



Madison County's 2025 Comprehensive Plan

Adopted May 7, 2025

Acknowledgements

A sincere thanks is due to the many citizens, Comprehensive Plan Committee members, Ligon Webb, Former County Planner, Jennifer Little, Rappahannock Rapidan Regional Commission, Don McCown, Piedmont Environmental Council, Peter Rice, Madison County Resident, Peter Work, Madison County Resident, Jonathon Weakley, County Administrator, and elected officials (both past and present) who contributed to the development of Madison County's 2024 Comprehensive Plan. It was the support and assistance of the participants that made the Plan what it is – a reflection of the community's desires and hopes, with strategic steps to achieve that future!

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Appendix A: Route 29 Corridor Study (2012)

Vision Statement

The Comprehensive Plan Committee adopted the following Vision Statement for Madison County's 2025 Plan:

As residents of Madison County, we seek to maintain and enhance the County's civic, cultural, and natural assets. We recognize the importance of preserving the County's highly-valued rural character, scenic beauty, and friendly atmosphere. We believe the County must also encourage entrepreneurship, the expansion of employment opportunities for County residents, and modest, well-planned commercial and residential development.

Introduction

Purpose of the Comprehensive Plan

The Virginia Code, Section 15.2-2223, requires that each Virginia county adopt a Comprehensive Plan and regularly update it on a five-year cycle. The Plan serves as a general statement of policy, with the function of guiding the county's development and growth in light of its present and future needs, desires, and resources. In short, the Comprehensive Plan is a compass for the county's future. As a general statement of policy, the Comprehensive Plan is the document by which the county will evaluate all projects concerning rezoning applications, special-use applications, public facilities and location, and capital improvements for consistency with the county's growth and development policies. It is to be distinguished from the variety of tools available to the county to implement its Plan, such as zoning, subdivision, and site plan ordinances and economic development, and infrastructure. The Comprehensive Plan serves as a link between the county's aspirations and its realization of those aspirations through the use of these various tools.

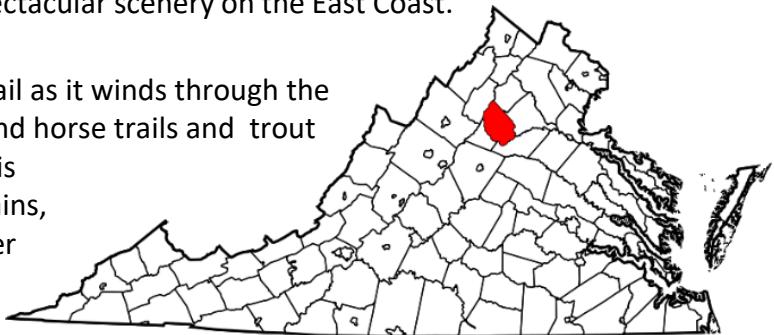
Process

The Comprehensive Plan process analyzes existing conditions, characteristics, trends, and incorporates these considerations for future scenarios and issues. Through analysis and citizen input, opportunities are recognized to ensure that the values of Madison County are maintained while seeking to address current and future concerns and manage potential growth. Madison County last updated its Comprehensive Plan in 2018. Work on the current, 2024 Plan commenced in late 2022 under the leadership of the County Planner and with the regular involvement of a Comprehensive Plan Committee consisting of Madison County residents.

Background of Madison County

Located just north of Virginia's geographic center, Madison County was named for the family of U.S. President James Madison, which owned property along the Rapidan River. Originally settled in 1725, the County was formally established in 1792. Nestled between the Blue Ridge Mountains to the west and the Piedmont to the east, Madison County offers some of the most spectacular scenery on the East Coast.

The County is bordered by the Appalachian Trail as it winds through the Shenandoah National Park (SNP), with miles of foot and horse trails and trout streams that outnumber the paved roads. While SNP is considered the crown jewel of the Blue Ridge Mountains, its creation in the 1930s marked a bittersweet chapter in the County's history as many local families were forced off their land to make way for the Park.



Despite this disruption, Madison's residents, both the longtime locals and newcomers, have developed a strong connection to the land, with agriculture remaining the backbone of the local economy.

Over the years, Madison's agricultural base has diversified, from timber and row crops to livestock, vineyards, and hops for local wine and beer production. Agritourism has also emerged as a growing sector, drawing visitors who want to experience the County's natural beauty and rural charm.

As the County's population grew slowly throughout the 20th century, it faced new challenges in managing development. In the late 1960s and early 1970s, Madison adopted its first subdivision and zoning ordinances. However, problems arose under these initial ordinances, prompting the County to impose a moratorium on subdivision development. In response, the County issued revised ordinances, including a site plan control ordinance. In 1977, Madison adopted its first Comprehensive Plan, and by the mid-1970s, it had joined the newly formed Rappahannock-Rapidan Planning District Commission (PD 9), which includes Culpeper, Fauquier, Orange, and Rappahannock Counties, as well as the Towns of Culpeper and Warrenton. The Commission was established to promote regional planning in areas such as community development, economic development, transportation, housing, agriculture, tourism, and environmental issues. In 1980, the Commission released an initial Route 29 Corridor Study, which has been adopted by reference as a part of this document, analyzing physical characteristics along the corridor. This study has been updated over the years, with the most recent version adopted in 2014.

By 2020, Madison County's population reached 13,837, growing at an average rate of 63 people per year since 1990. This increase has been fueled, in part, by the rising demand for rural land and housing. After the COVID-19 pandemic, real estate prices surged as second-home buyers and short-term rental tourists sought the peace and space offered by the County.

In response to the challenges and opportunities of the 21st century, Madison County is taking steps to ensure that it remains a viable and vibrant place for both residents and visitors. Recognizing the importance of connectivity, the County is working regionally to install a world-class fiber optic network that will provide universal coverage to support local schools, emergency services, agribusinesses, and telecommuting. This infrastructure will help maintain the County's rural character while also fostering economic growth and entrepreneurial opportunities, reducing the need for costly new infrastructure.

As Madison County continues to evolve, it remains committed to preserving its distinctive charm and connection to nature. This Comprehensive Plan seeks to balance the County's rich agricultural heritage with modern planning initiatives, ensuring a high quality of life for all residents and visitors while preparing for a sustainable and prosperous future.

Factual Considerations

The Physical Environment

Approximately 70% of the County lies within the Virginia Piedmont province and is dissected by many small streams and rivers that flow in narrow meandering valleys. The western part of the County, about 30% of its land area, lies in the Blue Ridge province and is characterized by many streams that have cut deep narrow valleys bordered by steep rocky slopes and narrow ridges.

Shenandoah National Park, with their scenic beauty and recreational opportunities, exert a strong influence on development and land use patterns across the County. Historically, the location of development consisting of farms, villages, and road systems, is closely related to the physical characteristics of the land. Scattered along the County's road system can be found areas of commerce including agriculture and agritourism, and villages mainly consisting of residences.



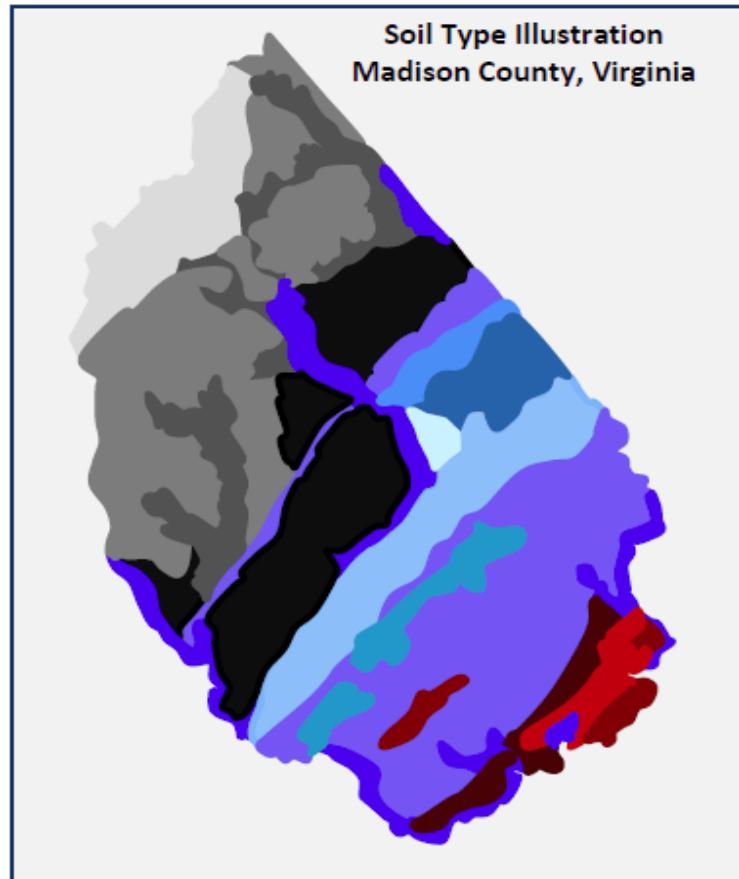
Photo by Will Parson/Chesapeake Bay Program with aerial support by Southwings

Soils Suitability and Farmland

Soil suitability is an important guide to optimum land use. The soils of Madison County have been analyzed, rated, and mapped according to their suitability for different uses. The many soils have been grouped for analysis into 14 soil associations. While the individual soils within an association may differ greatly, the characteristics of each association are relatively constant. Additional information on soil analysis is available through the Madison County Extension Office.

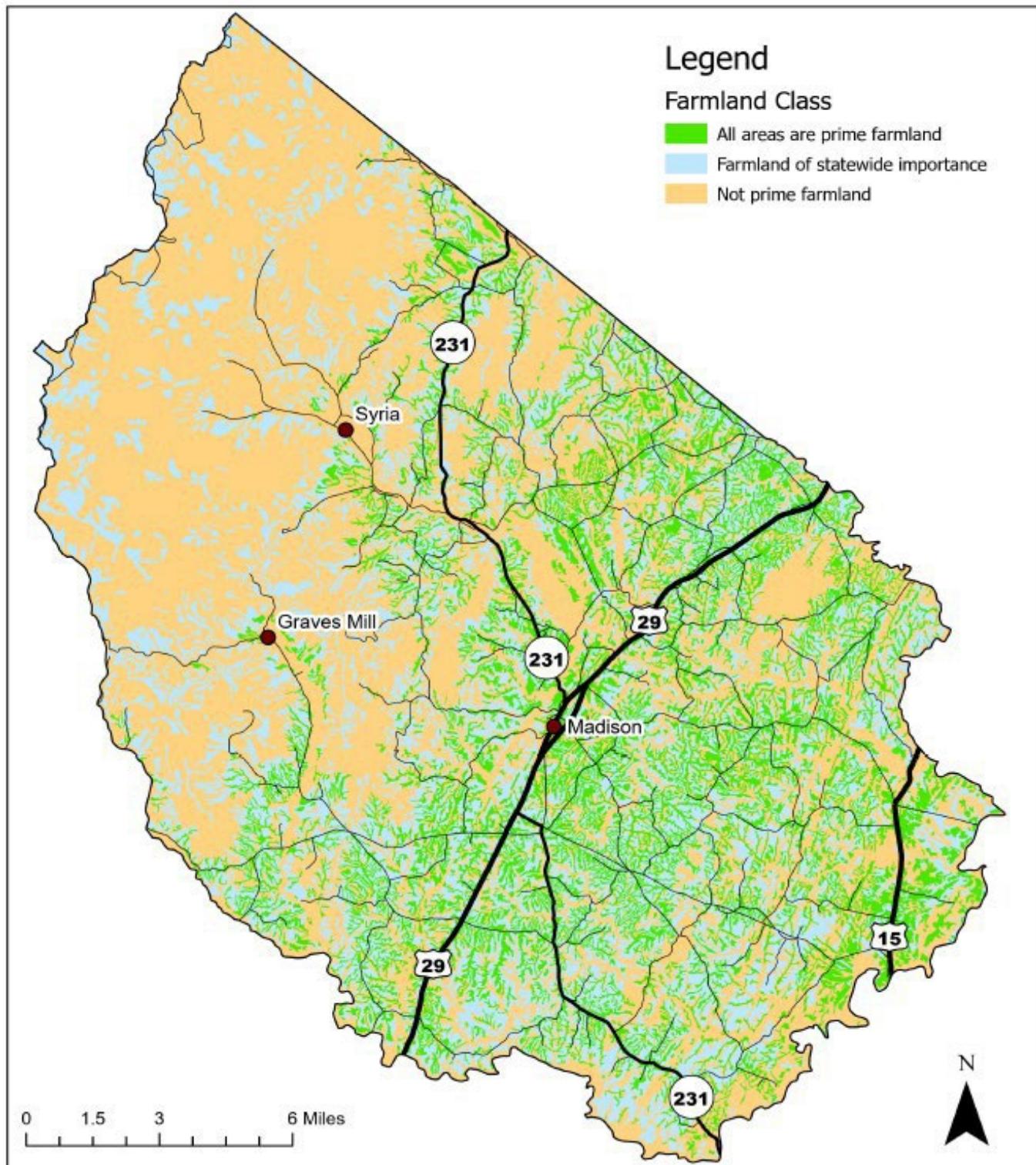
The USDA-produced farmland class map (p.5) provides a sense of where soils are most suited for agricultural activities within Madison County. Component soils and properties of the soil are determined by a database of information collected over the course of a century by the National Cooperative Soil Survey. Information such as water capacity, frequency of flooding, and yields for cropland, woodland, rangeland, and pastureland all factor into how the USDA and Natural Resources Conservation Service classify the soils.

As noted, the areas are classified as prime farmland, farmland of statewide importance, and not prime farmland of statewide importance. Farmlands of importance include those which economically produce high yields of crops when treated and managed according to acceptable farming methods.



	<i>Building</i>	<i>Farming</i>	<i>Forest</i>
<i>Rock land/ Myersville/ Catoctin</i>	FAIR	POOR	FAIR
<i>Porters/ Rock land</i>	FAIR	POOR	FAIR
<i>Tusquitee/ Colluvial/ Unison</i>	FAIR	FAIR	GOOD
<i>Brandywine/ Eubanks/ Lloyd</i>	GOOD	FAIR	GOOD
<i>Elioak/ Hazel/ Meadowville</i>	GOOD	FAIR	GOOD
<i>Brandywine/ Eubanks</i>	FAIR	FAIR	GOOD
<i>Brandywine/ Chester/ Meadowville</i>	GOOD	GOOD	GOOD
<i>Hiwasee/ Wickham/ Roanoke</i>	FAIR	GOOD	GOOD
<i>Chewacla/ Congaree/ Codorus</i>	POOR	GOOD	GOOD
<i>Cecil/ Lloyd/ Louisburg</i>	FAIR	FAIR	POOR
<i>Lloyd/ Hazel/ Elioak</i>	GOOD	GOOD	GOOD
<i>Fauquier/ Catoctin</i>	GOOD	GOOD	GOOD
<i>Davidson/ Bremo/ Zion</i>	FAIR	GOOD	GOOD
<i>Rapidan/ Penn/ Bucks</i>	GOOD	GOOD	GOOD

Madison County Farmland Class Map



Created by RRRRC for general planning purposes only. Data is from various sources and may vary in accuracy and completeness. | Date: June 1, 2023

Madison County, VA Farmland Suitability



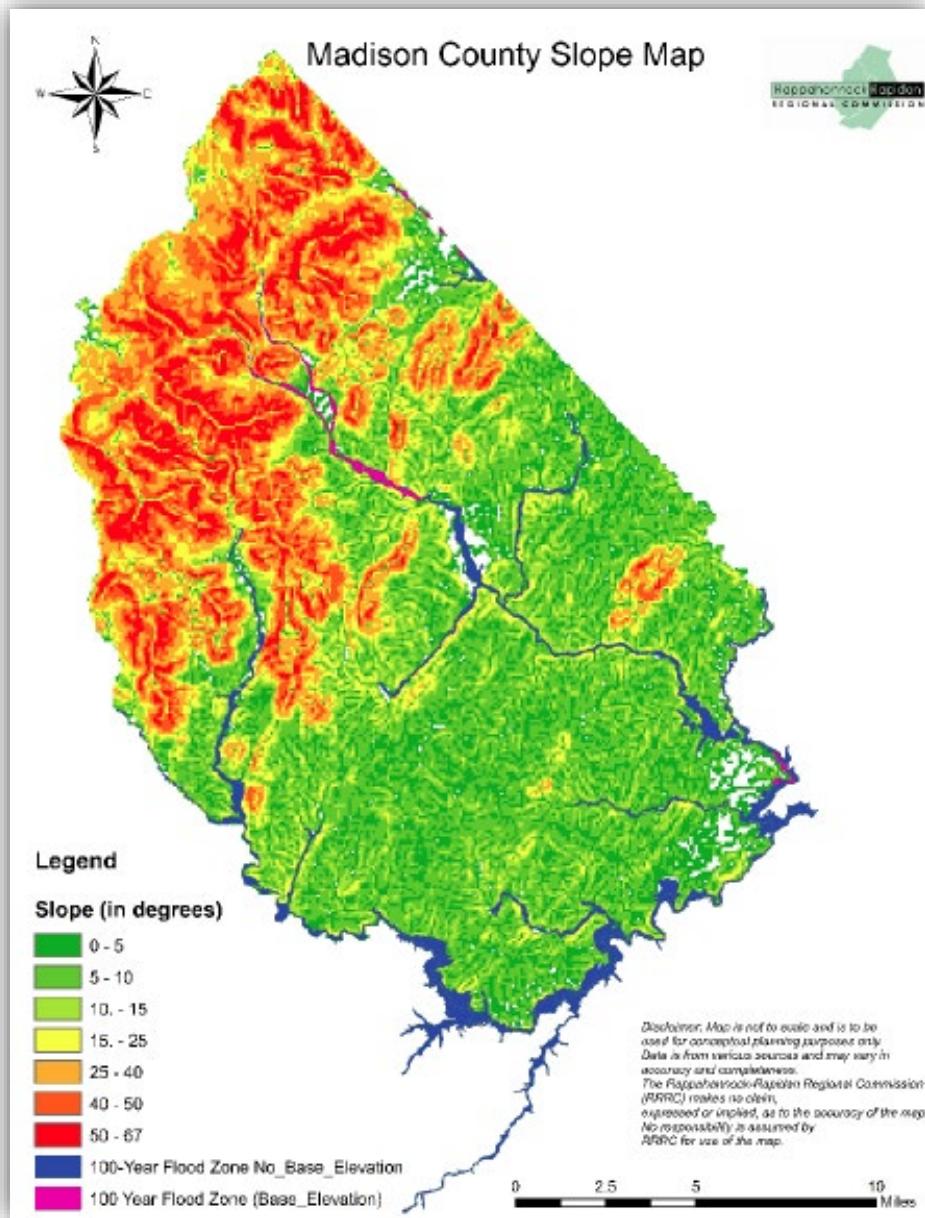
Source: USDA; ESRI Geographic Information Systems mapping programs.

