looking guiding policies for future development, conservation, and overall land use in the County, based on historical data, existing development patterns, as well as where future development should be focused.

Land Use categories were revised in 2013 with the revision of this Plan, and again in 2015 with adoption of the GWAP, and are based on thorough analysis of the existing land use development patterns and the evolving characteristics of the County. The land use categories are as follows: A1, A2, Village, Town-Suburban, Economic Development, and the Germanna-Wilderness Area.

Land use categories A1 and A2 closely resemble those in the previous Comprehensive Plan they replaced, Agricultural Conservation and Agricultural. Development policies within each remain much as before - A1 should remain largely protected from residential and commercial growth, development in A2 should be compatible with existing patterns. The remaining categories more accurately reflect current residential and commercial uses and point to those areas most suitable for future growth.

Although not specifically a land use designation, there is a significant institutional land use throughout the County and this Plan identifies public and private non-profit uses and property ownership including, but not limited to: Airports, schools, parks, fire and rescue stations, libraries, post offices, utility stations, landfills, solid waste collection sites, emergency operations centers, churches and other such uses typically associated with public facilities and services. Recommended uses are public and semi-public in nature.

Furthermore, the Zoning and Subdivision Ordinances should reflect the concepts of this Plan, including the management of residential and commercial uses, and will be the controlling sources for the future uses.

Note: For more comprehensive detail regarding development standards, please refer to the Orange County Zoning and Subdivision Ordinances.
C. Future Land Use Policy Designations

Agricultural 1 (A1)
Land in this category generally includes historic sites, sensitive conservation areas, forests, open spaces, and areas of prime farmland. These are areas of low impact uses and very low population densities.

The land in the area identified as A1 generally shares one or more of the following characteristics:

- Parcels of specific historic relevance.
- Parcels in conservation or other public/private easements.
- Parcels predominate by at least one of the following environmental constraints: Steep slopes, wetlands, or 1% annual chance floodplain.
- Parcels containing soils considered by soil scientists as prime farmland.
- Highly dispersed residences, primarily large lot homesteads or estates.
- Scattered small scale commercial uses such as auto repair shops and established rural convenience stores.
- Public service uses are generally limited to solid waste collection sites, and utilities such as electricity and telephone.

In the future, land in the A1 area should remain substantially unchanged from its current pattern of uses. As a general rule, development in the A1 areas will be discouraged as significant changes could alter the prevailing characteristics and therefore would be incompatible with the County’s vision and the stated principles in this Plan.

Agricultural 2 (A2)
This land use category covers areas of the County that feature a mix of agricultural activities and single-family residential neighborhoods. Large undeveloped tracts of land that are forested, in pasture or other agricultural uses interspersed with small neighborhoods define this category. Agricultural 2 preserves the rural character in this part of the County by protecting the predominant land use, agriculture, from conflicts with incompatible residential, commercial, or industrial uses.

The land in the area identified as A2 generally shares one or more of the following characteristics:

- Agricultural activity as permitted by the Zoning Ordinance.
- Scattered groupings of residences and subdivisions along primary highways, secondary roads, and areas that are easily accessible or in close proximity to such highways.
- Varied commercial uses located along primary and secondary highways.
that support and provide convenience for County residents living in this area.

- Public uses such as airports, solid waste collection sites, and fire and rescue stations. Public water and sewer services are typically not available in these areas.

In the future, land in the A2 area is intended to promote the agricultural lifestyle and to protect the characteristics of both our small neighborhoods and farming communities. The plan for these areas is based on a modest increase in the number of similar or compatible mix of uses, adjacent to existing residential or commercial developments (i.e. "infilling"). In the future, care should be taken to ensure that development in the A2 area does not negatively impact the land located in the A1 areas of the County, nor nearby agricultural land uses in A2.

**Village (V)**

The Village land use category is intended to retain the small village and community living atmosphere and identity of longstanding hamlets in the County. The three designated villages are Barboursville, Unionville-Rhoadesville, and Locust Grove. Public water and sewer are not available. The areas designated as such include:

- Concentration of residential development along with areas of open land.
- Adjacent areas of commercial services for the convenience of the residents and businesses near primary intersections.
- Public services and facilities such as fire and rescue stations, solid waste collection sites, public schools, and libraries.
- Development contiguous with existing development uses.

**Town - Suburban (T/S)**

The Town-Suburban land use category includes those areas adjacent to incorporated towns and Lake of the Woods. This category maintains and promotes the continuity of established development patterns of the incorporated towns and Lake of the Woods. Particular attention should be given to consider the impacts of one jurisdiction's land use decisions impact on another jurisdiction. Encouraging greater communication and coordinated planning efforts should ameliorate conflicting land uses.

Public water and sewer are available in most areas, and the predominant type of development is single family detached dwellings, although greater density or a non-residential use may be appropriate if consistent with the existing, adjacent uses. The properties should be served by public water and sewer. Other public facilities and uses may include fire and rescue stations, public schools, solid waste collection sites, libraries, and emergency operations centers.
Economic Development (ED)
This land use category has been identified in the County’s Comprehensive Plans for many years to serve two main goals: 1) Create more jobs in the County; and 2) Create tax sources that are based on economic activity. Areas of the County that are designated for economic development (including commercial, mixed use, and industrial developments) are primarily for locating businesses that address these goals by providing employment, shopping and other activities for the residents of Orange County and increasing the business tax base while not changing the character of the majority of the County. Designation of an ED land use category does not mean that all of such area will be developed. The small area plan, as an extension of the Comprehensive Plan, will detail which areas will be developed and which areas will be preserved.

The areas of the County designated for economic development are west on Route 3 toward the Rapidan River, as well as the industrial park and other properties suitable for commercial or industrial use along Route 15 between the towns of Orange and Gordonsville, and along Route 20 near the airport.

An area plan, designed to identify each economic development planning area in detail, may be prepared to address the opportunities and needs specific to each corridor. In general, these plans may include the following considerations:

- Projects may require approval of a Master Plan of sufficient design detail to describe the vision and effect of the development. The Master Plan will generally include the general layout of roads, uses and functions, utilities, and easements. The Plan may contain preliminary design details such as building uses/design, buffers and landscaping, lighting and signage requirements, setbacks, street alignments/functional classification and arrangement of open space.

- As a general rule, Economic Development proposals should not adversely affect the environment and shall be provided with substantial buffers or natural shielding from major thoroughfares to preserve the natural appearance of the County.

- Projects in the Economic Development area are best served by public water and sewer.

- Revisions to applicable sections of the Zoning Ordinance may be prepared to encourage the preferred Economic Development projects and specify the details of preferred designs and uses.

- A Capital Improvements Plan (CIP), for each Economic Development area, may be prepared to identify the existing infrastructure (water, sewer, solid waste, communications, energy, etc.), the anticipated improvements required by development, and the sources of funding for the required improvements.

- When feasible, encourage the clustering of industries and businesses with similar intensity for ease in delivery of services and to promote
efficient use of land.

- Economic Development projects that are designed for mixed use are encouraged. The intention of the mixed-use development is to create sustainable development that allows for the ability to live, work and shop in one area. Specifically, mixed use development will consist of residential, employment, commercial and civic elements together creating a cohesive “town center” or village type community.

- Proposals for new economic development should minimize impacts on the cultural and historic resources of the County by incorporating design features that are compatible with the area. Development in the Rt.3 corridor should generally be compatible with the Gateway concepts that have been proposed for the entrance to the County.

The Phase II Wilderness Gateway Study (November 2012) identified certain development features that served as part of the framework for the GWAP developed in 2015:

- A Rapidan Recreational Crescent to provide a recreational greenway along the Rapidan River extending west to Germanna.
- A Scenic Lake formed by Wilderness Run and Shotgun Hill Branch to serve as a future water supply source for the region, provide additional recreational and scenic amenities, and create land feature for locating a new village.
- A Mixed-use Village to serve as a destination for retail, lodging, dining, shopping, and other commercial activities, as well as residential units.
- A Business Campus adjacent to the village and other commercial development to support job-creation.
- Design guidance and landscape buffering for new development and redevelopment along Route 3. Revised land development regulations to encourage enhanced setbacks, landscaping and improved signage for future development.

**Germanna-Wilderness Area (GWA)**

The Germanna-Wilderness Area is designated as the easternmost portion of the county, from the natural drainage basins created by Russell Run and South Wilderness Run, and bound on the northern and eastern sides by the Rapidan River and on the southern side by the Spotsylvania County corporate line. While this area contains only 14,600 acres, or approximately 7% of the county’s total land area, it has consistently contained the highest population growth and rate of land development in the county. This has been, and continues to be, driven by its proximity to the Fredericksburg, Culpeper and Northern Virginia labor markets as well as the availability of public infrastructure and relative ease of transportation. Orange County has long considered this area to be its growth center, and in 2015 the Germanna-Wilderness Area Plan (GWAP) was developed to guide and coordinate future
private-sector development in the area along with the corresponding public-sector investment for infrastructure and services (see Appendix B for the complete area plan). As a designated growth area, the establishment of the GWA is to meet the intent of §15.2-2223.1 of the Code of Virginia.

Previously, the GWA contained portions of land designated as Agricultural A1, Agricultural A2, Town-Suburban and Economic Development. With adoption of the GWAP, the area is now its own future land use category, and the land use designations within the Area were further defined in greater detail. There are several overarching objectives to guide the development, conservation, and general use of land within the GWA:

- Development will be coordinated with the availability of adequate public facilities so that the expansion of water/wastewater, transportation, telecommunications, electrical capacity, and other related infrastructure occurs in timely conjunction with development proposals.
- Planned development proposals are preferred to those utilizing traditional zoning techniques.
- Conservation areas will be maintained along and adjacent to all extreme topography, wetlands, water features, and most importantly along the Rapidan River.
- A focus will be maintained on quality development to fit with the economic development branding and marketing strategy for the area. Part of this objective will be achieved by maintaining higher standards for site and building layout and design, enforcing access management standards along Route 3, and promoting multi-modal connectivity.
- Historic and cultural assets and natural resources in the area will be protected, celebrated, and endorsed as reinforcement of the quality of life within this area of the county.
- Economic development will be incentivized as a means of inducing business investment, improving the median personal/household income, and expanding the tax base, thereby providing for a more balanced and sustainable economy for the entire county.

Land use in the GWA will be considerably more intensive and coordinated, and in many areas more urban, than in the areas of the county outside of the GWA, and a greater focus will be placed on integrating design standards for all development. By formally designating a geographic area for growth and more intensive land development, the rural character of the majority of Orange County is more affirmatively sustained via an adopted policy framework that establishes where development will and will not be encouraged.
V. Public Facilities

A. Introduction

The purpose of public facility planning is to assess the current and future public service and facility needs and provide clear guidance on the best policies for meeting these needs in an efficient and cost-effective manner. The secondary purpose is to provide the approximate location, character, and extent of future public facilities and land uses in order to facilitate a methodical and transparent process. The principal goals of the Comprehensive Plan regarding public facilities and utilities are as follows:

1. Provide modern emergency services and law enforcement facilities that enhance the ability of county agencies to protect citizens.
2. Provide modern and safe educational facilities that enhance the ability of teachers to educate students.
3. Provide community facilities that meet service needs in an efficient and cost-effective manner while respecting the character of the neighborhoods and areas in which the facilities are located and operated.
4. Provide public recreation facilities that serve the recreation needs of the community year-round.
5. Provide telecommunications facilities that meet the service needs of county agencies and the public.

The levels of service available within the County will vary depending on programmatic funding via the Capital Improvements Plan (CIP), population density, transportation infrastructure, the needs and desires of the citizenry, and in some cases topography. The County Infrastructure map in the Appendix provides the general location of existing schools, fire and rescue station sites,
and locations of other public services, such as water and sewer systems. Future planned facilities are described in subsection B below.

At a minimum, public facility planning should involve the following five overarching considerations:

1. Location must be considered in relation to various elements such as existing and future population distribution, zoning, major transportation arteries, topography, and utilities.

2. Sites should be accessible to major transportation routes providing the best possible access to the greatest number of citizens expected to use or need services from the facility.

3. Related facilities should generally be grouped within one complex or area to enhance operational economy.

4. The present state of repair for particular facilities needs to be considered for expansion or renovation projects where said facilities remain operational.

5. New projects should be shown to be cost effective in technical design and/or justified by the public benefits outweighing the public costs.

B. Review of Public Uses

Pursuant to 15.2-2232 VA Code Ann, no public facility shall be constructed, established, or authorized, unless or until the general location or approximate location, character, and extent thereof has been identified in this Plan, or submitted to and approved by the Planning Commission as being in substantially in accord with the Comprehensive Plan. Expansions of existing public facilities described in this Plan or shown on any map herein shall be deemed to meet the requirements of § 15.2-2232 VA Code Ann. See Section XII for the process to be followed for approval of public facilities.

The Orange County Capital Improvement Plan (CIP) is one of the primary tools used to coordinate the implementation timeframes and financing associated with public facility planning. The CIP offers a 5-year outlook for anticipated capital investments, but is updated annually based on the changing needs of the citizens and on available current resources and funds. The following matrix details planned future public facilities projects. As new projects are identified (particularly if designated in the CIP), they should be included in this matrix as the need arises in order to facilitate § 15.2-2232 compliance as well as facilitate methodical, transparent public facility planning.
<table>
<thead>
<tr>
<th>Public Facility Improvement</th>
<th>Property Location</th>
<th>Project Description</th>
<th>Public Facility Planning Goal</th>
<th>Consideration Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fiber optic Cable Installation</td>
<td>Primary highways (beginning with Route 20 &amp; Route 3) and secondary road rights-of-way</td>
<td>The installation of a Countywide fiber optic cable network to service citizens, governments, and businesses</td>
<td>Goal #5: Provide telecommunications facilities that meet the service needs of county agencies and the public</td>
<td>Consideration #5: New projects should be shown to be cost-effective in technical design and/or justified by the public benefits outweighing the public costs</td>
</tr>
<tr>
<td>OCPS Master Plan Phase 1-9</td>
<td>Orange County Public Schools</td>
<td>The implementation of multiple improvements to existing public school properties</td>
<td>Goal #2: Provide modern and safe educational facilities that enhance the ability of teachers to educate students</td>
<td>Consideration #4: The present state of repair for particular facilities needs to be considered for expansion or renovation projects where said facilities remain operational</td>
</tr>
<tr>
<td>Locust Grove elementary school</td>
<td>Locust Grove</td>
<td>A new elementary school to serve the Locust Grove area.</td>
<td>Goal #2: Provide modern and safe educational facilities that enhance the ability of teachers to educate students</td>
<td>Consideration #1: Location must be considered in relation to various elements such as existing and future population distribution, zoning, major transportation arteries, topography, and utilities</td>
</tr>
<tr>
<td>Booster Park facilities expansion</td>
<td>Booster Park</td>
<td>The addition of a field house and other similar recreational facilities in the vicinity of Booster Park.</td>
<td>Goal #4: Provide public recreation facilities that serve the recreation needs of the community year-round</td>
<td>Consideration #3: Related facilities should be grouped within one complex or area to enhance operational economy</td>
</tr>
<tr>
<td>Mountain Track Park</td>
<td>17167 Mountain Track Rd</td>
<td>Development of a new public park on a 131-acre parcel owned by the County.</td>
<td>Goal #4: Provide public recreation facilities that serve the recreation needs of the community year-round</td>
<td>Consideration #1: Location must be considered in relation to various elements such as existing and future population distribution, zoning, major transportation arteries, topography, and utilities</td>
</tr>
<tr>
<td>Orange Skate Park</td>
<td>299 Berry Hill Rd in the Town of Orange</td>
<td>Development of a new public park on a 1-acre parcel owned by the Town of Orange and in collaboration with the Town.</td>
<td>Goal #4: Provide public recreation facilities that serve the recreation needs of the community year-round</td>
<td>Consideration #1: Location must be considered in relation to various elements such as existing and future population distribution, zoning, major transportation arteries, topography, and utilities</td>
</tr>
<tr>
<td>Unionville area park</td>
<td>In the vicinity of Narrow Gauge Rd/Route 20 in Unionville</td>
<td>Expansion of existing park facilities owned by the County.</td>
<td>Goal #4: Provide public recreation facilities that serve the recreation needs of the community year-round</td>
<td>Consideration #1: Location must be considered in relation to various elements such as existing and future population distribution, zoning, major transportation arteries, topography, and utilities</td>
</tr>
<tr>
<td>Locust Grove local parks</td>
<td>Adjacent to Locust Grove Elementary and Primary Schools, and Locust Grove Middle School</td>
<td>Development of new public parks adjacent to existing school properties owned by the County.</td>
<td>Goal #4: Provide public recreation facilities that serve the recreation needs of the community year-round</td>
<td>Consideration #1: Location must be considered in relation to various elements such as existing and future population distribution, zoning, major transportation arteries, topography, and utilities</td>
</tr>
</tbody>
</table>

**Economic Development**

**Education**

**Parks & Recreation**

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2023 Orange County Comprehensive Plan

*Sustain the rural character of Orange County while enhancing and improving the quality of life for all its citizens.*

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### Locust Grove regional park
- In the vicinity of the Route 20/Route 3 intersection near Wilderness Run
- Development of a new approx. 40-acre regional public park; in conjunction with the Wilderness Crossing development
- Goal #4: Provide public recreation facilities that serve the recreation needs of the community year-round
- Consideration #1: Location must be considered in relation to various elements such as existing and future population distribution, zoning, major transportation arteries, topography, and utilities

### Orange County Government Center
- Bloomsbury Rd. adjacent to the Orange County Airport
- The construction of a new complex to house various county government functions.
- Goal #3: Provide community facilities that meet service needs in an efficient and cost-effective manner while respecting the character of the neighborhoods and areas in which the facilities are located and operated
- Consideration #2: Site should be accessible to major transportation routes providing the best possible access to the greatest number of citizens expected to use or need services from the facility

### Modena Building adaptive reuse
- 130 N Madison St in the Town of Orange
- Purchase and renovation of an existing private building/facility for County government office use.
- Goal #3: Provide community facilities that meet service needs in an efficient and cost-effective manner while respecting the character of the neighborhoods and areas in which the facilities are located and operated
- Consideration #4: The present state of repair for particular facilities needs to be considered for expansion or renovation projects where said facilities remain operational

### Unionville fire station
- Unionville, near the Route 20/U.S. 522 intersection
- A new fire station in the Unionville area.
- Goal #1: Provide modern emergency services and law enforcement facilities that enhance the ability of county agencies to protect citizens.
- Goal #3: Provide community facilities that meet service needs in an efficient and cost-effective manner while respecting the character of the neighborhoods and areas in which the facilities are located and operated
- Consideration #2: Site should be accessible to major transportation routes providing the best possible access to the greatest number of citizens expected to use or need services from the facility

### Locust Grove Fire and Public Safety Station
- Locust Grove
- A new fire, rescue, and public safety facility to serve the Locust Grove area.
- Goal #1: Provide modern emergency services and law enforcement facilities that enhance the ability of county agencies to protect citizens.
- Goal #3: Provide community facilities that meet service needs in an efficient and cost-effective manner while respecting the character of the neighborhoods and areas in which the facilities are located and operated

### Public Safety/Telecommunications towers
- Countywide
- The strategic locating and upgrading of telecommunication towers throughout the County to provide an effective communication network
- Goal #5: Provide telecommunications facilities that meet the service needs of county agencies and the public
- Consideration #1: Location must be considered in relation to various elements such as existing and future population distribution, zoning, major transportation arteries, topography, and utilities
C. Public Education

Currently, there are nine public schools located in Orange County. There are six elementary schools: Gordon-Barbour Elementary, Lightfoot Elementary, Locust Grove Primary, Locust Grove Elementary, Orange Elementary, and Unionville Elementary. The total number of students currently enrolled (as of September 2023) in these six schools is approximately 2,028.