Slopes

Slopes in Madison County can generally be grouped into three categories. Slopes of less than 15 percent are intrinsically best-suited for most development, whether agricultural or residential. Slopes in the 15-25 percent range will support low-density residential development with careful attention to erosion issues. Slopes of greater than 25 percent are best suited for passive recreation or permanent woodland cover, to avoid severe erosion problems.

The adjoining slope map shows that most of the western portion of the County has high slopes. Most of this area is public land within the Shenandoah National Park and the Rapidan Wildlife Management Area. The central and eastern portions of the County have slopes of mostly 15 percent or less.

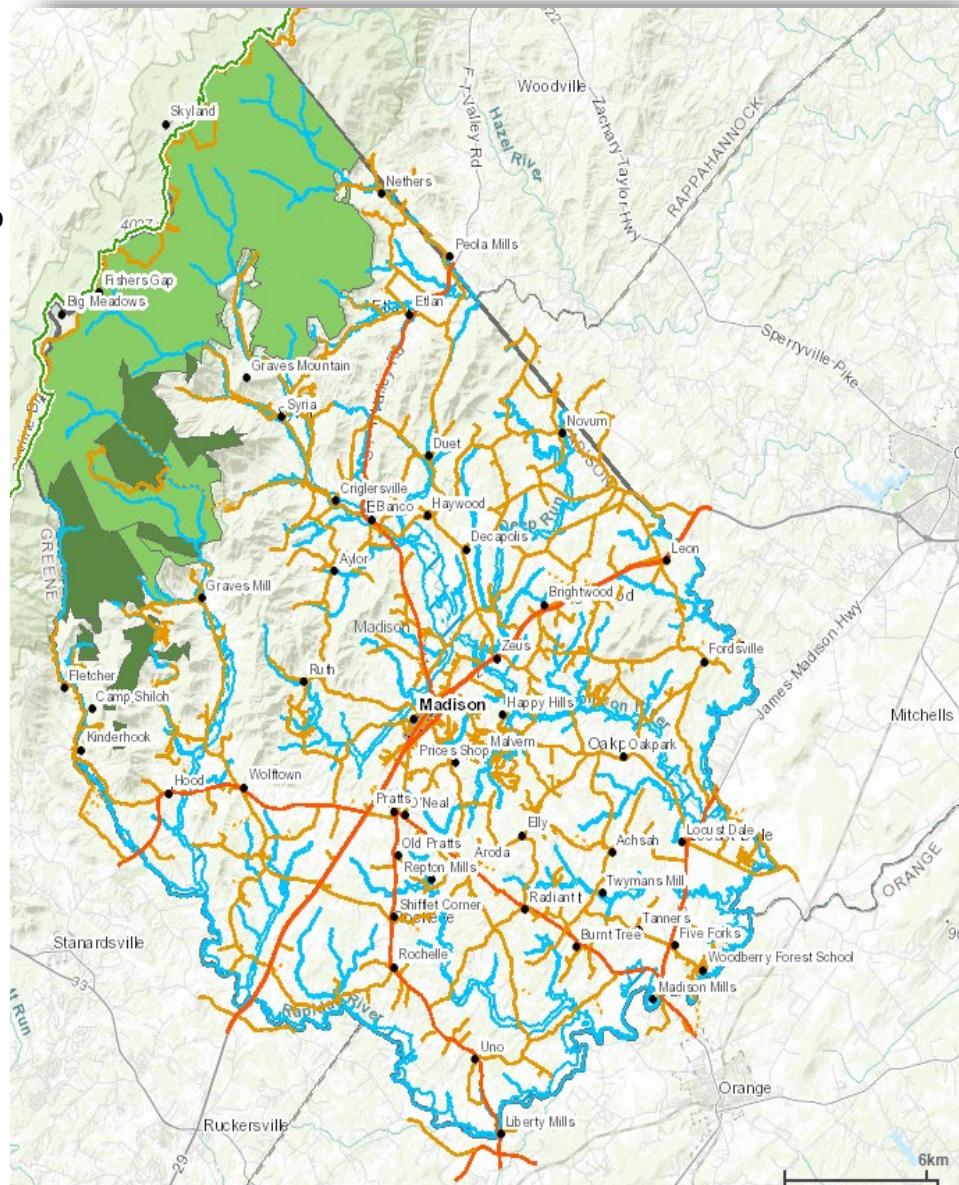
In the Piedmont, slopes are generally less than 15 percent, with some 15-24 percent slopes adjacent to streams and rivers. There is a concentration of 25 percent and greater slopes along the fault ridge on which the Town of Madison is situated and around the smaller mountains in the Piedmont. Most of these steep slopes are presently in forest cover, their most appropriate use. There is a delicate balance between soil, forest cover, and weather on the 25 percent slopes such that the removal of any large amount of tree cover could cause serious erosion and landslides.



Floodplains

Adjoining is a map showing the major floodplains in Madison County according to the Federal Emergency Management Agency (FEMA). The map was updated by FEMA in 2020, and shows the locations of so-called “100-year floodplains.” This term means that in any given year there is a 1 percent chance that a flood covering these areas will occur. Floods are natural events, and they deposit fine soils that enrich the fertility of floodplain land. Since the 100-year floodplain refers to probability, it is also statistically possible, though not likely, that there could be more than one 100-year flood in any given year. The Town of Madison is not within a flood plain area according to FEMA.

The flood that stands out in the minds of many County residents is the 2000-year flood of June 1995. Following the 1995 storm, the U.S. Department of Interior and the U.S. Geological Survey mapped debris flow hazard areas, and this map is available at the Madison County Zoning Office. Madison County restricts some development on steep slopes through its Conservation zoning, but there has been no local analysis through mapping to compare the areas in Conservation zoning to the mapped debris flow hazard areas. The County currently has a floodplain ordinance to prevent loss of life and property and to prevent the creation of health and safety hazards by restricting or prohibiting certain development located in areas subject to flooding, and by regulating or restricting development that may result in unacceptable increases in flood heights, velocities or frequencies.



Land Uses

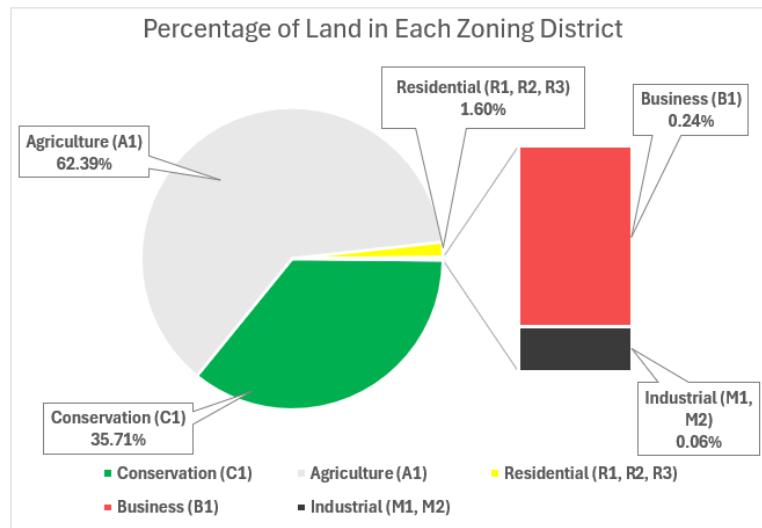
Madison is a scenic, rural county, and its land is dominated by agricultural, timber, and parkland uses. The gently rolling fields of Madison County's Piedmont produce livestock and dairy products, cash grains, and forage. The Blue Ridge Mountains and Shenandoah National Park, with their natural beauty and abundant recreational opportunities, exert a strong influence on life in the County as well as attracting tourists and visitors.

At approximately 62% of all Madison County land, agriculturally zoned (A1) land consists of cropland, pastureland and woodland. This district was established for the purpose of accommodating all types of rural, open land uses such as agriculture and forestry, along with kindred rural occupations. The basic aim is to promote agriculture as a continuing way of life in Madison County. However, an increasing amount of land is being used for non-farm single family homes as noted in the Land Use Map (p.10). The 2018 Comprehensive Plan identified 106,991 acres in farm land according to the 2012 USDA Agriculture Census County Profile. As of 2022, the Agriculture Census indicated acreage decreased to 99,536 at a loss of 7%(-7,455 acres) of active farmland between 2012 and 2022 (see Goals p. 42-45 and 51 for strategies).

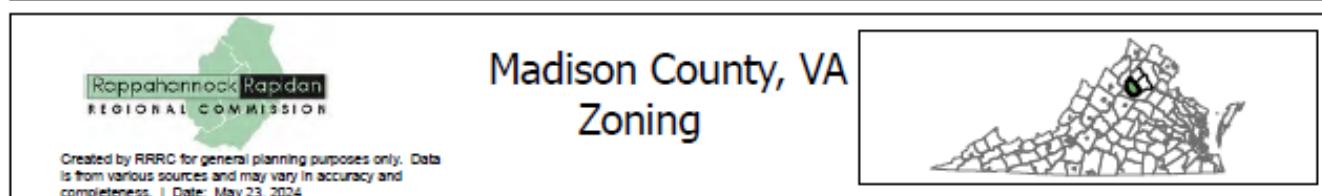
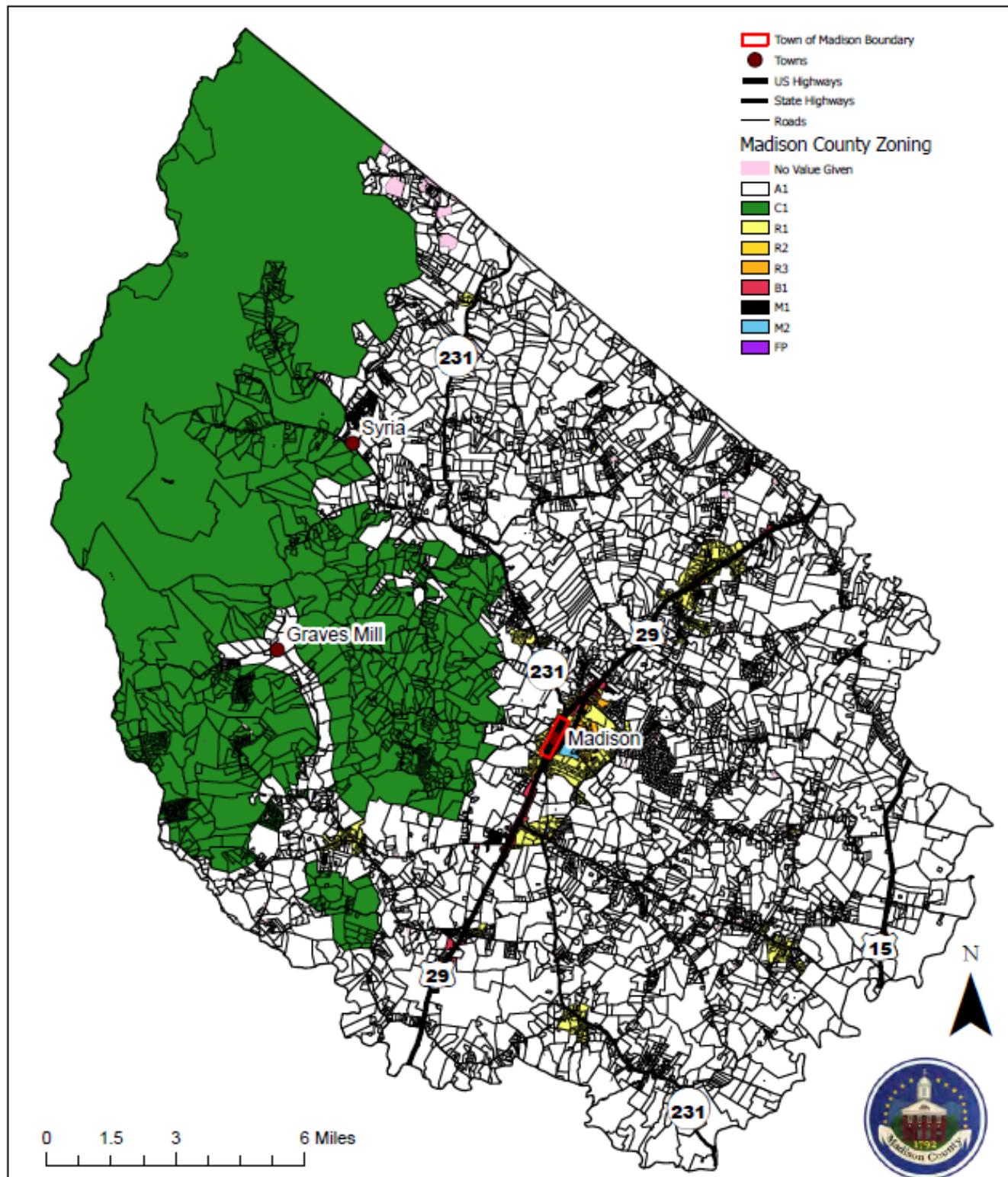
Approximately 36% of County land is zoned as Conservation (C1). This district consists of land in Shenandoah National Park and covers steep slopes, hardwood forests, areas of erosive soils, and those portions of the County which are occupied by various open spaces such as parklands, farms, lakes, or mountains.

Approximately 0.3% of County land is zoned Business (B1) and Industrial (M1/M2). Commercial and industrial developments are of three basic types: highway commercial and industrial development primarily along U.S. Route 29, commercial development in the Town of Madison, and village development serving localized needs.

Comparing the following maps (p. 9 and 10) illustrates that zoning and actual land use vary significantly according to the Geographical Information System (GIS) based on a collection of parcel information provided the County's Planning and Zoning Department. The GIS information is managed by a third party contractor, Hurt and Proffitt, on behalf of the County to provide information regarding parcel boundaries/size (not a survey), parcel ownership, and zoning.