There are two middle schools and one high school: Locust Grove and Prospect Heights Middle Schools and Orange County High School. The total number of students enrolled is approximately 1,143 in the middle schools and approximately 1,480 in the high school. These figures equate to (Year 2023) county-wide enrollment of approximately 4,895.
Chart V-I: Orange County Public Schools Enrollment

<table>
<thead>
<tr>
<th></th>
<th>2012</th>
<th>2017</th>
<th>2023</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elementary</td>
<td>2,280</td>
<td>2,166*</td>
<td>2,028</td>
</tr>
<tr>
<td>Middle</td>
<td>1,193</td>
<td>1,187*</td>
<td>1,143</td>
</tr>
<tr>
<td>High</td>
<td>1,487</td>
<td>1,502*</td>
<td>1,480</td>
</tr>
<tr>
<td>Total enrollment</td>
<td>4,960</td>
<td>4,855</td>
<td>4,895</td>
</tr>
<tr>
<td>Home Instruction (not included in total)</td>
<td>217</td>
<td>256</td>
<td>619</td>
</tr>
</tbody>
</table>

* These figures were approximated based on available data.

Source: Orange County Public Schools

D. Public Safety

Emergency Communication

The Orange County Emergency Communications Center serves as the Public Safety Answering Point (PSAP) for Orange County twenty-four hours a day, seven days a week. The center operates a three channel VHF conventional PL steered radio system, and Computer Aided Dispatch system and Emergency Medical Dispatching program, a Master Street Addressing Guide system and an enhanced 911 system. Staff consists of employees that are professionally trained and constantly strive to protect and serve individuals during emergency and non-emergency situations.

Emergency Management

The Orange County Office of Emergency Management is a combined department consisting of the Emergency Management Department and the County's Fire & EMS Department.

The Emergency Management Office is responsible for overall coordination of emergency services for Orange County. This includes coordinating local emergency planning, training, and exercise activities and overseeing maintenance of the local emergency operations plan.

Emergency Services within Orange County consists of a blend of volunteers and career personnel. During times of crisis, it is the public safety community that can make the difference between life and death. Orange County’s system consists of five (5) volunteer fire departments and three (3) County and volunteer emergency medical services agencies. The County also relies heavily on three (3) law enforcement agencies.

Sheriff

The Orange County Sheriff’s Office provides law enforcement services to County residents, including investigating crimes, pursuing offenders, and making arrests. The Sheriff’s Office also provides animal control services, security services in the courthouse, and serves summons for potential jurors.
and witnesses.

E. Parks and Recreation

The Parks & Recreation Department operates approximately 30 recreation programs throughout the County, including a wide range of athletic and non-athletic activities.

The Board of Supervisors intends to provide community parks that meet the needs of citizens across the County. These parks will be developed with a combination of capital improvements funding and community support.

F. Community Infrastructure

Public Water Supply

The Rapidan River serves as the primary source of public water for the towns of Gordonsville and Orange and portions of central and eastern Orange County.

The Town of Orange water filtration plant has a capacity of 2.0 million gallons per day. The Town of Gordonsville obtains its water through the Rapidan Service Authority (RSA). RSA buys water from the Town of Orange Treatment Plant and feeds it along U.S. 15 to the Town of Gordonsville. RSA also supplies water to the Route 20/Route 629 area from a well on Route 625 near the Orange County Sheriff’s Office. This yields 30 gallons per minute.

In eastern Orange County, RSA’s water treatment plant has a capacity of 1.6 million gallons/day and is permitted to draw up to 3 million gallons per day from the Rapidan River. This serves the Route 3 corridor, including Lake of the Woods, Somerset Farms, and Wilderness Shores subdivisions.

Sewage Treatment

Orange County relies primarily on septic treatment systems for sewage waste disposal. Significant areas served by public sewer include both towns, Lake of the Woods, Wilderness Shores (and other Route 3-area residential developments) and U.S. 15 between Gordonsville and Orange. According to Commissioner of Revenue 2023 data, 10,320 households utilize septic systems compared to approximately 7,200 that utilize public sewer.

The Town of Gordonsville is served by the Rapidan Service Authority which owns the Gordonsville Wastewater Treatment Plant located just outside of the town. The plant collects wastewater from the Town and has a capacity of 670,000 gallons per day.

The Town of Orange Wastewater treatment plant is located off Spicers Mill Road approximately 1.2 miles northeast of the town limits near Route 633 and the confluence of Poplar and Laurel Runs. To comply with the Chesapeake Bay Preservation Act the Town of Orange Wastewater Treatment Plant was updated and expanded so that it could treat wastewater to the maximum extent possible using current technology. The new 3.0 million gallon per day
plant was brought on-line in September 2010. The plant uses a Bardenpho system for biological nutrient removal, clarification to remove solids and ultra-violet to disinfect the water before being discharged.

In eastern Orange County, RSA owns a modern wastewater treatment plant with a capacity of 2.0 million gallons per day and serves the entire Route 3 corridor including Lake of the Woods, Wilderness Shores, Somerset, Germanna Heights and the Germanna Community College. The plant is located near the Wilderness Shores Subdivision on the Rapidan River.

**Utility Transmission Lines**

Orange County does not plan for there to be construction of new utility transmission lines outside of the existing easements dedicated for such use within the County.

**Broadband**

Orange County set up a broadband authority in 2016 and shortly thereafter began developing fiber optic infrastructure throughout the County. As of late 2022 over 320 miles of fiber cabling have been installed, predominantly within public road rights-of-way. As of August 2023, this figure increased to 350 miles, and more than 7,500 accounts had access to service. The authority offers internet service to residents and businesses, and serves areas of the County which the private sector has been unable or unwilling to service.
VI. Transportation

The present economy and land use pattern is dependent upon the highway system that has evolved. For the future growth and development of the county to occur in an organized and desirable manner, proper planning for the network is essential, which is why the county has adopted the Virginia Department of Transportation Six Year Improvement Program. The County’s partnership with VDOT includes VDOT maintenance of County roads which have been inspected and accepted by VDOT.

A. Functional Classifications of Roads

Roads in rural counties such as Orange serve different purposes and meet different needs than those in more urban areas. Rural arterial roads are intended for a higher degree of mobility while rural collector roads are intended for greater access to property. All roads within Orange County can be placed into 1 of 5 VDOT functional classifications, which are illustrated in the 2014 VDOT Functional Classification road map (see Appendix):

Primary Roads

Principal Arterials - Serve corridor movements of substantial statewide or interstate travel and provide an integrated network without stub connections (dead ends). This network connects all or nearly all Urbanized Areas and a large majority of Urban Clusters with populations of 25,000 and over. Route 3 is the sole principal arterial in Orange County.

Minor Arterials - Link cities and large towns, along with other major traffic generators, and form an integrated network providing interstate and inter-county service. The design in rural areas typically provides for relatively high overall speeds, with minimum interference to the through movement. Minor Arterials are spaced at intervals, consistent with population density, so that all developed areas within the state are within a reasonable distance of an arterial roadway. They also provide service to corridors with trip lengths and travel density greater than those served by rural collectors or local systems. Routes 20 (east of the Town of Orange), 522, 15, 231 and 33 are minor arterials.

Secondary Roads

Major Collectors - Provide service to any county seat not on an arterial system, to larger towns not directly served by higher systems and link the above to nearby larger towns or routes of higher classification. They serve as the more important intra-county travel corridors. Major collector roads include: Constitution Hwy (Route 20) west of the Town of Orange, Carpenters Mill Rd (Route 607), a portion of Spicers Mill Rd (Route 633) adjacent to the Town of Orange, Old Gordonsville Rd (Route 647), Monrovia Rd (Route 612), Lahore Rd (Route 629), Marquis Rd (Route 669) between Monrovia Rd and Lahore Rd, Rapidan Rd (Route 615), Pine Stake Rd (Route 621), Raccoon Ford Rd (Route 611), Burr Hill Rd (Route 692), Mine Run Rd (Route 621), Dulin Ln (Route 608), Gold Dale Rd (Route 611/604), and Flat Run Rd (Route 601).
Minor Collectors - Spaced at intervals and consistent with population density. They collect traffic from local roads and bring all developed areas within a reasonable distance of a collector road. These roads also provide service to the remaining smaller communities and link local traffic generators with their rural hinterland. Minor collector roads include: Scuffletown Rd (Route 609), Ridge Rd (Route 644), Cox Mill Rd (Route 643), Madison Run Rd (Route 639), Mountain Track Rd (Route 638), Tomahawk Creek Rd (Route 637), and Zoar Rd (Route 611).

Local - Serve primarily to provide direct access to adjacent land and/or to provide service to travel over relatively short distances as compared to collectors or other higher systems. All roads not falling under one of the above classifications are classified as local roads. These account for the largest percentage of public roadways in terms of mileage.

B. Air Transportation

Two general aviation airports are located in Orange County.

The Orange County Airport is a public, general aviation airport that is located three miles northeast of the Town of Orange on State Route 20, has a 3,200 foot runway with a parallel taxiway and will accommodate turboprop and propeller driven aircraft of 12,500 pounds or less. It has a modern Automated Weather Observing System (AWOS-III) to provide pilots real time weather data to promote safe operations.

The Orange County Airport has a 24 hour self-serve fueling system for both Jet-A and 100 Octane Low Lead aviation fuels. The County offers 10 “T-hangars” for lease, also 19 paved and 17 grass tie downs to facilitate based and transient aircraft. Under long term lease with the County, Tracy Corporation built an additional 18 modern “T-hangars” and offers them for lease to private citizens and businesses. At the conclusion of the lease, ownership of the hangars convey to the County. Additional Airport services include aircraft maintenance and flight instruction. Approximately 40 aircraft are based at the Orange County Airport.