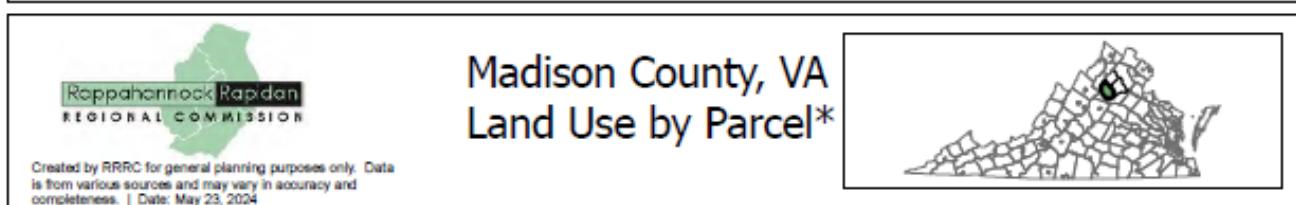
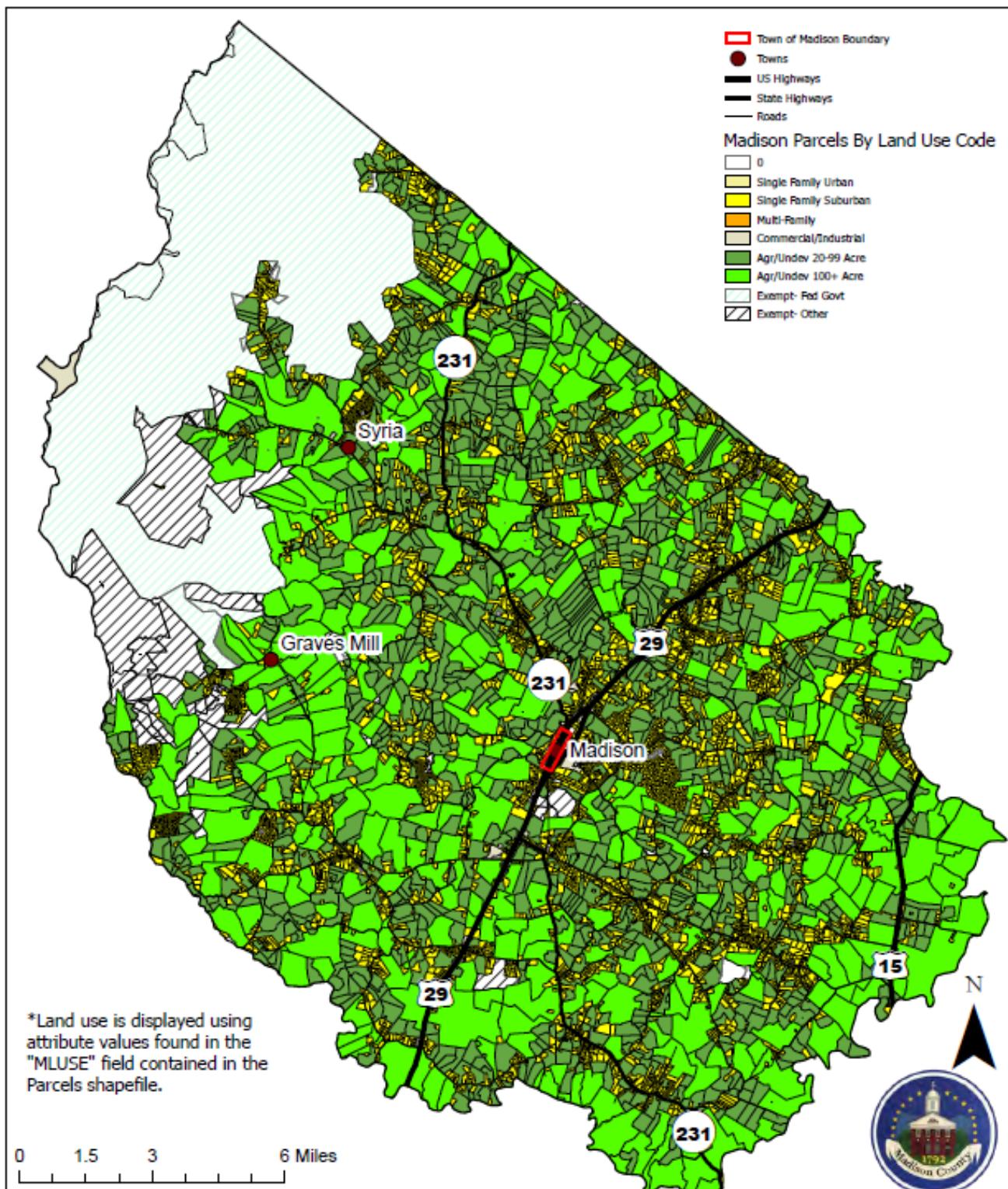


Madison County Zoning by Parcel Map



Source: Madison County Zoning Office

Land Use by Parcel Map



Population Trends and Demographics

Background and Findings

To establish a comprehensive assessment of population trends and demographics, a varied collection of resources representing the most recent data available was used to form a picture of Madison County's existing conditions. The data represented ranged from 2017 to 2023, depending on the source. Among the resources accessed, the U.S. Bureau of the Census website was used in conjunction with the Weldon Cooper Center of the University of Virginia. Data trends noted in prior Madison County Comprehensive Plans were observed as additional sources for assessing current population trends and demographics. The data were cross-referenced where possible, and inferences were made to provide a general sense of conditions as prescribed by the Code of Virginia regarding comprehensive plan development. This approach may, in some cases, create the appearance of a discrepancy between numbers; however, it should be noted that data represented herein are dynamic in nature and may contain a margin of error.

For over 50 years, Madison County has seen modest, yet fairly steady population growth. Among the trends noted, the following may be significant if the patterns continue:

- An increasing median age indicates the overall population is older and living longer.
- Decreasing household sizes is indicated by almost 65% of the County's households made up of 2, or 1, person(s).
- The school age population (under 19) has remained fairly steady.
- The over 65-year-old population as a percentage of overall population has shown consistent growth.
- Educational attainment for those with bachelor or graduate degrees is lower than in Virginia at large, but the percentage of high school graduates tracks closely with the state percentage.

Overall, Madison County's households are trending older in age and smaller in size, as is the case in many rural areas throughout the United States.

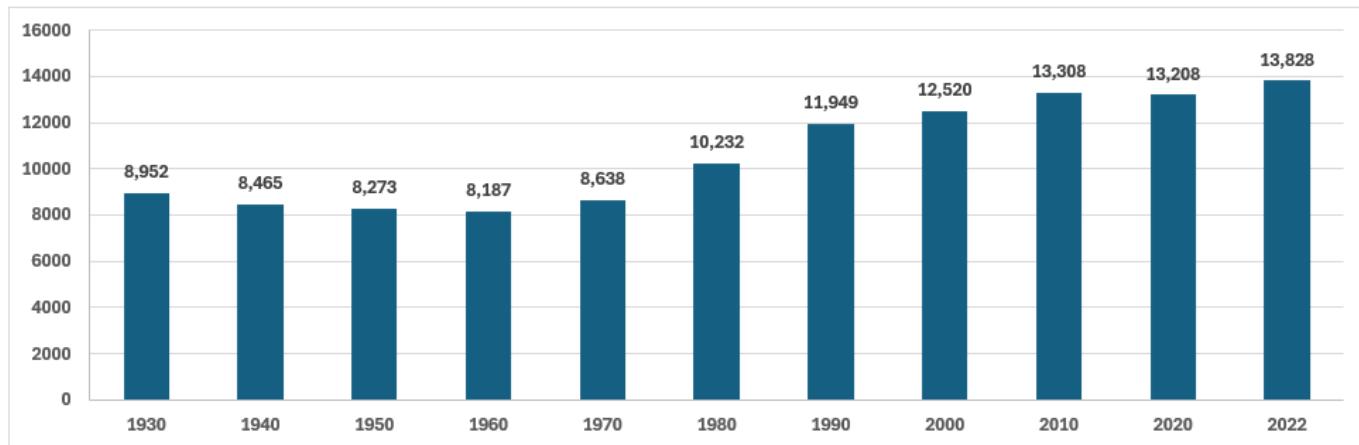


Source: Madison County Parks and Recreation

Comparing the population counts of the past, present, and predicted future, certain trends can be identified. Assessment of these trends enables Madison County to identify the needs of current and future residents.

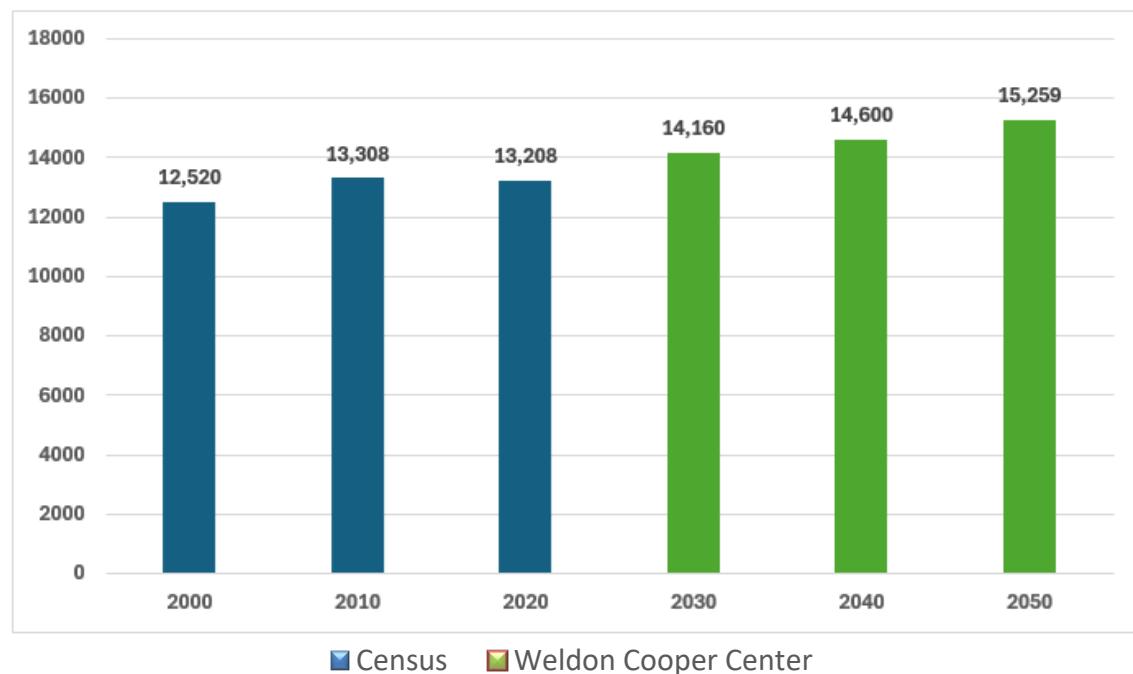
Decennial Population Growth, 1930 – 2020 and 2022

Madison County's population has grown modestly in recent years, from 13,308 in 2010, to an estimated 13,828 in 2022 - an increase of 5.3% during this period. During this same 2010-2022 period, the adjoining counties of Greene, Orange, Culpeper, Rappahannock, and Page experienced population increases of 11.6%, 8.4%, 12.5%, and decreases of 0.3% and 1.3%, respectively.



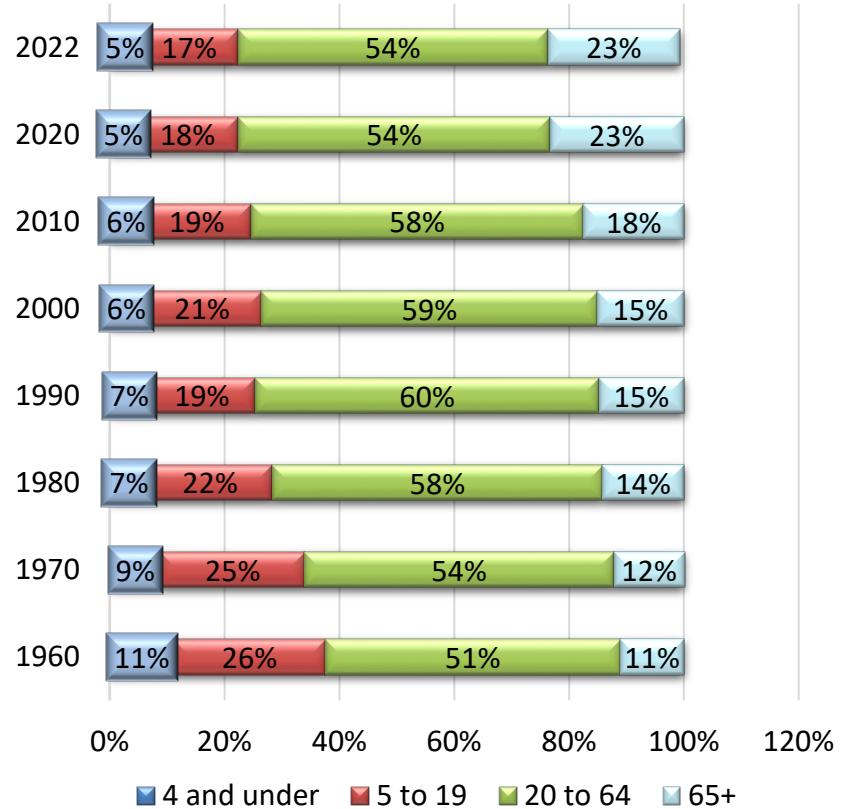
Population Projections, 2030 - 2050

To provide population projections based on the known data points, a simple linear interpolation approach is utilized, assuming a linear growth pattern from year-to-year. Population growth, however, can be influenced by a variety of factors, and these linear projections may well not fully capture potential changes in growth trends. Based on the historic population figures, the following chart assumes consistent linear changes in population during succeeding years at given points in the future.



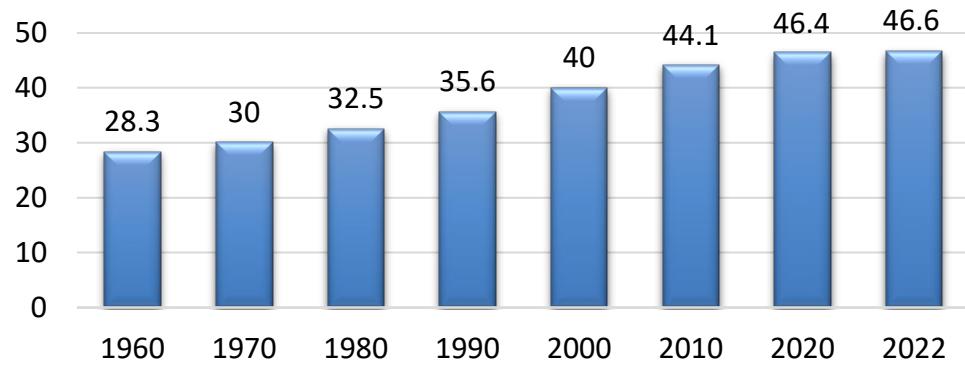
Age Trends 1960 - 2022

Taking into account actual and predicted changes in the age of Madison County's population helps to identify present and future priorities for addressing the County's needs. In 2020 and 2022, the age group 65 years and above made up 23% of the County's population, twice that of 50 years ago. Today, that is nearly 1 in every 4 people. In contrast, Virginia's state-wide percentage of people 65 years and older was 16.3%. The percentage of population representing the age cohort under 19, decreased 12% over the same 50 year period. These are indicators that support an overall aging population as does the median age.



Median Age 1960-2022 and Age of Householder

The County's median age has increased by 18.3 years since 1960 - from 28.3 years in 1960 to 46.4 years in 2020. This figure compares to Virginia's median age in 2020 of 38.8 years. Although not illustrated here, the age of the householder, or head of household, represented 32% of households headed by individuals aged 65 years or older. Those aged between 55 and 64 years, represented 24% of households, which further demonstrates that planning should take into account an aging population.

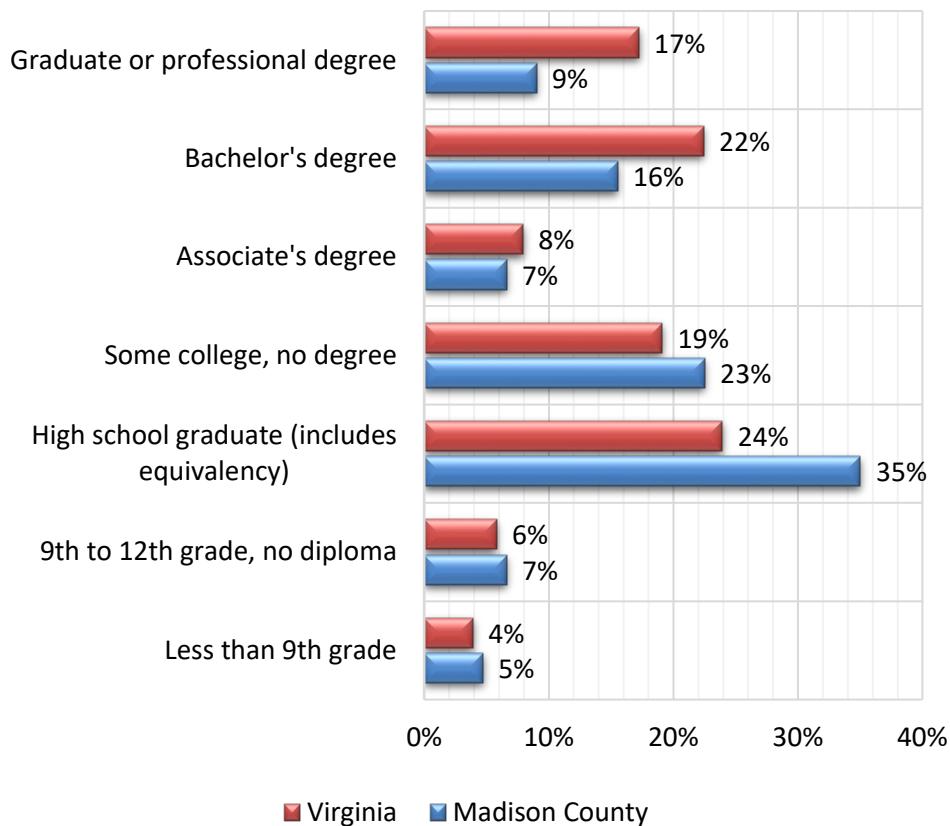


Educational Attainment

Educational attainment rate is one factor used to define the employability of residents and thus income potential. Madison County residents, who are 25 years or older, trended differently from Virginia at large. In 2022, the percentage of persons 25 years old, or older, with bachelor's degrees was 16% for Madison. For comparison, the adjoining Counties of Greene, Orange, Culpeper, Rappahannock, and Page these were 28.6%, 26.1%, 26.5%, 31.8%, and 14.6% respectively. However this does not reflect acquired skillsets such as that found in the trades, areas of interest including entrepreneurship, arts and craft talents, and agriculture or agritourism.

Additional key 2022 data points to note:

- 12% (more than 1 in 10) did not graduate high school;
- 35% (more than 1 in 3) completed high school, but no further;
- 23% (nearly 1 in 4) attended some college, but did not graduate.



Economic Trends and Facts

Background and Findings

Analysis of Madison County's economic data reveals a favorable economic landscape with key indicators suggesting stability and potential for growth. These data are sourced from the Bureau of the Census, the USDA Agricultural Census (2012, 2017, 2022), the Virginia Tourism Corporation, and Virginia Employment Commission: Labor Market Information which collects and analyzes employer-reported counts by county, city, and regional planning district. The data were combined with additional sources based on the data noted in prior Madison County Comprehensive Plans and certain trends that were observed during the assessment. In some cases the data trends may seem counter-intuitive and may require further study and analysis.

Among the trends noted, the following data relating to Madison's economy indicate:

- Madison County residents have experienced low unemployment rates compared to Virginia. However, a significant number of residents commute out of the County for employment, indicating employment opportunities within the County remain low, or possibly that higher paying jobs are attracting workers primarily towards nearby counties. Out-commuting represents 70% of the labor force and approximately 14% of the labor force works within the County, highlighting the importance of fostering local businesses and indicating a need to strengthen local employment opportunities.
- A growing number of Madison County residents, who are employed elsewhere, work remotely from home in Madison County. The number of individuals who worked remotely from home has steadily increased since 2014 to twice the number in 2022. The increasing ability to work from home may be attributed in part to the investment made in strengthening access to broadband across the County.
- Median household income has increased notably, demonstrating a rise in overall incomes. However, income remains relatively low for County residents. This increase is tempered by inflation and the rising cost of goods, particularly housing. Examining this topic further, renters had a significantly lower median income of \$39,681 compared to home owners with a higher median income of \$82,035. A significant portion of households, about 2 out of 3, earned less than \$75,000 in 2022, although the poverty rate has remained slightly lower than Virginia's as a whole.
- A changing agricultural environment is illustrated by many part-time farmers who may rely on other employment to support their families. Farming, although historically significant, faces challenges with 50% of farms having less than \$10,000 in annual sales. However, the overall market value of products sold was over \$39 million and most likely attributed to the few larger operations contributing over \$100,000 in sales per farm.
- The County's overall Gross Domestic Product has shown substantial growth, indicating a strengthening economic base.
- An expanding tourist market, with spending estimated to have increased about \$1 million in 2022.

Another observed trend in Madison County is that many people engaged in farming do so on a part-time basis and rely on other employment to help support their families. This trend is desirable in that it makes farming economically feasible and helps preserve the rural character of the County. About 40% of farms rely on the support of unpaid workers, suggesting the involvement of extended family in farming activities.

Additional key data points:

- Tourism spending increased over \$5 million between 2020-2021, with an estimated \$1 million increase in 2022 alone.
- As of 2022, the poverty rate was approximately 9%, compared to Virginia at 10.6%.

The following employment-related charts likely do not reflect fully the extent of agricultural employment (including self-employment and family involvement) and work-from-home employment (including self-employment and employment with out-of-area enterprises).

Labor Force Participation And Unemployment

In recent years, Madison County has consistently had a lower unemployment rate than Virginia's and for the nation at-large. In 2023, as measured by the Virginia Employment Commission, Madison County's total civilian labor force was made up of roughly 7,914 individuals. Also, since 2013 Madison's "Labor Force Participation" percentage has fluctuated from between 60.2% to 71.2%, with most years exceeding 68%. In 2021, Virginia's labor force participation rate was 63%, and the national rate was 62%

The U.S. Bureau of Labor and Statistics defines a labor force participant as an individual 16 years of age or older who is employee, or actively seeking employment. Individuals, not counted as labor force participants, are typically retired, disabled, a stay-at-home parent, and full-time students.

For over a decade, Madison County's unemployment rate has trended lower than the state and county. In 2022, the County's unemployment rate was 2.1%, which is near historic lows.

Madison County Unemployment

Year	Madison County	Virginia	United States
2013	4.4%	5.6%	7.4%
2014	4.0%	5.1%	6.2%
2015	3.4%	4.4%	5.3%
2016	3.4%	4.0%	4.9%
2017	2.9%	3.7%	4.4%
2018	2.5%	3.0%	3.9%
2019	2.2%	2.8%	3.7%
2020	3.9%	6.4%	8.1%
2021	2.5%	3.9%	5.3%
2022	2.1%	2.8%	3.6%
2023	2.3%	2.9%	3.6%

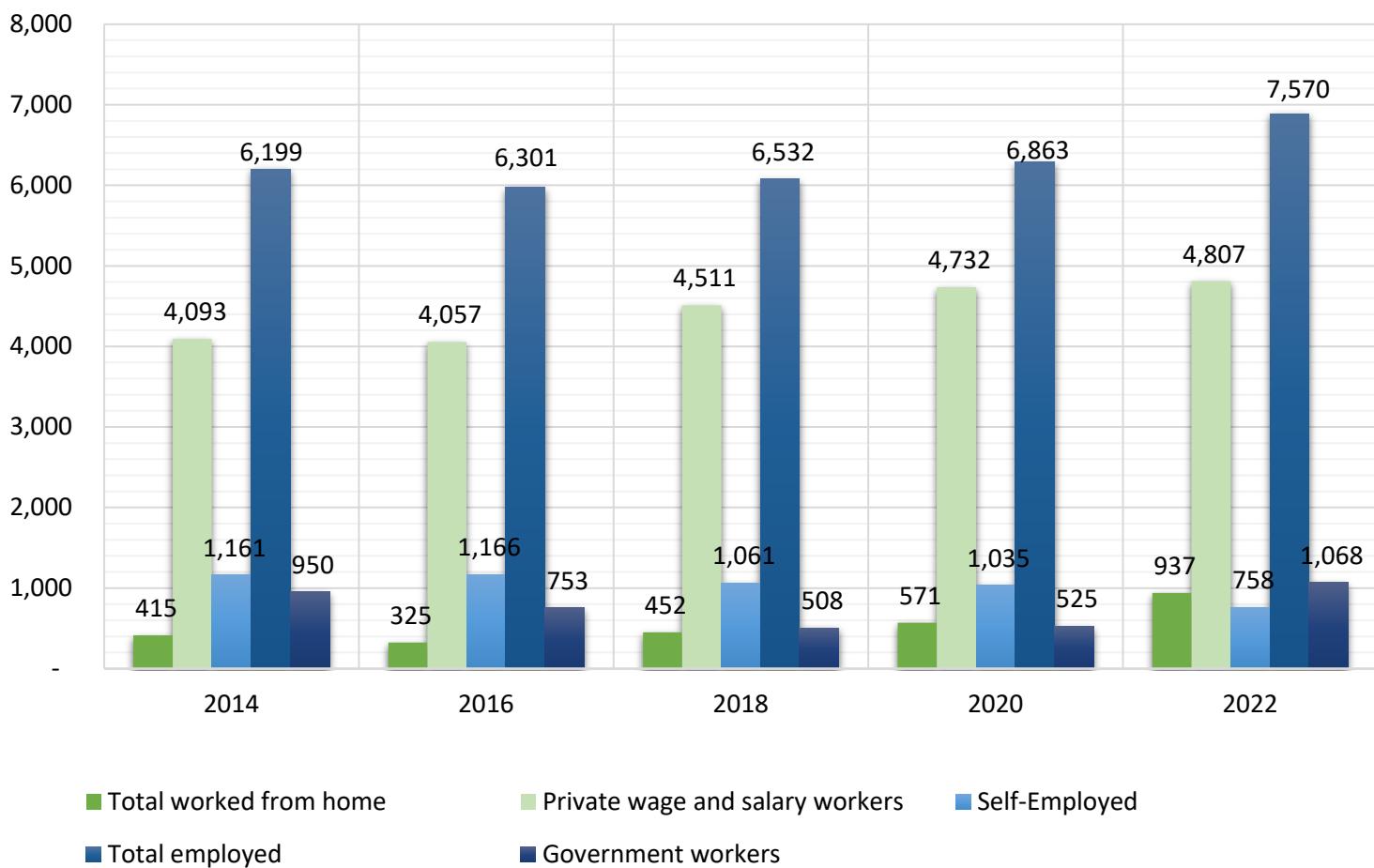
Source: Virginia Employment Commission

Employment Classification Trends, 2014-2022

Data analysis broadly illustrates residents of Madison County who were employed within or outside the County, and by what means they were employed. In some cases, there may be some overlap of the data presented here, such as a portion of those who worked from home may also have been self-employed, a government worker, or worked for a private employer.

Key trends to note:

- About 70% of workers were employed by the private industry;
- Self-employed workers declined by 35% (-403 workers), from 1,161 to 758;
- Remote workers, (i.e.) those who worked from home, more than doubled by 125% (+522 workers), from 415 to 937.

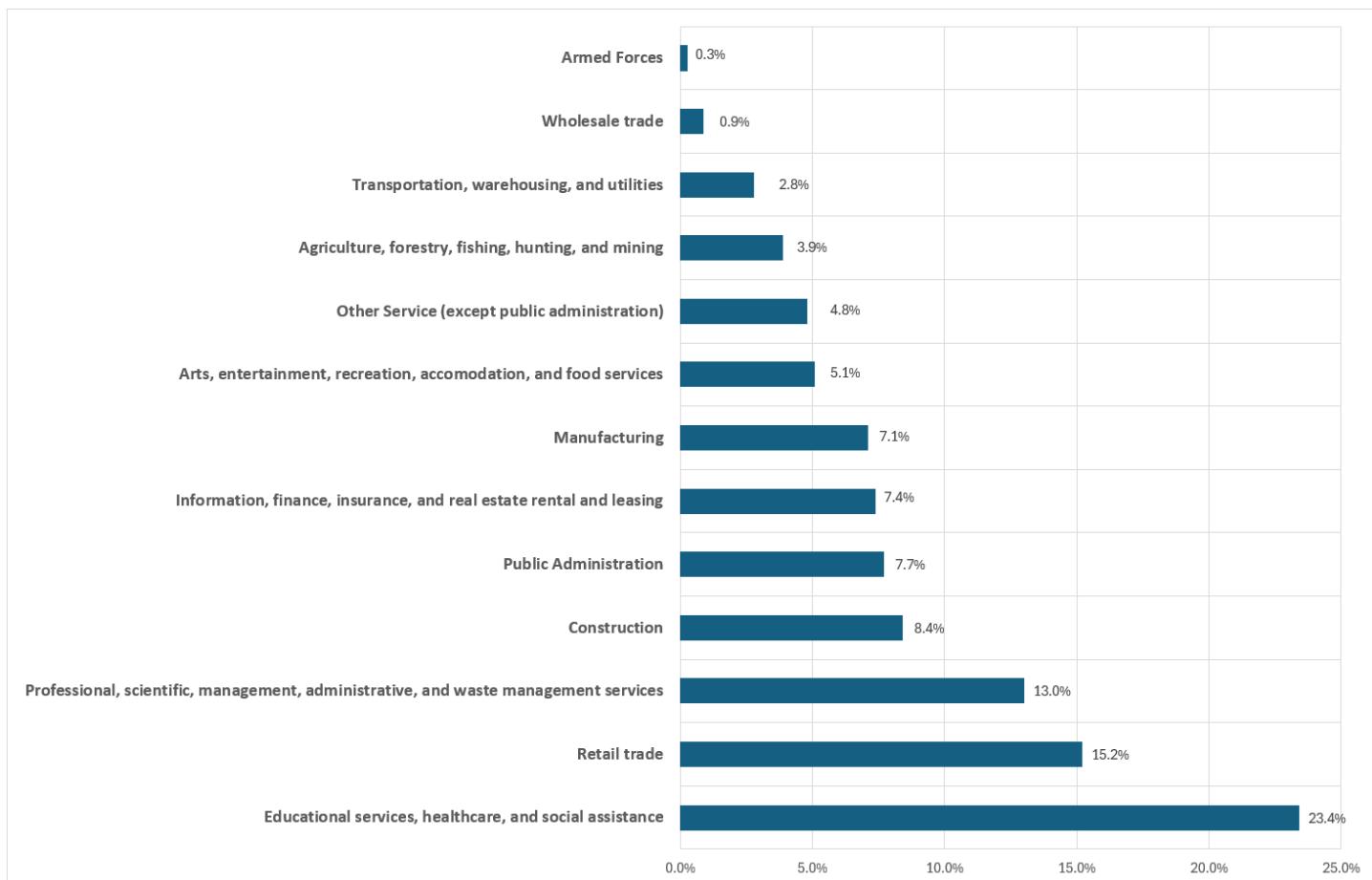


Residential Employment By Industry, 2022

Analysis of the enterprises in which Madison County residents worked, although dynamic in nature, illustrates a broad range of occupations. The chart below is based on self-reported data compiled by the U.S. Census Bureau and based individuals' reported primary occupation and whether the individual received a paycheck. The chart does not suggest that ongoing agricultural activities are not a source of income, rather that counts are based on how employment is reported and do not differentiate between those who work within the County and those who work outside the County. To provide context, Virginia's agricultural workforce is about 2%.

Key data points:

- 3.9% were employed in agriculture, forestry, fishing, hunting, and mining industries;
- 23.4% employed in the Education, healthcare, and social assistance sectors;
- 15.2% were employed in retail trade.



Size and Type of Employers

Employer data are complex and dynamic, and thus difficult to fully analyze. The following data, reported by the Virginia Employment Commission and the Bureau of the Census (County Business Patterns), offer an overview of employment within the County. Employer establishments ranged from 276 to 502 depending the reported quarter and year, between 2020 and 2023. In terms of the number of establishments (i.e. businesses), those which employ four (4) or fewer employees are the most prevalent. The top five employers with the largest segment of employed workers has remained essentially the same during this period and were as follows:

1. Madison County's Public Schools
2. Woodberry Forest School
3. Cardinal Home Center
4. Madison County
5. Madison Wood Preservers, Inc.