Gordonsville Municipal Airport, a local service airport, is owned by the Town of Gordonsville and is located on 34 acres a mile north of Gordonsville, on US 15. The airport has one 40 foot wide runway, which is 2,300 feet long. There are 12 hangars, which includes 10 “T-hangars,” 1 large main hanger, and 1 single hanger.
C. Alternative Transportation

Multi-Use Trails/Pathways

Trails provide a means of alternative transportation to connect the user with the natural and historic assets of Orange County, which in turn, promotes our rural character and celebrates our cultural heritage. Ultimately, a well-connected and expansive trail system enhances the quality of life for citizens.

A major benefit of developing a system of multi-use trails is to provide interconnectivity between the built environment and the natural landscape. This fosters an appreciation for open space and recreation, but more importantly provides residents a means of traveling from point A to point B without relying on a vehicle. The integration of the built environment with the natural landscape also provides several mental and physical health benefits. This concept of interconnectivity will be an important element of future planning efforts as the county implements the Germanna-Wilderness Area Plan (GWAP).

As the county works toward the stated strategy of developing an alternative transportation plan, communication with the citizens, private landowners, towns, and adjacent localities is essential toward developing and implementing a successful plan. At a minimum, multi-use trails should accommodate pedestrians, bicyclists, hikers, and the equestrian community. Opportunities for connections to trails in adjacent localities should be strongly encouraged, particularly in the northeastern and southern areas of the county.

A trails committee was formed in 2010 to identify elements for inclusion into the Comprehensive Plan and to propose several routes for trail development. Those elements are included in Goals, Objectives, and Strategies Implementation section of this Plan. The county should continue this coordinated effort into the future.

Sidewalks

Rural counties generally lack the need for a well-developed sidewalk network due to the scattered, low-density development. However, there are relatively well-developed sidewalks in both towns, but no connectivity with other nearby areas or anywhere outside town limits. The establishment of sidewalks and connection to existing sidewalks should be encouraged in the following areas:

- Areas contiguous to the existing sidewalk network in the Town of Orange. East Main Street, West Main Street and Rt. 15 N have sidewalks that terminate roughly at the town limits. As these areas expand, particularly Rt. 15 N, extending the existing sidewalks to serve the new development should be encouraged.
• Areas contiguous to the existing sidewalk network in the Town of Gordonsville. West Gordon Avenue, East Gordon Avenue and Cox Mill Road have sidewalks that terminate near the town limits. Sidewalk extension and connectivity should be encouraged as these areas expand.
• New development in the Germanna-Wilderness Area (GWA). All mixed-use development should contain extensive sidewalks. Residential development near existing or future commercial and institutional uses should establish sidewalks that connect to existing facilities in order to promote a more pedestrian-oriented environment.

Bicycles

Although recreational cycling is growing in popularity, Orange County roads lack cautionary signs or special markings to separate cyclists from vehicle traffic. Current population and demand don’t warrant proactive installation of dedicated bicycle lanes. However, as certain roads are resurfaced and/or upgraded, the county should work with VDOT to install dedicated bicycle lanes or extra roadway width to accommodate cycling, as has been done in nearby counties. Roads identified as Virginia Byways (Rt 15 N, Rt 20 south of the Town of Orange, Rt 231 and Rapidan Rd) are ideal candidates, as are other primary roads and major collector roads. Cyclists are attracted by roads with low traffic and moderate terrain, especially those roads enhanced by scenic views. There are numerous roads in Orange County that fit these criteria, so it is important to ensure such roads can accommodate both automobiles and cyclists. At a minimum, “Share the Road” signs should be installed on selected roads to alert motorists that cyclists may be present.

As with sidewalks, the county should support and strongly encourage bicycle infrastructure in all new development within the GWA. A variety of transportation choices in the GWA will be important as the area continues to develop. If implemented in a coordinated manner, having transportation choices can curb automobile usage, enhance property values, and promote a healthier lifestyle.

D. Transportation Improvements

Most future transportation improvements will be located on or near Constitution Hwy (Rt 20) since it is the longest primary highway in the county and one of the most heavily traveled. It is also the only major road to connect the eastern and western portions of the county. The majority of improvements recommended by the VDOT Phase I (July 2006) and VDOT Phase II (June, 2007) Route 20 Corridor Study have been included in the Proposed Transportation Improvements chart below. All currently planned transportation projects are included in the chart below.

The GWAP identifies several major transportation projects planned along or near Germanna Hwy (Rt 3), including the construction of a new parkway, the realignment of the Constitution Hwy (Rt 20)/Germanna Hwy (Rt 3) intersection, and the improvement of existing roadways. The County will
Sustain the rural character of Orange County while enhancing and improving the quality of life for all its citizens.

Consider projects from the cited studies and/or other planning documents listed in the chart below for incorporation into VDOT’s 6 Year (SYIP) Improvement Program as appropriate and as funding becomes available.

<table>
<thead>
<tr>
<th>Road(s)</th>
<th>Location</th>
<th>Project</th>
<th>Timeframe</th>
<th>Total Cost Estimate (2023 dollars)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chicken Mountain Rd (Route 655)</td>
<td>Between Route 20 and Route 15</td>
<td>Rural Rustic/pave</td>
<td>FY 23-24</td>
<td>$257,000</td>
</tr>
<tr>
<td>Greewood Rd (Route 635)</td>
<td>South of Route 20, west of the Town of Orange</td>
<td>Rural Rustic/pave</td>
<td>FY 23-24</td>
<td>$320,000</td>
</tr>
<tr>
<td>Jones Mill Rd (Route 635)</td>
<td>North of Route 20, west of the Town of Orange</td>
<td>Rural Rustic/pave</td>
<td>FY 24-25</td>
<td>$360,000</td>
</tr>
<tr>
<td>Bushy Mountain Rd (Route 626)</td>
<td>Between River Rd (Route 636) and Clarks Mountain Rd (Route 627)</td>
<td>Rural Rustic/pave</td>
<td>FY 27-28</td>
<td>$810,000</td>
</tr>
<tr>
<td>Hawfield Rd (Route 666)</td>
<td>Between Everona Rd (Route 617) and Clarks Mountain Rd (Route 627)</td>
<td>Rural Rustic/pave</td>
<td>TBD</td>
<td>TBD</td>
</tr>
<tr>
<td>Barnes Rd (Route 605)</td>
<td>From Old Plank Rd (Route 621) to end of state maintenance</td>
<td>Rural Rustic/pave</td>
<td>TBD</td>
<td>TBD</td>
</tr>
<tr>
<td>Tannery Rd (Route 729)</td>
<td>From Constitution Hwy (Rt 20) to end of state maintenance</td>
<td>Rural Rustic/pave</td>
<td>TBD</td>
<td>TBD</td>
</tr>
<tr>
<td>Reynolds Rd (Route 698)</td>
<td>From Barnes Rd (Route 605) to end of state maintenance</td>
<td>Rural Rustic/pave</td>
<td>TBD</td>
<td>TBD</td>
</tr>
<tr>
<td>Independence Rd (Route 650)</td>
<td>From end of state maintenance westward</td>
<td>Rural Addition/extend state maintenance by 0.3 mile</td>
<td>TBD</td>
<td>TBD</td>
</tr>
<tr>
<td>Road(s)</td>
<td>Location</td>
<td>Project</td>
<td>Timeframe</td>
<td>Total Estimated Cost (2023 dollars)</td>
</tr>
<tr>
<td>---------------------------------</td>
<td>----------------------------------------------------</td>
<td>--------------------------------</td>
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<td>-------------------------------------</td>
</tr>
<tr>
<td>Oak Springs Rd (pvt)</td>
<td>Between Kendall Rd (Route 600) and Lakeview Ln (pvt)</td>
<td>Rural Addition</td>
<td>TBD</td>
<td>TBD</td>
</tr>
<tr>
<td>Liberty Mills Rd (Route 641)</td>
<td>East of intersection with Blue Ridge Tpke (Route 231)</td>
<td>Rural Rustic/pave</td>
<td>TBD</td>
<td>TBD</td>
</tr>
<tr>
<td>Fieldstone Ln (pvt)</td>
<td>North of Old Office Rd (Route 622) to end of road</td>
<td>Rural Addition</td>
<td>TBD</td>
<td>TBD</td>
</tr>
<tr>
<td>Shore Dr (pvt)</td>
<td>From Harbor Dr (Route 689) to end of road</td>
<td>Rural Addition</td>
<td>TBD</td>
<td>TBD</td>
</tr>
</tbody>
</table>

**Identified in Route 20 Corridor Study (Phase II)**

<table>
<thead>
<tr>
<th>Road(s)</th>
<th>Location</th>
<th>Project</th>
<th>Timeframe</th>
<th>Total Estimated Cost (2023 dollars)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constitution Hwy (Rt 20)</td>
<td>Intersection with Crestview Dr (Rt 2016)</td>
<td>Install eastbound turn lane</td>
<td>TBD</td>
<td>$850,000</td>
</tr>
<tr>
<td>Constitution Hwy (Rt 20)</td>
<td>Intersection with Brick Church Rd (Rt 631)</td>
<td>Install westbound turn lane</td>
<td>TBD</td>
<td>$850,000</td>
</tr>
<tr>
<td>Constitution Hwy (Rt 20)</td>
<td>Intersection with Porter Rd (Rt 625)</td>
<td>Install westbound turn lane</td>
<td>FY 27-28</td>
<td>$850,000</td>
</tr>
<tr>
<td>Constitution Hwy (Rt 20)</td>
<td>Intersection with Kendall Rd (Rt 600 E)</td>
<td>Install eastbound and westbound turn lanes</td>
<td>TBD</td>
<td>$850,000</td>
</tr>
<tr>
<td>Constitution Hwy (Rt 20)</td>
<td>Intersection with Village Rd (Rt 671)</td>
<td>Install eastbound turn lane</td>
<td>TBD</td>
<td>$850,000</td>
</tr>
</tbody>
</table>