The overall breakdown of both Madison County and Virginia employers by number of employees is shown in the following chart:

Size of establishment by number of employees	Madison County Number of businesses	Virginia Number of businesses
0 to 4	392	204,325
5 to 9	53	40,499
10 to 19	30	30,065
20 to 49	15	22,270
50 to 99	7	7,684
100 to 249	2	3,967
250 to 499	1	1,080
500 to 999	0	378
1,000 and over	0	268
Total establishments	500	310,536

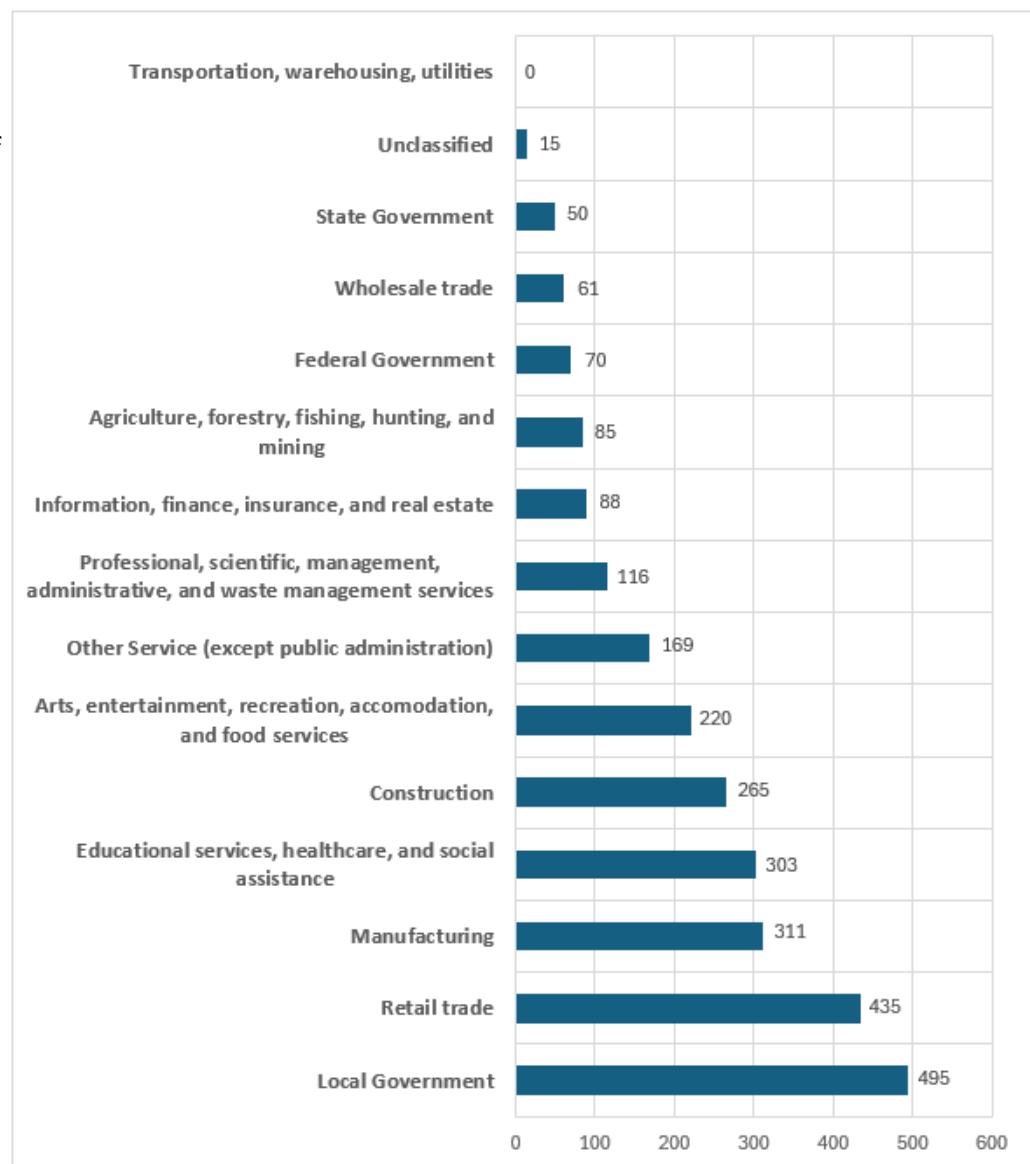
According to the U.S. Census Bureau in 2021, Madison County had a total annual private payroll of \$94,789,000. In 2015, it had a total annual private payroll of \$89,041,000.

Employment Within The County

Analysis of employment within the County focuses on what industry is located within the boundaries of the County. Revealing a different set of data points than the employment of residents, this too remains dynamic making analysis complex. The chart does not reflect fully the extent of agricultural employment (including self-employment and family involvement) and work-from-home employment (including self-employment and employment with out-of-area enterprises).

The following chart, based on Virginia Employment Commission data, breaks down employment (of resident and non-resident workers) within Madison County during the fourth quarter of 2023. The chart is not an exhaustive list. Between 2020 and 2023, the number of jobs within Madison County ranged from approximately 2,688 to approximately 3,147.

The chart does not reflect fully the extent of agricultural employment, including self-employment and employment of family members. Nor does the chart reflect work-from-home employment, including self-employment and employment with out-of-area enterprises.



Commuting Patterns

Analysis of the commuting patterns is strong indicator of where people seek employment. A significant number of workers leave Madison County for employment. More workers commute into the County for work than those who both live and work in the County.

Residents who live and work in the County may have a limited range of employment options and relatively limited pay, unless they work remotely for out-of-area employers. They also may face a tight housing market and a lack of desired amenities that are available elsewhere.

Key data points:

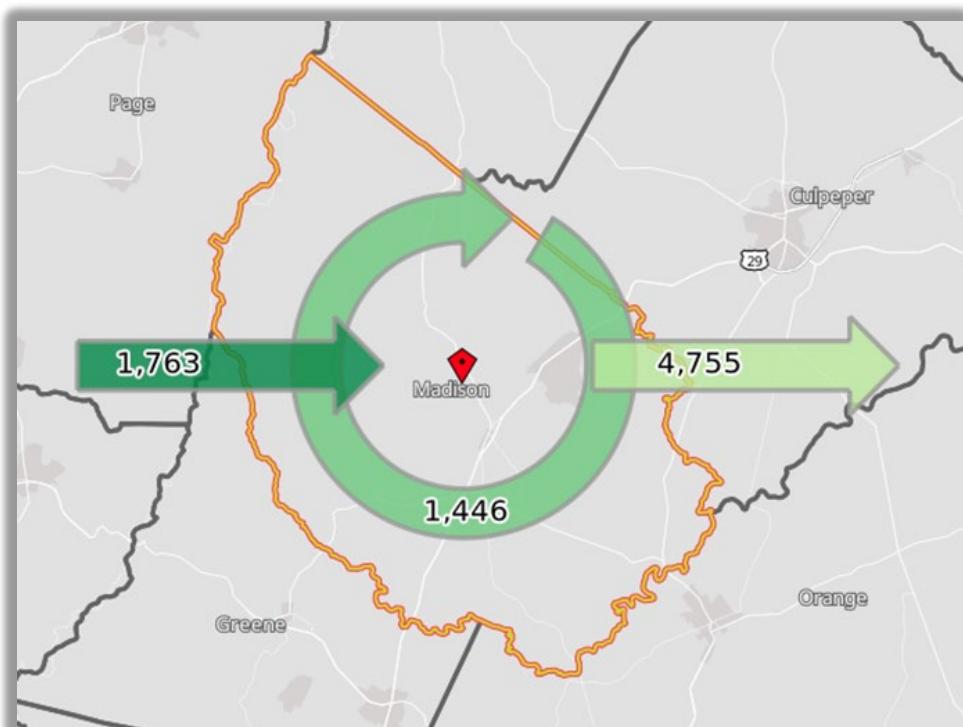
- There are approximately 6,470 employed workers aged 16+ years who lived in Madison County.
- Over 70% of employed residents left the County for work;
- Approximately 22% of employed residents both lived and worked within the County;
- During 2022, 937 people worked from home (see p. 17);
- Over 1,700 jobs are held by workers who lived outside the County.

The top five places workers commute outside the County for employment include:

1. Culpeper County
2. Albemarle County
3. Orange County
4. Charlottesville
5. Fauquier County

The top five places workers commute into the County for employment from include:

1. Orange County
2. Culpeper County
3. Greene County
4. Albemarle County
5. Louisa County

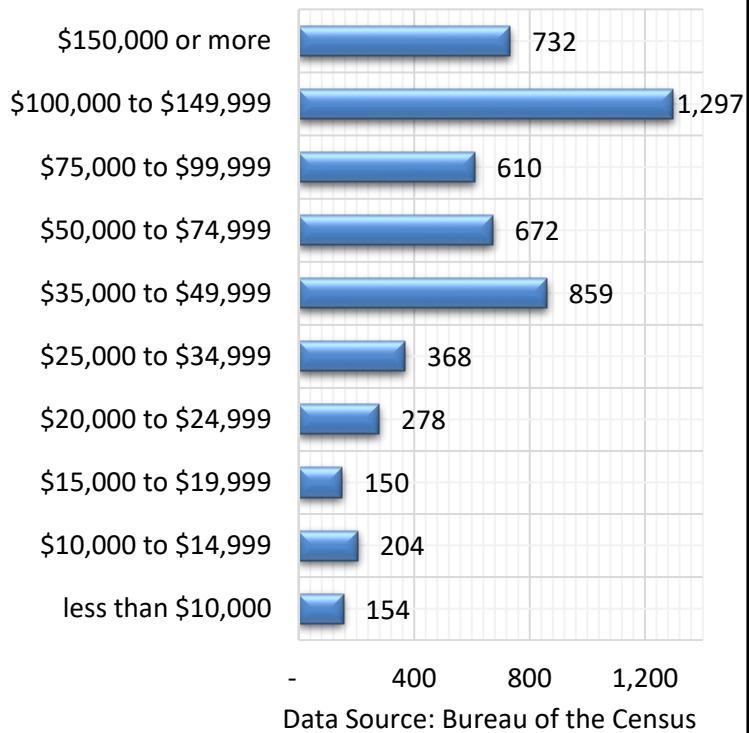


On the Map; Bureau of the Census, 2022

Household Income, 2022

In 2022, there were 5,324 households whose income was counted. When compared to the individual income, households most likely have multiple income earners. The following key facts illustrate varied income levels:

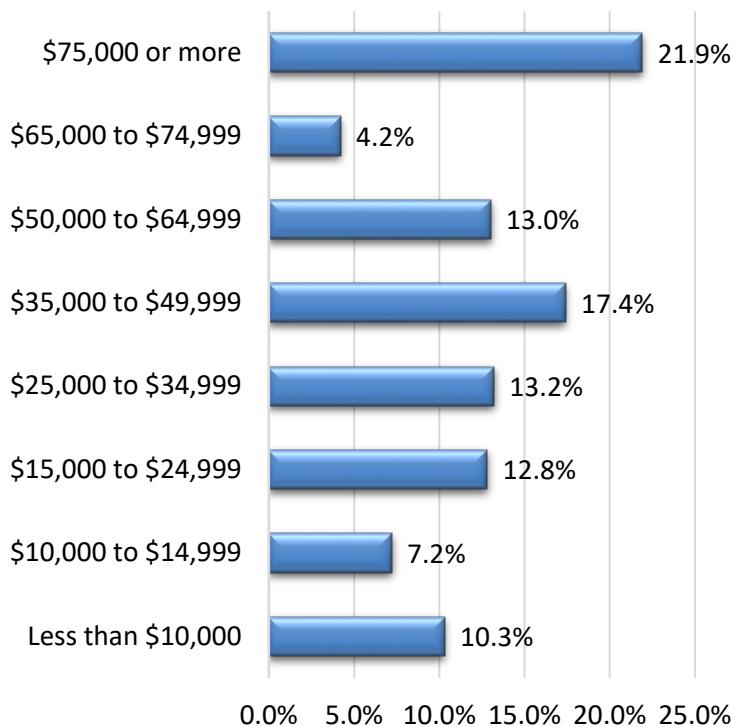
- The median income increased 38% from \$54,197 in 2018 to \$74,586 in 2022;
- 154 households (3%) earned less than \$10,000;
- 2,163 households (40%) earned less than \$50,000;
- 2,029 (38%) earned \$100,000 or more, which is twice the number of households in 2018.



Individual Income by Percent, 2022

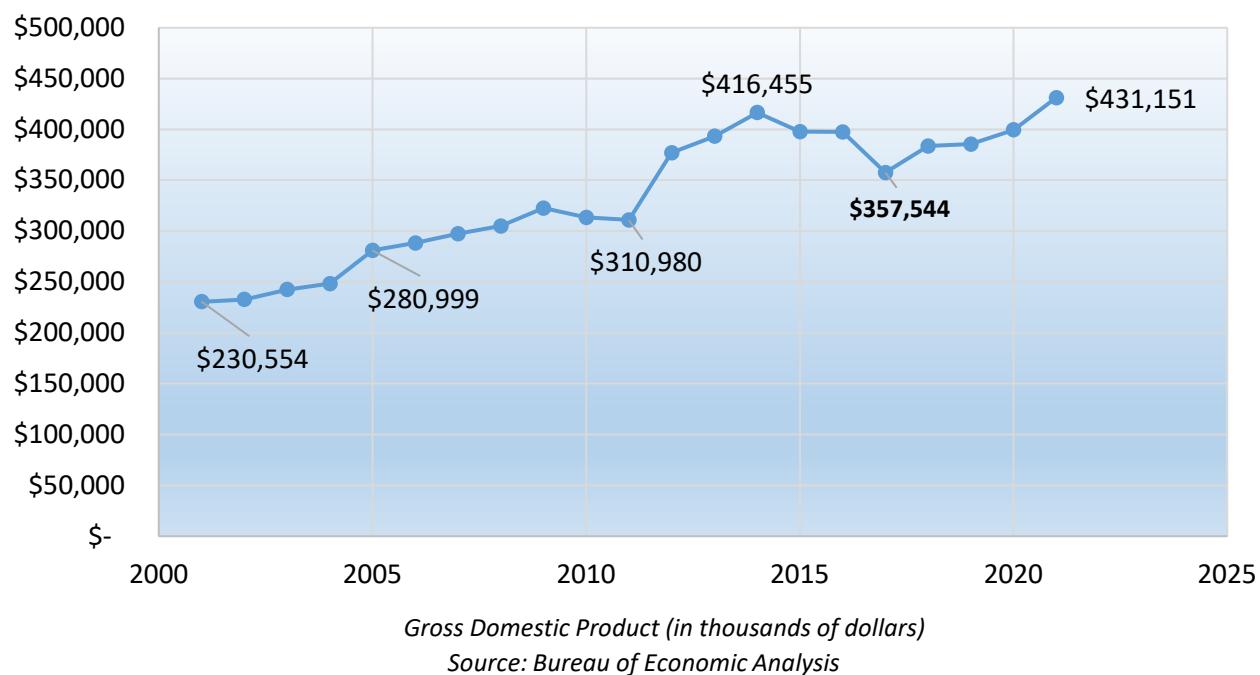
Individual income is affected by educational attainment, the skills acquired, and access to well-paying jobs. Based on Census survey responses, 6,470 employed residents aged 16 years to 64 years self-reported the following individual income levels:

- 10.3% (647) earned less than \$10,000;
- 67.8% (3,235) earned between \$10,000 - \$74,999;
- 21.9% (1,423) earned \$75,000 or more.



Gross Domestic Product For All Industries, 2001 - 2021

County-level Gross Domestic Product (GDP) measures the economic output or value of all goods and services produced within the boundaries of Madison County during a defined period, typically each year. It provides a quantified assessment of the economic activity and productivity within that specific geographic region. This includes the value of goods produced, services rendered, and various economic transactions occurring within the County, encompassing a wide range of sectors such as agriculture, manufacturing, tourism, and more. In 2001, the County's GDP was \$230,554,000 and in 2021 it was \$431,151,000, or an 86% increase. Adjusted for inflation, this GDP increase would be 25.1%.



Economic Impact of Tourism

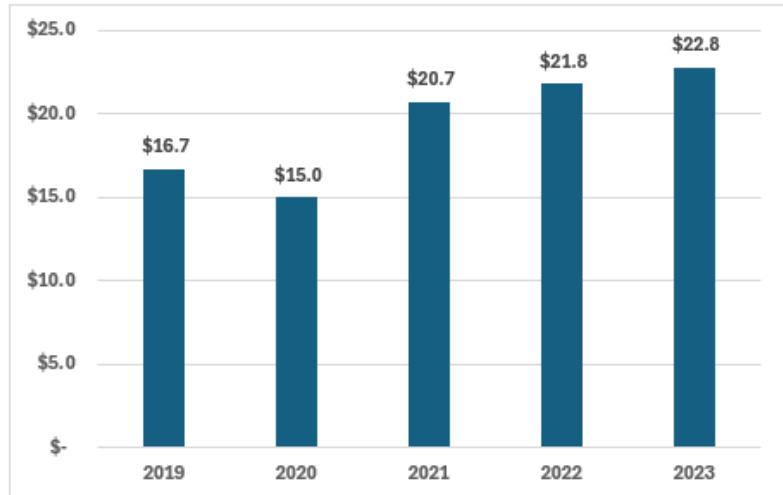
Tourism and recreational opportunities are plentiful in Madison County. These opportunities include outdoor recreation, historic and cultural heritage sites, special event venues, agri-tourism, wineries, and craft breweries. Tourism has an important role in the County's economy, providing tax revenues and jobs. It is estimated that the County has roughly 200 overnight rental accommodations ranging from rustic cabins, luxury homes, and "glamping" units.



Revelation Vineyards; Madison County Economic Development

Direct Tourism Spending, 2019 - 2023

The table adjoining shows the Virginia Tourism Corporation's estimates of the direct financial impact that tourism-related businesses had on Madison County's economy from 2019 through 2023, the last year that data was available. In 2023, Virginia Tourism also estimated that tourism-related establishments employed 233 individuals. Traveler's spending is up 35% since 2019.



Source: Virginia Tourism Corporation; shown in millions of USD

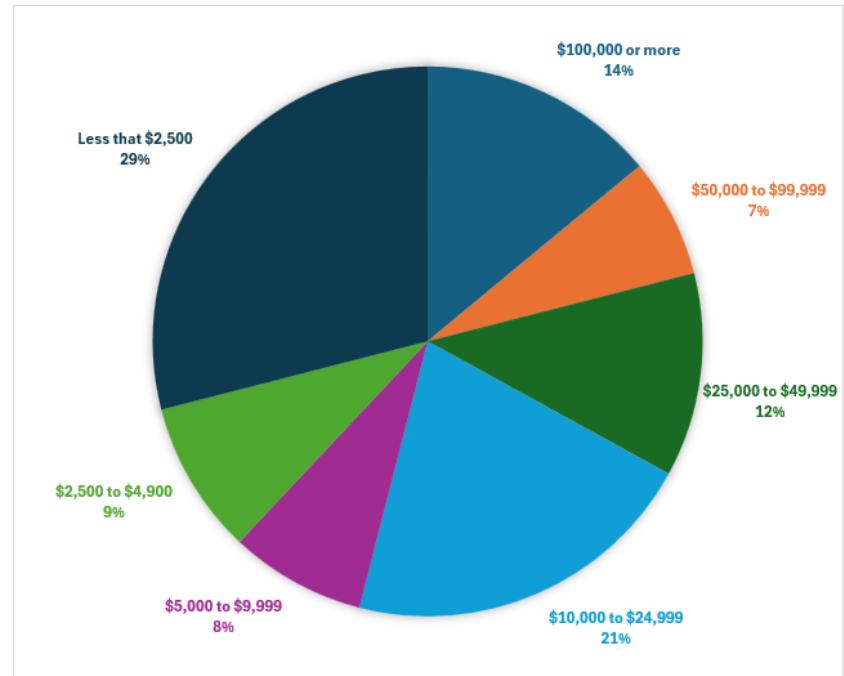
Agriculture

Farms by Value of Sales 2022

Agricultural Census data indicate that large-scale establishments make up a small percentage of farming operations in Madison County, while smaller scale farming operations make up a significant percentage. All crop and nursery products made up approximately 55% of sales, and livestock, poultry, and related products made up 45% of sales. The total market value of agricultural products sold in 2022 was \$39,487,000.

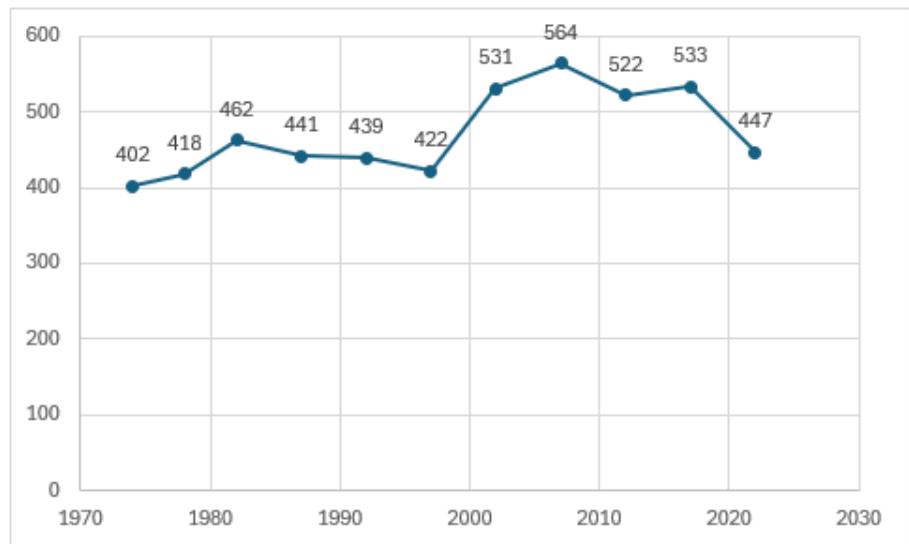
Based on sales value contributed, the following key data points:

- 46% (200 total) farms contributed less than \$9,999
- 14% (62 total) of farms contributed more than \$100,000



Total Number of Farms, 1972 - 2022

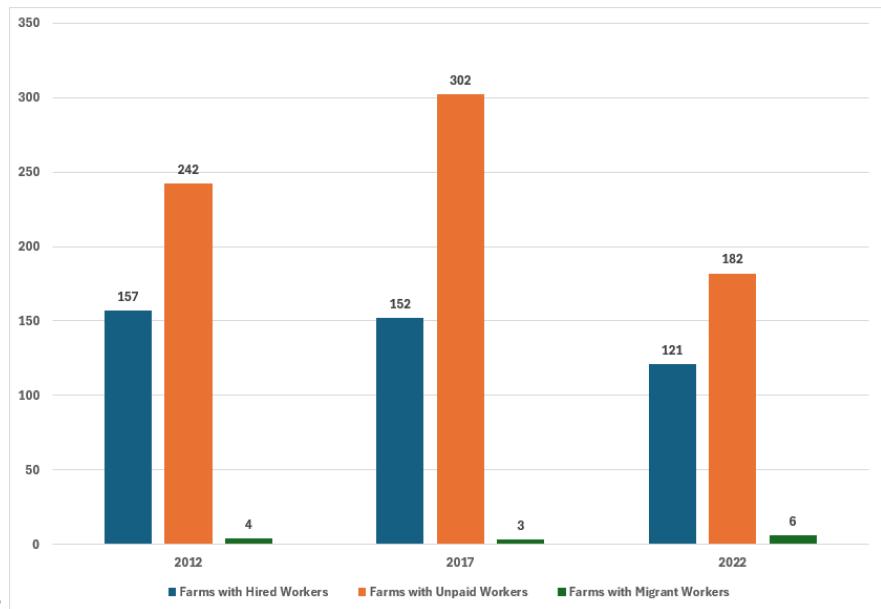
Since 1974, Madison County has experienced an approximately 24% increase in the number of farms. The data indicates, however, that there was a significant drop in the number of farms between roughly 2008 and 2022. Approximately 98% of farms were classified as family farms (2017). Approximately 29% of farms (2017) hired labor. Approximately 26% of the farming population was classified as new or beginning farming producers, most likely indicating that people are moving to Madison County to experience its agricultural heritage.



Farms With Hired Workers, 2012 - 2022

The USDA Agriculture Census counts illustrates the number of farms which had hired workers. Although the number of farms reporting workers increased in 2017, as of 2022, 309 (69%) of farms reported having workers. The following illustrates further break down of the farms with hired workers in 2012 compared to 2022:

- 157 farms with hired workers in 2012 declined to 121 farms in 2022;
- 242 farms in 2012 with unpaid workers declined to 182 farms in 2022.



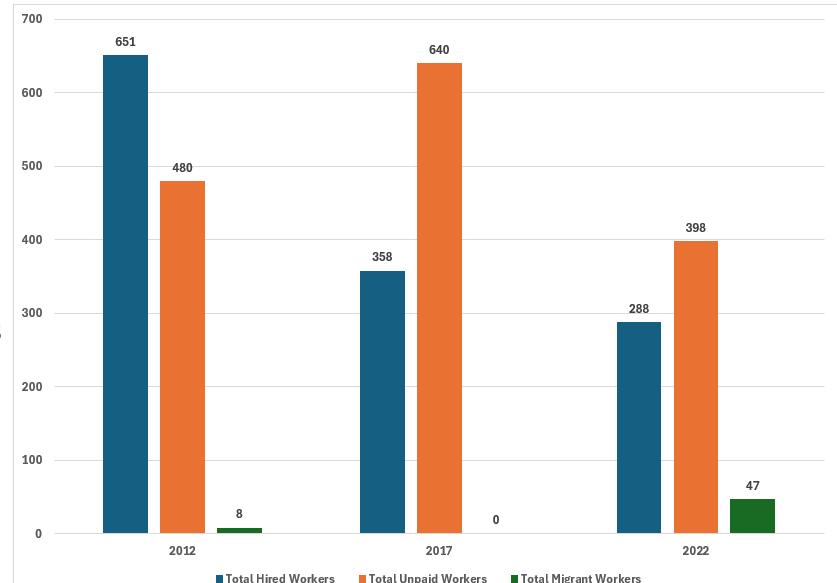
Farm Workers 2012 – 2022

The USDA Agriculture Census and US Census Bureau both indicate a low percentage (3.9%) of workers are employed in agriculture. This does not count unpaid workers, such as family members engaged in various levels of farming activities.

The overall number of farm workers declined from 2012 to 2017 and again 2022, although in 2017, the number of unpaid workers temporarily increased.

Key data points:

- Hired workers declined 56% from 2012 to 2022;
- Unpaid workers declined 17% overall between 2012 and 2022;
- Migrant workers totaled 47 in 2022.



Housing and Households Trends

Background and Findings

Broadly assessing housing conditions in Madison County required capturing a series of data sets and conducting an analysis of the County's housing stock and trends of its household population and overall housing conditions. Initially sourced from the Bureau of the Census website and combined with the data collected from prior Comprehensive Plans, key data points were identified to establish trends over time. The results to this analysis were then compared with the results of a survey conducted in 2023 by the Comprehensive Plan Committee.

Data analysis has revealed certain trends indicating that Madison County residents would benefit from an increase in housing stock and a diversification of the types of housing. Single-family housing figures predominantly as the housing of choice in Madison County and underscores the importance of planning for the future expansion of housing options available to Madison County's residents. Historic zoning and land use practices have influenced the provision of adequate housing, but market demand has also played a part.

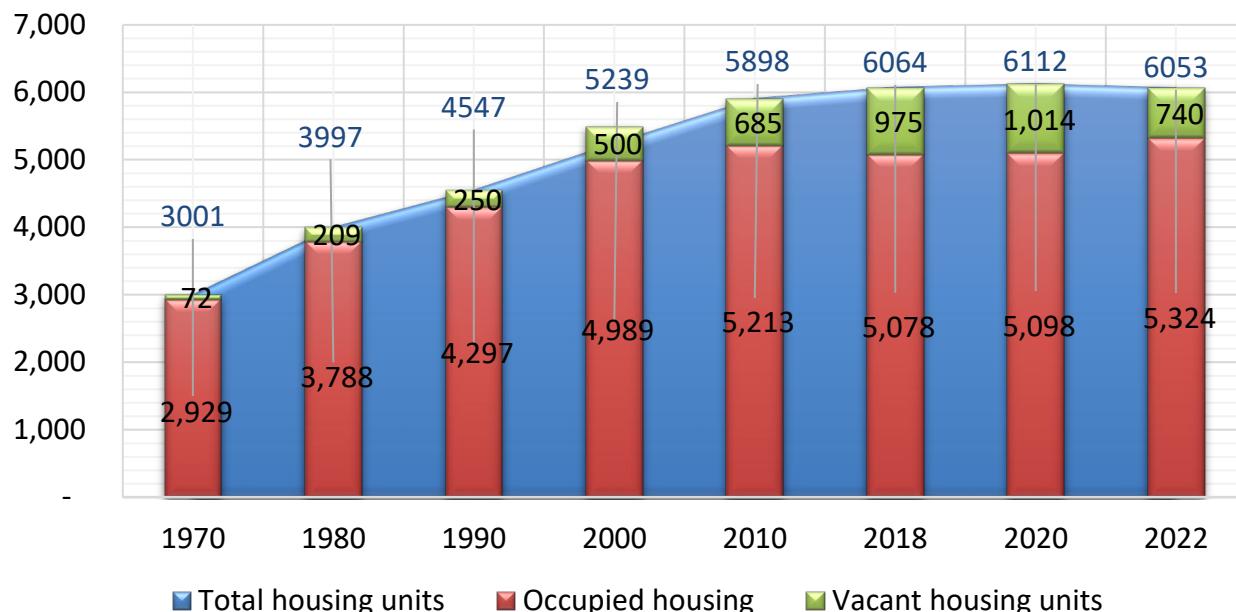
Among the trends noted, the number of housing units for which the County granted permits outpaced by almost twice the rate of the number of new households in Madison County over the last two decades. Due to greater growth in housing than in full-time population, this trend indicates that a growing number of homes are used as secondary or vacation homes for part-time residency and as seasonal or short-term rentals for tourists. The growing number of homes used as part-time residences and short-term rentals, and the low inventory of housing generally, impacts the availability of homes for full-time residents who want to new households and those with connections to Madison wanting to move the County.

Data analysis also suggests that there may be unmet demand for housing to accommodate fixed-income, aging, single, or divorced persons, and lower-income families. A significant number of households are smaller; and are headed by seniors over 65 years of age. At least 25% of Madison County households are estimated to be housing cost-burdened (page 29).

Housing Occupancy Decennial Trends, 1970 – 2020, and 2022

The high percentage of single-family homes and low inventory of homes leave potential home-buyers and renters few choices to find housing that suits their needs and fit within their budget. The following trends which, as indicated, strongly suggest that Madison County's housing growth in recent years may be largely attributable to the demand of non-County residents for weekend or vacation homes and short-term rentals.

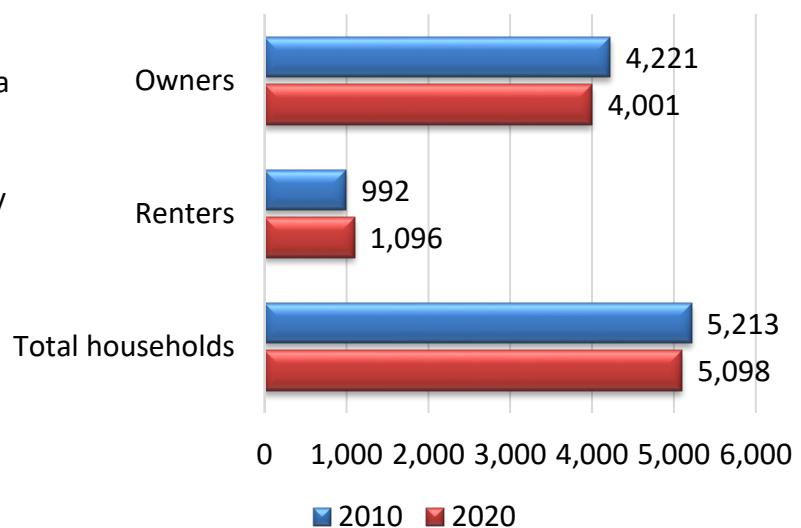
- Between 2000 and 2020, the overall number of units in the County's housing stock have increased (+15%), but the number of full-time households increased at a significantly slower rate (+7%).
- Between 2010 and 2020, the number of full-time households in Madison County decreased by 115 households, but the housing stock increased by 119 units over the same period.
- The full-time housing occupancy rate in Madison County was 90% in 2000, but declined to 84% in 2020 - comparatively lower than Virginia's full-time housing rate of 92%.
- The housing "vacancy" rate (12%), reflecting both actual vacancy and part-time occupancy, is comparatively higher than that of Virginia (8%), although it is believed the 12% rate is likely capturing short-term rental units and homes that are not occupied full-time.
- The number of "vacant" homes has doubled between 1990 and 2000, reaching a peak of 17% in 2020. As of 2022, this still represents more than 12% (at least 1 in 10) of all housing.
- The market vacancy rate for homeowners and renters is less than 1%.