**Identified in Route 20 Corridor Study (Phase I)**

<table>
<thead>
<tr>
<th>Road(s)</th>
<th>Location</th>
<th>Project</th>
<th>Timeframe</th>
<th>Total Estimated Cost (2023 dollars)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zachary Taylor Hwy (Rt 522 S)</td>
<td>Intersection with Village Rd (Rt 671)</td>
<td>Shift intersection to the south</td>
<td>TBD</td>
<td>$1.25 million</td>
</tr>
</tbody>
</table>
**Constitution Hwy (Rt 20)**
- Intersection with Mine Run Rd (Rt 621 S): Install westbound turn lane on Rt 20 and turn lane on Mine Run Rd
- Total Estimated Cost: $850,000

**Strawberry Hill Rd (Rt 742)**
- Intersection with Mine Run Rd (Rt 621 S): Shift intersection to the south
- Total Estimated Cost: $1.1 million

**Constitution Hwy (Rt 20)**
- Intersection with Pine Stake Rd (Rt 621 N): Relocate intersection east to connect with Mine Run Rd (Rt 621 S)
- Total Estimated Cost: $2.5 million

**Constitution Hwy (Rt 20)**
- Intersection with Burr Hill Rd (Rt 692 N): Relocate Grasty Gold Mine Rd (Rt 692 S) to connect with Burr Hill Rd (Rt 692 N)
- Total Estimated Cost: $1.1 million

**Constitution Hwy (Rt 20)**
- From Zoar Rd/Gold Dale Rd (Rt 611) to Germanna Hwy (Rt 3): Widen road to a 4-lane divided highway
- Total Estimated Cost: $37.6 million

<table>
<thead>
<tr>
<th>Bridges/Culverts Identified as “Structurally Deficient” by VDOT</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Road(s)</strong></td>
</tr>
<tr>
<td>Dolly Madison Rd (Route 675)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Identified in the RRRC Regional Long Range Transportation Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Road(s)</strong></td>
</tr>
<tr>
<td>Flat Run Rd (Route 601)</td>
</tr>
<tr>
<td>Flat Run Rd (Route 601)</td>
</tr>
<tr>
<td>Spotswood Tri (Route 33)</td>
</tr>
<tr>
<td>Road(s)</td>
</tr>
<tr>
<td>-------------------------------</td>
</tr>
<tr>
<td>Constitution Hwy (Rt 20)</td>
</tr>
<tr>
<td>Germanna-Wilderness Area Park</td>
</tr>
<tr>
<td>Goodwin Dr (Rt 1059)</td>
</tr>
<tr>
<td>Locust Grove post office stub road</td>
</tr>
<tr>
<td>Pilgrim Church Rd</td>
</tr>
<tr>
<td>Vaucluse Rd (Rt 667) &amp; Chewning Rd</td>
</tr>
</tbody>
</table>
**VII. Capital Improvements Plan**

The Capital Improvements Plan (CIP) is the primary mechanism for long-range planning and funding of various public facilities and improvements such as schools, public safety facilities and equipment, the airport, municipal solid waste collection and disposal, water and wastewater provision/treatment, recreation facilities, libraries, and other public infrastructure investments. The CIP, in essence, coordinates and aligns revenues from local, state, federal, and grant sources to fund projects which implement the goals and objectives contained within the Comprehensive Plan. Orange County prepares an annual capital budget as part of the budget preparation and adoption, which includes the updating of the five-year CIP. The CIP is both a budgeting document and a plan, and should be referred to for the specifics of a given project and its funding source.

The Orange County CIP lists capital projects by both description and by county department or function, and details the anticipated funding source for each project and its timing by fiscal year. The CIP does not commit the County to a

<table>
<thead>
<tr>
<th>Location</th>
<th>Description</th>
<th>Year</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flat Run Rd (Rt 601) &amp;</td>
<td>Approximately ¾ of a mile north of Locust Grove Middle School</td>
<td>2050</td>
<td>$4 million</td>
</tr>
<tr>
<td>Governor Almond Rd (Rt 614)</td>
<td>Construct a ¾ mile 2-lane connector road *</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flat Run Rd (Rt 601)</td>
<td>Between Germanna Hwy (Rt 3) and Constitution Hwy (Rt 20)</td>
<td>2040</td>
<td>$15 million</td>
</tr>
<tr>
<td></td>
<td>Improve/rehabilitate roadway north of Locust Grove Middle School, realign</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>certain sections, and install pedestrian/bicycle facilities *</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Indiantown Rd (Rt 603)</td>
<td>Between Flat Run Rd (Rt 601) and Governor Almond Rd (Rt 614)</td>
<td>2050</td>
<td>$5.5 million</td>
</tr>
<tr>
<td></td>
<td>Rehabilitate roadway and install pedestrian/bicycle facilities *</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Governor Almond Rd (Rt 614)</td>
<td>Between Indiantown Rd (Rt 603) and the planned connector road</td>
<td>2055</td>
<td>$7.5 million</td>
</tr>
<tr>
<td></td>
<td>Rehabilitate roadway and install pedestrian/bicycle facilities *</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constitution Hwy (Route 20)</td>
<td>Intersection with Flat Run Rd (Route 601)</td>
<td>TBD</td>
<td>TBD</td>
</tr>
<tr>
<td></td>
<td>Construct a roundabout *</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spotswood Trl (Route 33)</td>
<td>Western intersection with Constitution Hwy (Route 20)</td>
<td>TBD</td>
<td>TBD</td>
</tr>
<tr>
<td></td>
<td>Construct a roundabout</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Asterisk: Project to be based on a future GWAP transportation master plan
particular expenditure in a particular year, but rather provides a reasonable schedule by which capital projects are to be completed under normal budgetary conditions. The county has adopted financial policies, one of which stipulates the establishment of a dedicated reserve account for CIP monies and another of which stipulates annual baseline funding for this account. This provides for more consistent coordination between the county’s budget and Comprehensive Plan.
Sustain the rural character of Orange County while enhancing and improving the quality of life for all its citizens.
VIII. Natural Resources

A. Climate

The climate of Orange County ranges from mild winters to warm and humid summers. Over the course of a year, the temperature typically varies from 25°F to 88°F and is rarely below 15°F or above 95°F.

B. Physical Geography

Orange County is located in the upper part of the Piedmont Plateau and wholly within the Piedmont geological province. In Virginia, this province lies between the Blue Ridge province on the west, and the Coastal Plain on the east. The Physiographic Map (please see Appendix) illustrates the Commonwealth’s geological provinces.

The County contains nine different rock formations according to the geologic map of Virginia. First, the Lynchburg formation (first found in the Lynchburg area), is on the western side of the County, adjacent to Greene County. This area is highly dissected by intermittent and permanent streams, has a well-defined drainage pattern, and ranges from gently sloping to steep.

East of the Lynchburg formation is the Newark group of rocks which underlies the communities of Barboursville and Somerset. This formation also occupies small areas along the east side of the Rapidan River and extends to Raccoon Ford. All the rocks of Triassic age, namely sandstone, red shale, siltstone, and conglomerate, are in this group. These areas are composed of wide, sloping ridges, and of small hilly and steep places along the larger streams.

The drainage pattern is dendritic (or shaped like a tree), but is less well-developed than in other parts of the County. The smoothest areas are those underlain by red shale and the roughest ones are those underlain by sandstone.

East of the Newark group is the Catoctin formation in the Southwestern Mountain Range. This range extends to Clarks Mountain, which lies northeast of the town of Orange. The drainage pattern in the area is well-defined. This area ranges from gentle to steep slopes.

East of the Catoctin is the largest formation in the County, consisting of metamorphosed and sedimentary and inter-layered igneous rocks that overlie the Virginia Blue Ridge complex, previously mapped as Wissahickon schist and granite gneiss, phyllite, and schist. The area is dissected by intermittent and permanent streams and has a well-defined drainage pattern. It ranges from nearly level to steep.

The Everona limestone outcrop lies in a narrow band extending from Gordonsville through Nasons to the Rapidan River, generally confined to road cuts and stream beds. The Everona Limestone Spur, located in this band, contains one of the County’s greatest groundwater assets.

Two areas underlain by granite are in Thornhill and Locust Grove. The topography in these areas is characterized by both relatively level areas and
steep areas. An area underlain by quartz diorite lies west of Locust Grove. Most of this area is nearly flat, but it ranges from nearly level to sloping, and has a drainage pattern that is not well defined. Between Ridge Run and Terry’s Run is a small area underlain by hornblende, gabbro, gneiss, and talc. The topography in this area ranges from nearly level to moderately steep.

Significant extractive minerals contained in the area’s geology include: Copper, gold, iron, limestone, soapstone, greenstone, granite, talc, manganese, and shale. Other known minerals include asbestos, barite, graphite, sulfur, and galena.

The topography of the County includes broad valleys and rolling hills. Elevations range from 200 to approximately 1,200 feet, with the higher areas scattered throughout the County. Elevations are lowest in the basin of the Rapidan River along the northern border of the County. Some of the highest points in the County range from 913 feet (Hardwick Mountain) and 1,197 feet (Cowherd Mountain). The Steep Slopes Map (see appendix) illustrates locations of extreme elevation changes in the County, which tend to transect the County north of Route 15 to the west of the Town of Orange and north of Route 20 in the Rapidan area.

The County is well dissected and mostly rolling. The interstream divides are fairly wide and are sloping or rolling, except in areas along the lower tributaries of large streams, where entrenchment has been rapid and bluffs and valleys are common. The walls of the valley are steep, rising abruptly from floodplains. The steepest areas are underlain by greenstone, sandstone, and conglomerate.