Owners and Renters Decennial Changes, 2010 Compared to 2020

Between 2010 and 2020, the number of owners and renters, shifted. The following key data points illustrate these changes:

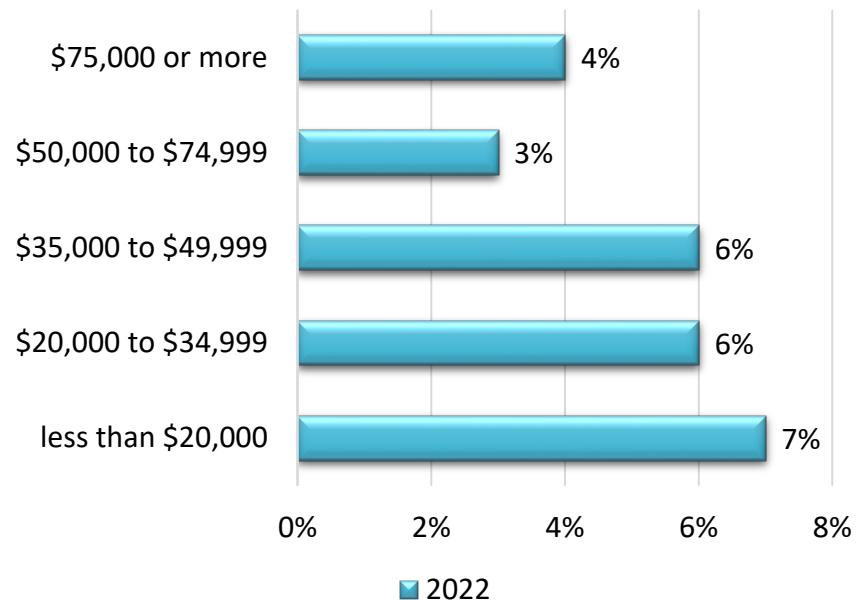
- The overall number of households decreased by 115 (-2%).
- Owners decreased by 200 (-5%) households
- Renters increased by 104 (10%) households



Cost-Burdened Households, 2022

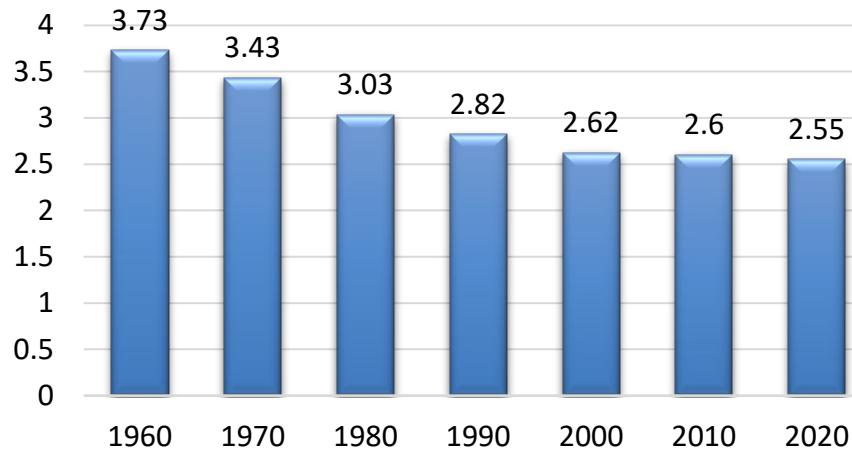
The definition of "affordable housing" varies depending on a household's income and how much the household spends on housing costs, including utilities. Recent inflation and market changes contribute to housing costs. However, the direct impacts are not measured here. Using the industry standard threshold of 30% or more of a household's gross income spent on housing costs, the following chart illustrates how many households are considered housing cost-burdened according to the U.S Department of Housing and Urban Development (HUD) criteria. The following key data points represent an approximate count of both owner and renter households.

- 26% (1,299) or 1 in 4 of all households are housing cost burdened
- 19% (967) or 1 in 5 of all households earned less than \$50,000 annually



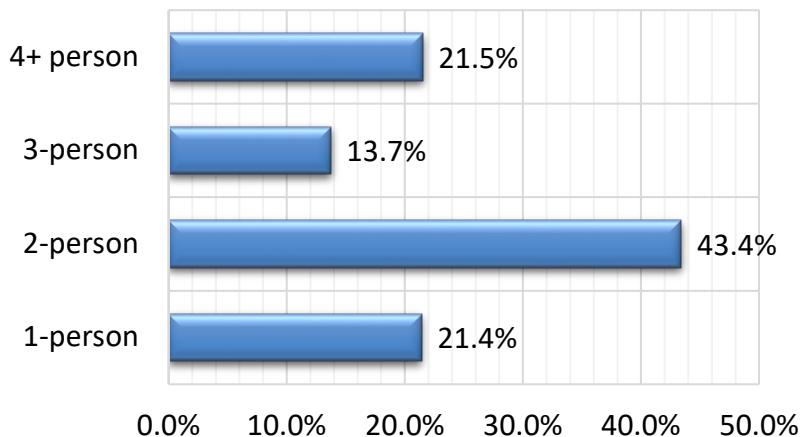
Household Size, 1960 - 2020

Analyzing the shifts in household size between 1960 and 2020 illustrates changes which may be indicative of lowering of birth rates over time. These shifts may also be reflective of younger or newly forming households moving out of the County.



Over time Madison County's household sizes have decreased. In 1960, the average household size was 3.73 persons, and it decreased to 2.55 persons in 2020. This average is slightly lower, compared to the Rappahannock Rapidan Region at 2.68 persons, but it is similar to that of Virginia which is 2.53. The following chart, reflecting 2020 data, illustrates these key data points:

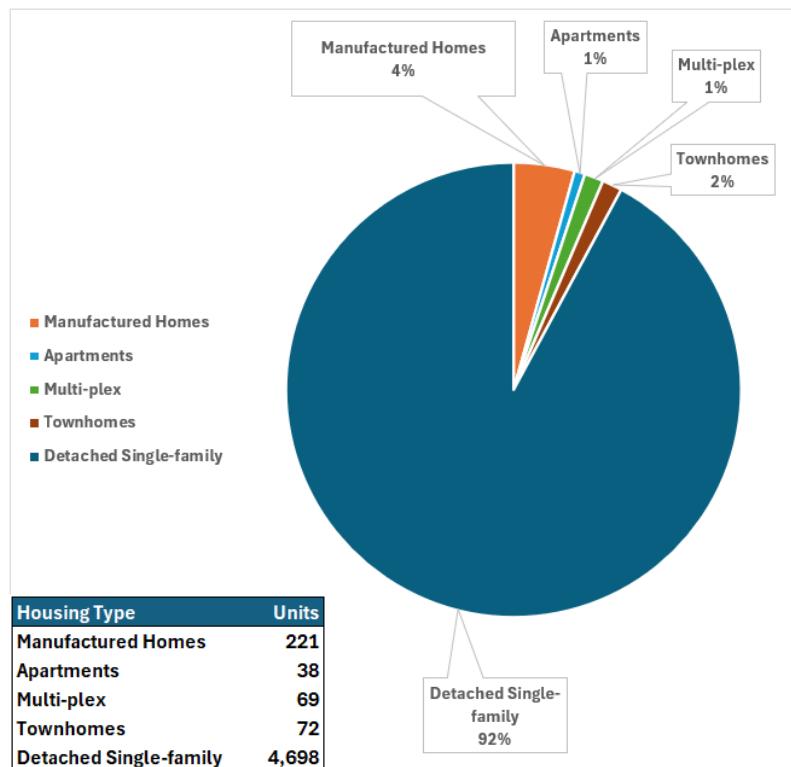
- 21.4% (nearly 1 in 4) were 1-person
- 43.4% (nearly 1 in 2) were 2-persons
- 21.5% (nearly 1 in 4) were 4 or more persons



Housing by Type, 2022

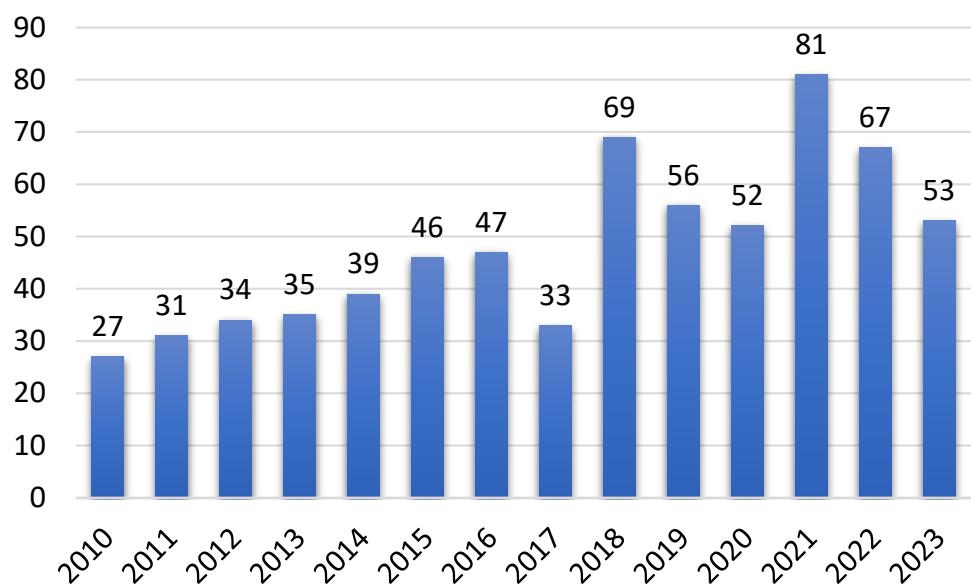
Housing stock increased by about 15% and twice the rate of households which increased by only 7%. Housing, when counted by typology reflects the following key data points:

- 92% were detached single-family homes
- 3% were town homes and multi-plexes make up 3% of housing options
- 4% were manufactured homes



New Construction Home Building Permits, 2010- 2023

Building permits for new construction homes were strong in the early 2000's and dropped off after the housing bubble (2008-2010), following national trends. Building permits have picked up some, but not to the level seen before 2008. Recent trends show the permits issued vary widely from year to year.



Data Source: Madison County Building Department

Community Facilities and Resources

Madison County boasts a varied assortment of historic and cultural resources encompassing parks and recreation, historic sites, cultural, and tourist attractions. The County also has facilities that serve a broad range of services for residents and visitors, fosters tourism in the County. The following paragraphs provide an overview of the County's resources and facilities, highlighting services, features, and amenities.

Parks and Recreation

There are approximately 46,315 acres of parks and recreation land in Madison County. The bulk of these acres are in Shenandoah National Park, while others comprise the Rapidan Wildlife Management Area, and Hoover Ridge Park.

Shenandoah National Park (SNP) is a 311 square mile park with roughly 52 square miles located in Madison County. The Park is the most important and popular tourist destination in Madison County. In 2022, the National Park Service (NPS) reported that the Park had 1.4 million visitors with \$104 million spent in communities near the Park. Annually SNP attracts thousands of visitors to Madison County with its offering of countless miles of hiking trails, the iconic Skyline Drive and its picturesque overlooks, campgrounds, picnic areas, historic structures, and the tourist accommodations at Skyland, Big Meadows, and Lewis Mountain.

Rapidan Wildlife Management Area, the state-owned wildlife management area, is a major hunting and fishing attraction as well as a popular horseback riding and hiking area.

Hoover Ridge Park

Hoover Ridge Park is Madison County's own park and is a 182-acre tract purchased in 2002. Shortly after the purchase, a committee comprised of County residents, local government officials and school representatives met with Virginia Tech's School of Architecture to develop a Master Plan for the site. Construction began in 2007, and the Park now offers a wide variety of recreational facilities. The Park is adjacent to Madison Primary School and across the road from Madison County High School. It is also home to various youth development organizations, including the Boys & Girls Club of Madison, the Boys Scouts and Girl Scouts of America, and the 4-H Club.

Historic and Cultural Resources

There are numerous historically significant resources within the County, including two National Register Historic Districts, a National Historic Landmark, and seventeen properties listed on the National Register of Historic Places. The Virginia Department of Transportation (VDOT) sponsors a highway marker program designed to highlight historical sites of local, state, and national significance. There are a number of such markers scattered throughout in Madison County. The following highlights some of these historic and cultural resources. Additional road or highway designations exist such as scenic byways.

Rapidan Camp

Located in the Madison County sector of Shenandoah National Park at the headwaters of the Rapidan River, Rapidan Camp (also known as Camp Hoover) is a National Historic Landmark. The camp was initially named Rapidan Camp at the time it was built by President Herbert Hoover and his wife in 1929 to serve as their retreat during the years of Hoover's presidency (1929-33). When Hoover lost his re-election bid to Franklin Roosevelt, he donated Rapidan Camp to the federal government to become part of Shenandoah National Park, which was being formed at the time.

Rapidan Camp was the precursor of today's presidential retreat at Camp David. Funded largely by President Hoover himself and built by the U.S. Marines as a "military exercise," the 164-acre camp originally consisted of thirteen buildings, including a lodge, two mess halls, cabins, and a "Town Hall," along with hiking trails and fishing streams.

The Camp was designated as a National Historic Landmark in 1988 under the name "Camp Hoover." After serving variously as a retreat for high-ranking federal officials and a Boy Scout camp, Rapidan Camp was restored by the National Park Service in 2004 to its condition during the Hoover presidency. It now consists of three cabins: the President's cabin known as the "Brown House" (to contrast with the White House), the Prime Minister's Cabin, and the Creel. The Camp is accessible by hiking either from Quaker Run Road near Criglersville, or from the Mill Prong Trail which connects with Skyline Drive. There is also shuttle/van service from Big Meadow to Rapidan Camp.



The First Lady and President Hoover at Rapidan Camp, circa 1931

Other Historic Places In Shenandoah National Park

Besides Rapidan Camp which is a National Historic Landmark, there are various registered National Historic Places located in the Madison County sector of Shenandoah National Park. They include Skyline Drive, Big Meadow Site, Cliff Kill Site, Gentle Site, Robertson Mountain Site, and George T. Corbin Cabin.

Madison County Courthouse District

With the creation of Madison County, a log structure was built in the center of the County to serve as a courthouse. It remained the County's courthouse until 1828, when it was replaced by a brick structure that continues to operate as the County's principal court to this day, anchoring a public square. A village grew up around the original log courthouse, and, in 1800, the Virginia General Assembly formally established it as the Town of Madison consisting of 50 acres followed by an extension of the Town's boundaries on both sides of Main Street in 1818. In 1983, the Virginia Historic Landmarks Commission performed a detailed inventory of properties within the Town of Madison and nominated the Town as a Historic District for inclusion in the National Register of Historic Places.



Madison County Courthouse anchoring the Madison Courthouse Historic District, built in 1828.

James City Historic District

A second Historic District within Madison County is the James City Historic District. Located in an area consisting of approximately 280 acres bordered by Crooked Run (which divides Madison and Culpeper Counties) and State Route 631, the James City Historic District contains a number of commercial and residential buildings on each side of a former farm lane (now Kirtley Road) that originally was a stage coach route and the main artery connecting the Rappahannock River port town of Fredericksburg and the Three Notched Road area of Albemarle County.

James City traces its origins to 1796, when Daniel James began acquiring property in Madison County. The James City Post Office (now the Leon Post Office) was established in 1810, and various commercial entities were founded within the district in the ensuing years, including an inn called the Madison Inn, a mercantile store, a boot and shoe factory, a tailor, and a blacksmith shop. Today, the James City Historic District stands as an example of late-18th, 19th, and early 20th century commercial, agricultural, and residential structures.

The Mountain Museum

Housed in a 1934 school building in the village of Criglersville, the Mountain Museum tells the story of how life was lived on the mountain before the establishment of Shenandoah National Park and recognizes the hardships suffered by people who were displaced by the Park and migrated to Madison County. The Mountain Museum is operated by the Madison County Historical Society.

Madison Museum at Kemper

Located in the Town of Madison and operated by the Madison County Historical Society, the Madison County Museum at Kemper chronicles and preserves the long history of Madison County.

Hebron Lutheran Church

Hebron Church, located in the Hebron Valley, is the oldest Lutheran Church in continuous use in the United States. The congregation of Hebron Church was formed in 1725 by German families who had started arriving in Madison County a decade earlier. The church itself was built in 1740 and was enlarged in 1800 to accommodate a pipe organ. The interior of the church has elaborate frescoed ceilings painted by the Italian-born artist Joseph Oddenino. Hebron Church is listed on the National Register of Historic Places and the Virginia Landmarks Register.



The Residence at Woodberry Forest School

The Residence was built for James Madison's brother William in 1793, with design assistance from James Madison's close friend, Thomas Jefferson. Today, the graceful, Palladian-style dwelling is home to Woodberry's Headmaster and serves as the center of many social events on the Woodberry campus.

Brampton

Built in 1846 on land acquired by James Madison's father in 1777, Brampton is an impressive frame structure that represents a rare example in the Virginia Piedmont of a two-tier portico, temple-form Greek Revival residence. It lies on the north side of the Rapidan River off Route 671. During the winter of 1863-64, Brampton served as headquarters for General J.E.B. Stuart, with General Robert E. Lee's headquarters situated just across the Rapidan River. The property was eventually deeded to Woodberry Forest School which adjoins Brampton on the south. It has been a private home since 1952.