C. Water Resources

Based on US Census Data (2020), approximately 2.5 square miles, or 0.7% of the County’s total area contains surface water.

The northern half of Orange County drains to the Rapidan River and is located in the Rappahannock River watershed, the southern half of the County drains to the North Anna River and is located in the York River watershed, and the extreme southwestern corner of the County drains to the Rivanna River and is located in the James River watershed. Floodplains in the County are incorporated by reference in County Code through the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map series (FIRM).

The North Anna River and its tributaries have their headwaters in Orange County. These streams are not large, and they supply only a small amount of water. Surface water is soft and of good quality. Three primary tributaries of the North Anna River, namely Pamunkey Creek, Terry’s Run and Negro Run serve as “fingers” of Lake Anna that extend into the County. Approximately 23% of the watershed for Lake Anna is located in Orange County.
Other surface water areas in Orange County include Lake Orange, a 124 acre public fishing lake owned by the Virginia Department of Wildlife Resources. Lake of the Woods (LOW), a planned residential community with approximately 4,260 lots contains two lakes, the Main Lake and Keaton’s Lake. The Main Lake contains 500 acres and is fed by Flat Run Creek and several springs. Keaton’s Lake (named after Keaton’s Run Creek) contains 35 acres. Each lake is impounded with a dam. Inundation zone maps are maintained for each of these three dams.

D. Groundwater

The condition and availability of groundwater is directly related to the bedrock geological formations. For purposes of this subsection, the County is underlain by three distinct geological provinces: 1) The Blue Ridge Province; 2) the Piedmont Province; and 3) the Mesozoic Culpeper and Barboursville Basins. Perhaps one of the largest aquifers in the County is located within the Everona Limestone Spur, located along Route 15, between the Towns of Gordonsville and Orange.

The Groundwater Protection Zone map (please see Appendix) illustrates their general locations in the County. Because faults exist in the geological structure of the County and the region, (Source: 2006 Draft Water Supply Study, EGGI), their presence influences groundwater flow and aquifer recharge capacity, as does fractures, faults or other conditions of the respective bedrock formations. The chief source of groundwater recharge in a well or well field is precipitation, which is transported by the fractures, etc.

Average precipitation in Orange County is roughly 42 inches (Wiley and Wilson, 2006). Runoff acts as the conveyance to the subsurface geological formations, and land use activities contribute to the quality of the water.

E. Soils

The characteristics of soils have a significant impact on land use. Some soils have low bearing capacity or shallow depth-to-bedrock and may be unsuitable for development.

Other soil types impose severe limitations for septic drain fields. The Soils Map (see Appendix) illustrates the general location and characteristics of the different soil types in Orange County.
IX. Demographics

Demographics enable planners to use the data as an analytical tool to measure trends and issues during the development of land use planning policy.

A. Population

The population in Orange County experienced an increase of 29.4% between 2000 and 2010, representing an (mean) annual growth rate of 2.9%. This slowed dramatically in the subsequent years however, slowing between 2010 and 2020 to a growth rate of 8.6%. This change represents an (mean) annual growth rate of 0.9%.

![Chart IX-1: Total Population](source)

Orange County has experienced consistent population growth in all age group segments captured by the 2000, 2010, and 2020 Censuses. Although overall growth slowed from 2010 to 2020 as compared to 2000 to 2010, growth continued to be greatest in the 60+ age category. It slowed significantly in the 0-19 years and 45-59 years segments. Growth has been lowest in the 35-44 years segment.
B. Housing

One measurement of a community's changing population profile is by examining residential land use, specifically, housing. To examine the distribution of the population in terms of residential development, persons per household is a standard measurement tool.

Charts 3 and 4 illustrate housing data, based on the decennial population and housing data derived from the U.S. Census. The housing occupancy in Orange has maintained a small but steady increase over the past 20 years.

Source: 2020 census, 2010 Census, 2000 census
### Chart IX-3: Occupied Household Data

<table>
<thead>
<tr>
<th>OCCUPIED HOUSEHOLDS</th>
<th>2000</th>
<th>2010</th>
<th>2020</th>
<th>% RATE OF CHANGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Households</td>
<td>10,150</td>
<td>12,895</td>
<td>13,926</td>
<td>37.2</td>
</tr>
</tbody>
</table>

### HOUSEHOLDS BY TYPE

<table>
<thead>
<tr>
<th>Family Households (Families)</th>
<th>2000</th>
<th>2010</th>
<th>2020</th>
<th>% RATE OF CHANGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>With Own Children under 18 years</td>
<td>3,002</td>
<td>3,586</td>
<td>3,566</td>
<td>18.8</td>
</tr>
<tr>
<td>Married-couple family</td>
<td>5,962</td>
<td>7,323</td>
<td>7,733</td>
<td>30.4</td>
</tr>
<tr>
<td>With Own Children under 18 years</td>
<td>2,183</td>
<td>2,581</td>
<td>2,337</td>
<td>7.1</td>
</tr>
<tr>
<td>Male householder, no spouse present</td>
<td>---</td>
<td>636</td>
<td>507</td>
<td>-20.3</td>
</tr>
<tr>
<td>With Own Children under 18 years</td>
<td>---</td>
<td>359</td>
<td>275</td>
<td>-23.4</td>
</tr>
<tr>
<td>Female householder, No husband present</td>
<td>1,084</td>
<td>1,411</td>
<td>1,797</td>
<td>65.8</td>
</tr>
<tr>
<td>With Own Children under 18 years</td>
<td>566</td>
<td>691</td>
<td>954</td>
<td>68.6</td>
</tr>
<tr>
<td>Nonfamily Households</td>
<td>2,679</td>
<td>3,553</td>
<td>3,889</td>
<td>45.2</td>
</tr>
<tr>
<td>Householder living alone</td>
<td>2,248</td>
<td>2,905</td>
<td>3,224</td>
<td>43.4</td>
</tr>
<tr>
<td>Householder 65 years and over</td>
<td>1,028</td>
<td>1,248</td>
<td>1,509</td>
<td>46.8</td>
</tr>
<tr>
<td>Households with Individuals under 18 years</td>
<td>3,367</td>
<td>4,123</td>
<td>4,206</td>
<td>24.9</td>
</tr>
<tr>
<td>Households with Individuals 65 years and over</td>
<td>3,055</td>
<td>4,210</td>
<td>3,384</td>
<td>10.8</td>
</tr>
</tbody>
</table>

Average Household Size: 2.5 to 2.97, 2.58 to 3.02, % change: 3.2 to 4.1

Average Family Size: 2.9 to 2.97, 3.02, % change: 4.1

### Chart IX-4: Housing Occupancy, 2000 to 2020

<table>
<thead>
<tr>
<th>TOTAL HOUSING UNITS</th>
<th>2000</th>
<th>2010</th>
<th>2020</th>
<th>% RATE OF CHANGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Housing Units</td>
<td>11,354</td>
<td>14,616</td>
<td>15,529</td>
<td>38</td>
</tr>
<tr>
<td>Occupied Housing Units</td>
<td>10,150</td>
<td>12,985</td>
<td>13,970</td>
<td>39.8</td>
</tr>
<tr>
<td>Vacant Housing Units</td>
<td>1,204</td>
<td>1,721</td>
<td>277</td>
<td>23</td>
</tr>
<tr>
<td>For seasonal, recreational, or occasional use</td>
<td>484</td>
<td>592</td>
<td>500</td>
<td>22.3</td>
</tr>
<tr>
<td>Homeowner vacancy rate (percent)</td>
<td>2.1</td>
<td>2.9</td>
<td>.9</td>
<td>38.1</td>
</tr>
<tr>
<td>Rental vacancy rate (percent)</td>
<td>4.7</td>
<td>8.1</td>
<td>.9</td>
<td>72.3</td>
</tr>
</tbody>
</table>

### HOUSING TENURE

| Total Occupied Housing Units              | 10,150| 12,985| 13,970| 27.0             |
| Owner-occupied housing units             | 7,822 | 9,890 | 11,010| 26.4             |
| Renter-occupied housing units            | 2,328 | 3,005 | 2,960 | 29.1             |
| Average household size of owner-occupied unit | 2.51 | 2.55 | 2.59 | 1.6              |
| Average household size of renter-occupied unit | 2.46 | 2.56 | 2.55 | 4.1              |

Source for both above tables: U.S. Census
C. Household Income

Chart 5 provides a breakdown of household income information. The chart demonstrates that overall, most lower income brackets have decreased, with the notable exception of incomes less than $15,000, which has increased. By contrast, higher income brackets have all increased, while incomes of $50,000-$74,999 have dropped. Further stratification of this bracket is unavailable, but it can be assumed that this bracket is probably weighted towards the middle and higher end of this bracket, based on overall trend.

Due to lack of available data, the reason for this change is unknown. Future studies into related areas such as housing costs would be appropriate in order to identify the reason for this trend and any recommended actions.

D. Civilian Labor Force

Civilian labor force data generally describes individuals over the age of 16, who are not serving in the military nor institutionalized, and either employed or unemployed. The size of the labor force has generally followed the increase in population. According to Virginia Employment Commission data and U.S. Census
data, there was an increase from 12,661 workers in 2000 to 15,322 workers in 2012 to 17,864 workers as of January 2023.

E. Unemployment

The unemployment rates for 2010-2022 are presented in Chart 5. Orange’s unemployment rate largely follows that of the state and national trends. This has been largely decreasing, except for a spike around 2020 and carrying through 2021. This is assumed to be largely due to the COVID-19 pandemic.

F. Commuting Patterns

The safe and efficient movement of people and goods is critical to the well-being of the citizens and the economy of Orange County. Overall, the County continues to have a negative net in-commuters figure, with the majority of the labor force working outside of the County. The rate of change of in-commuters is a much higher increase than that of out-commuters.
G. Business and Economy

The health of the local economy in general, and the level of businesses’ activity directly, are the dominant factors in Orange County’s fiscal soundness. Charts 8 and 9 provide information on the tax income from economic activity, as a measure of health on business types in Orange.

<table>
<thead>
<tr>
<th>Chart IX-8: Tax Revenue by Type</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td>Public Service Corporation Taxes</td>
</tr>
<tr>
<td>Business Equipment Taxes</td>
</tr>
<tr>
<td>Machinery &amp; Tools Taxes</td>
</tr>
<tr>
<td>Merchant Capital Taxes</td>
</tr>
<tr>
<td>Total Direct Business Taxes</td>
</tr>
<tr>
<td>Individual Personal Property Taxes</td>
</tr>
<tr>
<td>Local Sales &amp; Use Taxes</td>
</tr>
<tr>
<td>Consumer Utility Taxes (Inc. Consumption)</td>
</tr>
<tr>
<td>Motor Vehicle License Taxes</td>
</tr>
<tr>
<td>Recodation Taxes</td>
</tr>
<tr>
<td>Cigarette Taxes</td>
</tr>
<tr>
<td>Utility License Taxes</td>
</tr>
</tbody>
</table>

Source: U.S. Census
Chart IX-9: Top 10 Taxable Sales by Business Classification

<table>
<thead>
<tr>
<th>NAICS</th>
<th>CLASSIFICATION</th>
<th># OPERATING</th>
<th>$ AMOUNT</th>
<th>NAICS</th>
<th>CLASSIFICATION</th>
<th># OPERATING</th>
<th>$ AMOUNT</th>
</tr>
</thead>
<tbody>
<tr>
<td>445</td>
<td>Food and Beverage Stores</td>
<td>20</td>
<td>49,601,471</td>
<td>445</td>
<td>Food and Beverage Stores</td>
<td>22</td>
<td>64,811,292</td>
</tr>
<tr>
<td>722</td>
<td>Food Services and Drinking Places</td>
<td>68</td>
<td>30,466,795</td>
<td>447</td>
<td>Gasoline Stations</td>
<td>15</td>
<td>24,430,510</td>
</tr>
<tr>
<td>447</td>
<td>Gasoline Stations</td>
<td>14</td>
<td>15,959,040</td>
<td>423</td>
<td>Merchant Wholesalers, Durable Goods</td>
<td>30</td>
<td>29,439,142</td>
</tr>
<tr>
<td>452</td>
<td>General Merchandise Dealers</td>
<td>17</td>
<td>15,476,268</td>
<td>441</td>
<td>Motor Vehicles and Parts Dealer</td>
<td>22</td>
<td>22,069,535</td>
</tr>
<tr>
<td>441</td>
<td>Motor Vehicle and Parts Dealers</td>
<td>21</td>
<td>14,477,512</td>
<td>453</td>
<td>Miscellaneous store retailers</td>
<td>56</td>
<td>5,899,981</td>
</tr>
<tr>
<td>444</td>
<td>Building Material and Garden Equipment</td>
<td>17</td>
<td>10,010,234</td>
<td>722</td>
<td>Food services and drinking places</td>
<td>68</td>
<td>33,944,514</td>
</tr>
<tr>
<td>422</td>
<td>Wholesale Trade; Nondurable Goods</td>
<td>5</td>
<td>6,872,982</td>
<td>452</td>
<td>General merchandise stores</td>
<td>15</td>
<td>74,172,927</td>
</tr>
<tr>
<td>312</td>
<td>Beverage and Tobacco Products</td>
<td>8</td>
<td>5,120,885</td>
<td>444</td>
<td>Building Material and Garden Equipment and Supplies Dealers</td>
<td>10</td>
<td>16,439,076</td>
</tr>
<tr>
<td>454</td>
<td>Non-store Retailers</td>
<td>45</td>
<td>5,063,896</td>
<td>721</td>
<td>Accommodation</td>
<td>13</td>
<td>4,980,934</td>
</tr>
<tr>
<td>4446</td>
<td>Health and Personal Care Stores</td>
<td>7</td>
<td>4,853,460</td>
<td>811</td>
<td>Repair and Maintenance</td>
<td>28</td>
<td>4,784,141</td>
</tr>
</tbody>
</table>

Source: Virginia Department of Taxation

H. Changes in Employment Base
The economy of Orange County continues to reflect a mix of agricultural and forestal products, and general manufacturing employers. Chart 10 identifies the top private-sector employers in the County.

Chart IX-10: Top Private Sector Employers

<table>
<thead>
<tr>
<th>FIRM</th>
<th>PRODUCT</th>
<th># OF EMPLOYEES</th>
<th>YEAR ESTABLISHED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aerojet Rocketdyne</td>
<td>Defense Contractor</td>
<td>100+</td>
<td>2004</td>
</tr>
<tr>
<td>American Woodmark Corp.</td>
<td>Cabinet Components</td>
<td>300+</td>
<td>1980</td>
</tr>
<tr>
<td>Battlefield Farms, Inc.</td>
<td>Bedding/Holiday Plants</td>
<td>200+</td>
<td>1989</td>
</tr>
</tbody>
</table>
Chart IX-11: Employment by Industry Comparison 2012 & 2022

<table>
<thead>
<tr>
<th>INDUSTRY</th>
<th>2012 - # OF EMPLOYEES</th>
<th>2022 - # OF EMPLOYEES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture, Forestry, Fishing and Hunting</td>
<td>508</td>
<td>418</td>
</tr>
<tr>
<td>Mining, Quarrying, and Oil and Gas Extraction*</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Utilities</td>
<td>-</td>
<td>29</td>
</tr>
<tr>
<td>Construction</td>
<td>356</td>
<td>506</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>923</td>
<td>1,266</td>
</tr>
<tr>
<td>Wholesale Trade</td>
<td>557</td>
<td>546</td>
</tr>
<tr>
<td>Retail Trade</td>
<td>943</td>
<td>1,309</td>
</tr>
<tr>
<td>Transportation and Warehousing</td>
<td>175</td>
<td>164</td>
</tr>
<tr>
<td>Information</td>
<td>53</td>
<td>30</td>
</tr>
<tr>
<td>Finance and Insurance</td>
<td>205</td>
<td>212</td>
</tr>
<tr>
<td>Real Estate and Rental and Leasing</td>
<td>260</td>
<td>134</td>
</tr>
<tr>
<td>Professional, Scientific, and Technical Services</td>
<td>286</td>
<td>220</td>
</tr>
<tr>
<td>Management of Companies and Enterprises*</td>
<td>-</td>
<td>14</td>
</tr>
<tr>
<td>Administrative and Support and Waste Management</td>
<td>185</td>
<td>345</td>
</tr>
<tr>
<td>Educational Services</td>
<td>64</td>
<td>92</td>
</tr>
<tr>
<td>Health Care and Social Assistance</td>
<td>542</td>
<td>605</td>
</tr>
<tr>
<td>Arts, Entertainment, and Recreation</td>
<td>151</td>
<td>131</td>
</tr>
<tr>
<td>Accommodation and Food Services</td>
<td>721</td>
<td>772</td>
</tr>
</tbody>
</table>
Chapter IX: Agriculture

I. General Agricultural Statistics and Agricultural Employment

According to the U.S. Department of Agriculture’s 2017 Census of Agriculture, the total number of farms in the County was 417 in 2017 and the total farm acreage was 95,246 acres. 418 jobs in Orange County are identified as part of the Agricultural, Forestry, Hunting and Fishing industry sector. Of interesting comparison, based on Commissioner of Revenue data, nearly 14,000 parcels are enrolled in the Land Use Value Assessment Program. While this figure is not further stratified into Agricultural Land Use only, all but 15 parcels at least intersect the Agricultural Zoning District.

The top agricultural industry in the County was “nursery, greenhouse, floriculture, and sod,” with sales totaling more than $77,574,000. This can likely be attributed to the presence of industrial greenhouses within the County. Orange continues to be, since at least 2007, the state’s top producer in this category.

In 2017, Orange County farms produced and sold $113 million worth of products in terms of market value, ranked 6th in the state. This is a change from 2007, at which time the figures were $76 million and a ranking of 7th, respectively. Approximately 57% (239) of the farms in the County produce less than $10,000 in sales, as detailed in Chart 13. Overall, farm profits have all been declining since 2012, with some declining since 2007.

<table>
<thead>
<tr>
<th>Chart IX-12: Selected Farm Traits</th>
<th>2007</th>
<th>2012</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Farms</td>
<td>518</td>
<td>547</td>
<td>417</td>
</tr>
<tr>
<td>Acreage in Farms</td>
<td>104,606</td>
<td>104,806</td>
<td>92,246</td>
</tr>
<tr>
<td>Total cropland (farms)</td>
<td>341</td>
<td>370</td>
<td>287</td>
</tr>
<tr>
<td>Total Cropland (acres)</td>
<td>45,202</td>
<td>40,460</td>
<td>39,802</td>
</tr>
<tr>
<td>Total Pasture (farms)</td>
<td>417</td>
<td>445</td>
<td>327</td>
</tr>
<tr>
<td>Total Pasture (acres)</td>
<td>40,295</td>
<td>35,768</td>
<td>31,481</td>
</tr>
<tr>
<td>Workers Employed</td>
<td>821</td>
<td>831</td>
<td>154</td>
</tr>
</tbody>
</table>

Source: USDA Census of Agriculture

Note: Asterisk (*) indicates non-disclosable data.
Source: Virginia Employment Commission
In keeping with the trends shown in the profits, Chart 14 shows a clear decrease in the number of farms in all size brackets. It should be noted, this chart does not include subsistence farming, or “home-steading” properties.
J. Tourism

The impacts of tourism can be measured by the amount of taxes generated from meals and lodging. Chart 15 below shows the growing impact of tourism on the local economy from 2009 to 2019.

Dollar amounts within the table include activity within the towns of Orange and Gordonsville. The availability of lodging and restaurants within the town of Orange accounted for 77% of lodging taxes and 62% of food service taxes collected, respectively, in the county in 2019. Although specific data was unavailable for the town of Gordonsville, taxes collected related to food service within the town make up a significant portion of the total amount.

<table>
<thead>
<tr>
<th>Chart IX-15: Tourism-Generated Economic Impact For Orange County</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td>Employed.</td>
</tr>
<tr>
<td>Expenditures.</td>
</tr>
<tr>
<td>Local Tax Receipts.</td>
</tr>
<tr>
<td>Payroll.</td>
</tr>
<tr>
<td>2009</td>
</tr>
<tr>
<td>----------------</td>
</tr>
<tr>
<td>POPULATION</td>
</tr>
<tr>
<td>TRAVEL ECONOMIC IMPACTS</td>
</tr>
<tr>
<td>Employment</td>
</tr>
<tr>
<td>Expenditures</td>
</tr>
<tr>
<td>Local Tax Receipts</td>
</tr>
<tr>
<td>Payroll</td>
</tr>
</tbody>
</table>
K. Historic Resources

Orange County contains sites of prehistoric settlements, colonial outposts, Revolutionary War activities, Civil War battlefields, the lifelong home of President James Madison Jr., the birthplace of President Zachary Taylor, and the homes of five Virginia governors (Alexander Spotswood, James Barbour, James Lawson Kemper, Hardin Burnley, and Lindsay Almond). As of 2023, Orange County contains 38 listings in the Virginia Landmarks Register, 36 of which are also listed in the National Register of Historic Places.

Most of the historic resources in Orange County are privately owned. Many of these sites, including the Exchange Hotel, Germanna, and Wilderness Battlefield are protected and interpreted by responsible stewards. Others, such as Spotswood’s Enchanted Castle, provide opportunities for archaeological research. Greenwood, Hare Forest, and others remain as private homes. Willow Grove and the Barboursville ruins have been adapted for uses that combine preservation with commerce and tourism.

A National Heritage Area, created by Congress, has identified the following sites as historic resources and has included them in its “Journey Through Hallowed Ground” preservation effort:

- Waddell Memorial Presbyterian Church
- Willow Grove
- Orange County Courthouse
- St. Thomas Church
- Ballard-Marshall House
- Mayhurst
- Montpelier
- Somerset Christian Church
- Madison-Barbour Rural Historic District
- Barboursville
- Gordonsville Historic District
- Exchange Hotel
In 1987, the Virginia Department of Historic Resources created the Madison-Barbour Rural Historic District (MBRHD) in recognition of the significant cultural, scenic, and historic features found in the area. This is the second largest of 26 rural historic districts in the Commonwealth; the MBRHD encompasses approximately 31,200 acres of land within the County. Please refer to the Madison Barbour Rural Historic District map in the appendix for further detail.

X. Highways

As of December 31, 2021, there were 82.97 miles of primary roads in Orange County and 360.61 miles of secondary roads, approximately 49 miles of which are unpaved. There are six (6) primary roads in the County. US 15 is the major north-south route between Gordonsville and Orange, connecting the County with US 29 to the north and Interstate 64 to the south. US 33 is a southeast-northwest connection through Gordonsville and western Orange County. It provides access to Richmond to the southeast and to the Shenandoah Valley to the northwest.

US 522 traverses the center of the County from north to south and connects the County with Culpeper to the north and Interstate 64 in Louisa County to the south. State Route 3, one of two four-lane road segments in the County, traverses the eastern end of the County and provides easy access to Culpeper and Fredericksburg and other points north for travelers and commuters. State Route 20 runs southeast-northwest through the County, from Route 3 through the town of Orange, through the villages of Somerset and Barboursville, and on into Charlottesville. State Route 231, a north-south route, connects the County with Madison County to the north and Albemarle to the south.

Chart 16 contains traffic volumes over time for major roads throughout the County.

<p>| Chart X-16: Annual Average Daily Traffic Counts Primary Highways 2001 to 2021 |
|-----------------------------|-----------------------------|-----------------------------|</p>
<table>
<thead>
<tr>
<th>LOCATION</th>
<th>FROM</th>
<th>TO</th>
<th>2001</th>
<th>2011</th>
<th>2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROUTE</td>
<td>Culpeper CL</td>
<td>SR 20</td>
<td>8,500</td>
<td>13,000</td>
<td>5,400</td>
</tr>
<tr>
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XI. **Process for Review of Public Uses and Uses of a Public Nature**

**A. In General**

The purpose of this portion of the Comprehensive Plan is to identify standards and processes applicable to public uses and uses of a public nature, regardless of ownership, pursuant to § 15.2-2232 VA Code Ann. In general, no public facility, as defined herein, shall be constructed, established, or authorized unless or until the general location or approximate location, character, and extent thereof has been submitted to and approved by the Planning Commission as being substantially in accord with the Comprehensive Plan, or part thereof.

**Public Uses and Facilities**

1. Public facilities, structures and uses, as those terms are used herein, shall include, but not be limited to, public streets, connections to existing streets, parks or other public areas, public buildings or public structures, public utility facilities, or public service corporation facilities, whether publicly or privately owned.

2. For purposes herein, the foregoing facilities, structures and uses shall be referred to as "public facilities." The term "public facility" or "public use" shall not include the business office of any of the foregoing unless owned and operated by a governmental body.

<table>
<thead>
<tr>
<th></th>
<th>SR: State Route</th>
<th>CL: County Line</th>
<th>Rte: Secondary Route</th>
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<td>Rte 611</td>
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<td>SR 20</td>
<td>Culp. CL</td>
<td>2,400 5,200 6,000</td>
</tr>
</tbody>
</table>

*Source: Virginia Department of Transportation*
3. However, "public facilities" shall not include railroad facilities or underground natural gas or underground electric distribution facilities of a public utility as defined in § 56-265.1 VA Code Ann., within its certificated service territory, and shall not include a public telecommunications facility (except television and radio towers and structures not necessary to house electronic apparatus) that has received approval and funding by the Virginia Public Broadcasting Board pursuant to § 2.2-2426 et seq., VA Code Ann., or by the Board of Education pursuant to § 22.1-20.1 VA Code Ann.

B. Public Facilities, Permitted in all Zoning Districts, Subject to Review in Accordance with § 15.2-2232, VA Code Ann.

Public facilities may be located within any zoning district in the County, subject to § 15.2-2232, VA Code Ann., this part and any Zoning Ordinance requirement or limitation. If a special use permit is required by the Zoning Ordinance, then any public hearing required by this part may be held concurrently with the public hearing for the special use permit.


1. The Planning Director shall deem public areas, facilities, or uses as features already shown in the Comprehensive Plan when they are identified within, but are not the entire subject of, a subdivision plan submitted in accordance with the Subdivision Ordinance, or of a site plan for development submitted in accordance with the Zoning Ordinance, and;

2. When the general or approximate location, character, and extent of those facilities is consistent with the provisions of the Comprehensive Plan or a part thereof.

3. The public areas, facilities, or uses are the subject of a proffer accepted under the County's conditional zoning system.

4. Paving, repaid, reconstruction, improvement, drainage or similar work and normal service extensions of public utilities or public service corporation facilities shall not require a public facility determination. For purposes of this section, widening, narrowing, extension, enlargement, vacation or change of use of public streets or public areas shall be subject to the requirement of a "public facility determination."

1. Any public facility that the Planning Director cannot reasonably determine to be a feature shown in the Comprehensive Plan, or subject to an exception to Plan conformity review as set forth above, shall be submitted to the Planning Commission for its review in accordance with the provisions of this section.

E. Procedure for Consideration of Applications for Public Facility Determinations.

1. Application procedures. Submission of a site or subdivision plan shall constitute sufficient application for a determination as to plan conformity review under the provisions of this section unless the Planning Director requests more information under this section, or separate application may be made where no site or subdivision plan is submitted. The Planning Director may require any applicant to provide such additional information as needed to identify the nature, general or approximate location, character, and extent of the public use, structure, or facility proposed.

2. The Planning Director shall determine whether the application is in proper form and shall advise the applicant of the date on which the application was accepted for review, or what further information is required to constitute a satisfactory application.

When the Planning Director determines that the application is complete, the applicant and the Planning Commission shall be advised. The Commission shall hear and decide the application within 60 days, unless such time is extended by the Board of Supervisors prior to the expiration of the 60 days. Notwithstanding the above, the Commission shall hear and decide all applications for telecommunication facilities, consistent with the requirements of the Federal Telecommunications Act of 1996, within 90 days, unless such time is extended by the Board by no more than 60 additional days, or the applicant has agreed to a voluntary extension of time. Failure of the Commission to make a final decision as required herein shall be deemed an approval of the application.
3. The Planning Commission may (and as directed by the Board of Supervisors shall) advertise and hold a public hearing regarding the application prior to making its decision.

4. The Planning Commission shall communicate in writing its findings indicating its approval or disapproval with written reasons therefore to the Board of Supervisors. The Planning Director shall communicate the Commission's determination with respect to any application to the Board of Supervisors and the County Attorney. The Planning Director may incorporate an applicant's request for an extension of the 60-day time frame for the Commission to hear and act upon those determinations scheduled for public hearing.

5. The Board of Supervisors may overrule the action of the Planning Commission by a vote of a majority of its membership.

F. Appeals.

1. An applicant aggrieved by the public facility determination of the Planning Commission may appeal that determination to the Board of Supervisors, by written petition giving the reasons for such appeal, filed with the Clerk to the Board within 10 days after the Commission's decision.

2. The Board shall hear and decide such appeal within 60 days after the date upon which the appeal was filed with the Clerk. The Board of County Supervisors may overrule the decision of the Planning Commission rendered hereunder by majority vote of its membership. Its decision thereon shall be final.
Sustain the rural character of Orange County while enhancing and improving the quality of life for all its citizens.
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