Meander Plantation

Meander Plantation was first patented in 1726 by Col. Joshua Fry, who named it Meander because it is nestled in a curve of the Robinson River. Following Joshua Fry's death, his son Reverend Henry Fry inherited the property and built the first part of the house which is now the Inn at Meander Plantation. His friend, Thomas Jefferson, visited often, as did George Washington, George Mason, and General Lafayette. Today, Meander Plantation is a well-regarded inn and restaurant known as the Inn at Meander Plantation.

Graves Mill

The Graves Mill complex is situated on a gently terraced parcel of land surrounded by mountains. The mill itself is built on the side of a low hill at the foot of Jones Mountain. It is a rare and outstanding example of an 18th Century gristmill. The mill operated between 1798 and 1921 as a flour and corn mill, and between 1921 and 1940 as a corn mill. Graves Mill also served as the first voting precinct in Madison County, and the original voting booth is preserved within the structure.

Woodbourne

Woodbourne, located west of the Town of Madison on Route 657, was built between 1805 and 1814 by the contractors of Monticello and the Madison County Courthouse. It is a fine example of Federal style architecture and is distinguished by the fine quality of its masonry, the handsome crown molding of its cornice, and the integrity of much of its original architectural design. At one point it was owned by Dr. George Thrift, a physician who became a Confederate general and ultimately the Governor of Virginia.

Historical Farms

The Virginia Department of Agriculture and Consumer Services (VDACS) runs a program called "The Virginia Century Farm Program." The program recognizes farms that have been in operation for at least 100 years, as well as the generations of families that have maintained them. In Madison County, recognized farms include:

- Brightwood Farms
- Coppedge Farm
- Graves Mountain Farm
- Hoffman's Farm & Garden
- James Aylor Farm
- John W. Tatum Farm
- Maple Glen Farm
- Randolph Aylor Farm
- The Joel Byrd Yowell Farm
- Brookside Farm
- Deale Mountain Farm
- Henshaw Farm
- James Utz Farm
- JETT Farms, Inc.
- Lohr-Mallory Farm
- Mill Valley Farm
- Stone Ridge Farm
- Yowell Farm Enterprises, Inc.

Schools, Public Facilities, and Services

Public Schools

Madison County operates four public schools: Madison Primary School (pre-kindergarten through grade 2); Waverly Yowell Elementary School (grades 3-5); William Wetsel Middle School (grades 6-8); and Madison County High School (grades 9-12). Additionally, the County operates an Alternative Education program serving approximately 30 students annually in a facility near Waverly Yowell Elementary School.

Madison Primary School was built in 1977, expanded in 1981 and renovated in 2021. Waverly Yowell Elementary School was built in 1938, expanded in 1947 and 1968, and renovated in 2000. William Wetsel Middle School was built in 1968 as the high school annex and renovated and expanded in 1992 into a middle school. Madison County High School was built in 1955, expanded in 1959 and 1968, and partially renovated in 1992. Both the Middle School and the High School were renovated again between 2014 and 2015. In 2016 and 2022, respectively, Madison County Public Schools served 1,741 and 1,680 full-time students from Pre-Kindergarten through grade 12.

Private Schools

There are several private schools in Madison County: Woodberry Forest School, Oak Grove Mennonite School, and Hartland Institute. Woodberry Forest is a nationally known boarding school for approximately 400 boys in grades nine through twelve. Founded in 1889 on a farm originally owned by the family of President James Madison, the 1,200-acre campus attracts students from all over the nation and around the world. Academic and athletic facilities rival those at many small colleges. Oak Grove Mennonite School teaches approximately 50 children in grades kindergarten through twelve. Good Hope Christian School teaches approximately 60 children in four grades.

Madison County Library

The Madison County Library is an independent library, with its own volunteer Board of Directors. Funding comes from fundraising efforts by the active Friends of the Library organization and donations from the Madison County government and the Library of Virginia. Located in the Town of Madison adjacent to the Kemper House and County offices, the library currently has available space of about 6,000 square feet. Its collection consists of more than 30,000 books, as well as magazines, video tapes, etc. The library offers free Wi-Fi service, and it receives on average about 875 visits per week.



Transportation Facilities

There are four primary highways – two federal and two state - traversing Madison County. U.S. Route 29 is a four-lane divided highway running roughly north-south through the County. It is a major arterial for vehicles traveling between Charlottesville and the Washington, D.C. metropolitan area. U.S. Route 15 is a north-south route crossing the eastern tip of the County that provides access to Culpeper and Orange. State Route 230 runs from Route 15 across the County south of the Town of Madison to U.S. Route 33 in Stanardsville. State Route 231 connects Madison County with Gordonsville to the south and Rappahannock County to the north.

The Code of Virginia §15.2-2223(B) requires localities to develop a transportation plan as part of their Comprehensive Plans and to submit the plan to the Virginia Department of Transportation for review. Appendix B of this Comprehensive Plan contains the transportation information required by the Code of Virginia.

Broadband Internet Services

Madison County is committed to bringing universal broadband internet access to its citizens throughout the county. Since 2009, the Madison County government has been working to improve broadband internet service in the County. It remains the County's goal to encourage the universal, County-wide availability (and affordability) of broadband internet service.

The 2023 Comprehensive Plan survey asked respondents to "describe your home's internet connectivity." A total of 243 respondents answered and 19.34% described their home's internet connectivity as "excellent," 34.57% as "adequate," 20.99% as "below average," 19.75% as "poor," and 5.35% as "no internet service." These responses indicate something of a "digital divide" within Madison County, with residents living near, or in, the Town of Madison or larger established villages or subdivisions likely being satisfied with their home's internet connectivity, while those living in more rural and/or remote areas of the County not being satisfied with their home's internet connectivity.

Madison County currently has two broadband projects underway:

- The RISE project is being handled by Firefly. Firefly has committed to completing this project by December 2025. Currently, with funding provided in part by the Virginia Telecommunications Initiative ("VATI"), the County has an agreement with the internet service provider ("ISP") Firefly Fiber Broadband to serve a portion of the County via fiber optic lines that are being strung on REC utility poles.
- The VATI 2024 project is set to deploy boradband in the northern part of the County. The project will be completed by Firefly. Current agreements are being finalized between the provider and the Department of Housing and Community Development (DHCD). The project completion timeline has not been set at this time.

Work under these agreements is on-going and, when completed, should significantly improve the availability, quality, and affordability of broadband internet service throughout much of Madison County. The rapid accomplishment of this goal is vitally important for the County's economic well-being.

Public Water And Sewage

The Rapidan Service Authority (RSA) is a regional public water and sewer utility serving Madison and Orange Counties. Madison County does not have its own water or sewer system. Rather, RSA owns a water supply and sewage system that serves the Town of Madison and some adjacent areas of the County. Madison County has no plans to undertake the provision of public water and sewer services. Any future water and sewerage facilities in Madison County would be operated and maintained by RSA.

In 2010, the water system had 248 users using an aggregate average of 80,000 gallons per day (GPD). The water treatment plant, which withdraws water from White Oak Run, has a capacity of 250,000 GPD. A storage tank for the system on Courthouse Mountain has a capacity of 500,000 gallons. Also, within Madison County, RSA serves the old lace factory near Shelby, and provides water service to the Plow and Hearth facility at Oak Hill.

The RSA-operated sewage treatment plant in Madison County, located east of Route 29 and north of the Town of Madison, has 149 connections that use an average of 50,000 GPD and is operating at 62 percent of its capacity of 80,000 GPD.

Solid Waste Disposal

Madison County currently operates a solid waste transfer station on Route 662 east of Shelby which encompasses a recycling program. The site was originally opened in 1986 as an unlined trench-type landfill which the County closed in 1999.

Public Health

Madison County is part of the Rappahannock-Rapidan Health District which provides public health services to County residents, as does the Madison County Health Department. Mental health, intellectual disabilities, substance abuse, and senior services are provided by the Encompass Community Supports which operates an active Senior Center in Madison. Currently, there is one family medical practice, two dental practices, and a physical therapy practice in Madison, as well as a non-profit Free Clinic which offers screenings and referrals to participating doctors and pharmacies for income-eligible persons. There also are two nursing homes and two assisted living facilities in the County.

Public Services

Madison County benefits from being the home of several nonprofit organizations that provide public service to the community. It is worth citing some of the services provided by known nonprofits. Not all service providers are listed and those listed are just for mere awareness and illustration.

Madison Emergency Services Association (MESA) offers assistance in two primary areas of need: financial and food services. Financial services are provided on a as needed basis that include assistance with electric bills, rent or mortgage payments, fuel assistance, and medical/dental expenses based on need. MESA also provides food services through their food pantry program. Services are provided.

Skyline Community Action Partnership (Skyline CAP) is a community action agency that provides services aimed at assisting those in poverty. Programs provided by Skyline CAP include job counseling, budget counseling, emergency home repairs, rental assistance/housing vouchers, and Head Start pre-school.

Encompass Community Supports serves the Rappahannock Rapidan region. Encompass offers services for intellectual and developmental disabilities, housing, mental health, substance use and addiction, transportation, and services for adults aged 60 and above. Encompass provides the location for the Madison Senior Center.

Plan Elements:

- **Land Use, Community Design, and Environment**
- **Economic Development**
- **Housing**
- **Transportation and Mobility**
- **Recreation, Community Facilities, and Utilities**

Through the Plan Elements, the Comprehensive Plan provides decision-makers with a road map to help guide future development and improvement efforts.

Land Use, Community Design, and Environment Plan

Introduction

Dominated by rural open spaces and vistas, and by agricultural and forest uses, the character of Madison County lies in its natural and rural features that residents value. Their interest in preserving these features is high, while also recognizing the need for economic growth and possibly for modest commercial and residential development. Effective planning requires careful consideration of areas of the County appropriate for such growth and development. The land use element may be considered a driver of the plan, however zoning and the land use activities on a given parcel may vary and should be further evaluated. While some of the Land Use goals and strategies discussed in this section may be visionary and aspirational, in general, they are intended to provide an overall framework for long-term planning.

The County is encouraged to promote, in cooperation with the Town of Madison government, concentration of potential future commercial and residential development, ideally connected to public utilities, near the Town and, to a lesser extent, the County's established village areas. Current and potential future regulations, zoning or otherwise, should respect existing private property rights while recognizing the need for policies that will accommodate the County's potential future commercial and residential needs. Focusing development near the Town of Madison and existing villages, as well as in certain areas of the Route 29 corridor, serves to maintain the natural landscapes, agricultural lands, and scenic views that contribute to the unique charm and identity of the region.

Historic County Land Development Patterns

Established by the General Assembly in 1801, the incorporated Town of Madison is the County's seat and the historic residential and commercial center of the County. In 1880, the Town's population peaked at 461 residents, and it has maintained just over 200 residents since the 2000 census. Important non-incorporated historic village areas exist throughout the County, including Brightwood, Rochelle, Criglersville, Aroda, Etlan, Syria, and Wolftown. These village clusters have served as historic population and commercial centers and have fostered a sense of community in the rural areas of the County. It is expected that these village areas will continue to be important to Madison County's community development in the future.

Recent residential permitting data suggests an uptick in housing construction throughout the County that has outpaced the growth in the number of full-time households. A significant contributor to this rise appears to be second homeowners and part-time residents, who often seek housing permits for non-farming homes in agricultural areas. This trend is likely to continue and may require adjustments to zoning and subdivision ordinances.

Although housing permitting trends are expected to continue and second homes and vacation (short-term rental) homes have factored into land use and Comprehensive Plan updates in the past, it may be appropriate to consider how land is used through periodic reviews. Adjustments to zoning and subdivision ordinances may be necessary to address evolving needs, correct any inefficiencies or inconsistencies and ensure that zoning regulations remain relevant and effective over time.

As noted in the "Factual Considerations" section of this Comprehensive Plan, commercial development in Madison County is of three basic types: highway commercial uses, located primarily along U.S Route 29, serving large percentages of through and local vehicle traffic; village and neighborhood commercial uses, serving local needs; and community commercial facilities, serving major shopping needs and located near the Town of Madison. Some residents living in the County may prefer their access to major shopping opportunities outside the County, in Culpeper, Orange, Charlottesville, and Gordonsville.

Industrial development has taken place largely within a mile of the U.S Route 29 Highway corridor. For example, several wood products enterprises have developed within this corridor to locate closer to the timber sources. Virtually all development outside the Town of Madison is served by individual wells and septic disposal systems. Woodberry Forest School, The Hartland Institute and the Town of Madison have the only central sewerage systems.

It is recommended that the County adopt a growth management approach to ensure that should the County experience population growth beyond current, relatively minimal projections, goals and strategies are in place that reflect the overall vision and desires of the County's residents. The County is particularly encouraged to establish priority areas best suited for various agriculture and forestry activities, as well as for residential, commercial, and industrial development.

The availability of public water and sewer systems, within the urban development area, facilitate more efficient land use for present and future planning by concentrating development in areas where infrastructure exists or can be made available in the future. This approach encourages compact and orderly growth and will likely decrease the conversion of agriculture land for residential or commercial purposes. The County's villages and the Town of Madison are well-suited to serve local commercial and service functions for area residents and are ideal areas for modest residential growth. Their existence creates opportunities for mixed-use development and the potential extension of vibrant village centers.

Recognizing that new, or expanded, commercial and/or industrial developments are most likely to be located on or near the U.S. Route 29 corridor, an emphasis should be placed on the aesthetic and design qualities of potential developments that compliment the scenic beauty of Madison County. Locating potential development near significant intersections along the Route 29 corridor would be logical, while recognizing that proposals for new development proposals are evaluated "case by case," based on the specific merits of each proposal.

Goal 1: Preserve agriculture as the County's primary land use.

- 1.1) Preserve and protect prime agricultural lands for agricultural enterprises.
- 1.2) Support agritourism-related activities in appropriate locations.
- 1.3) Collaborate and consult with nonprofit organizations, land trusts, and other stakeholders to develop policies that support agriculture and the preservation of agricultural land and open space.



- 1.4) Continue the agricultural land use taxation program to qualified property owners by providing a reduced tax rate for land that is devoted to agriculture, horticulture, or forestry.
- 1.5) Support the voluntary donation of permanent conservation easements and agriculture land easements in rural areas of the County where such easements are consistent with the Comprehensive Plan.
- 1.6) Consider the establishment of voluntary local Agricultural and Forestal Districts in accordance with the Code of Virginia for the protection and improvement of agricultural and forest lands.
- 1.7) Continue zoning and planning practices that promote the retention of farm and forest lands by implementing a 10-year hold and limiting allowable subdivisions to no more than four every ten years in the A-1 and C-1 districts.
- 1.8) Take advantage of unprecedented levels of federal and state funding currently available for conservation projects.
- 1.9) Identify and use best management practices to promote the protection of air and water quality as well as improve tree and vegetative cover.

Goal 2: Protect environmentally sensitive areas and limit the environmental impacts of new development.

- 2.1) Recognize Shenandoah National Park as a valued natural asset and a generator of local economic activity. Limit nearby development and require that any such development is accomplished in a manner that does not significantly impact the Park and its environs.
- 2.2) Prepare and implement standards to ensure that development minimizes modification of the natural features and is adapted to the topography through standards that protect to the maximum extent possible existing grade, drainage patterns, forest cover, habitat, and other natural resources.
- 2.3) Minimize the use of greenfields, forests, and productive farmland for industrial solar facilities, and steer such development to brownfields, landfills, etc.



View from Old Rag Mountain trail system, Shenandoah National Park

2.4) Ensure that electric transmission and wireless communications facilities, which are essential for Madison County homes and businesses, are located to minimize visual impacts on the natural environment. This action would include, among other things, the screening of structures and the co-location of facilities such as electrical generation, distribution, and transmission infrastructure, electrical substations, and electrical storage. It would also include the undergrounding of distribution and transmission infrastructure (both new and as improvements are made to existing lines), the utilization of existing utility corridors without widening such corridors unless absolutely necessary and not more than the minimum width required for the proposed service area.

2.5) Review Site Plan requirements for commercial development and add set-back, landscaping, and buffering requirements for newly developed parking areas to increase aesthetics and reduce and improve storm water runoff.

Goal 3: Direct and focus higher-density housing developments on residentially-zoned land with existing services near the Town of Madison, and secondarily smaller-scale housing developments within established existing village areas.

3.1) Coordinate with the Town of Madison to consider establishing an Urban Development Area (UDA) that is appropriate for redevelopment and higher density development including housing and businesses. This area should have available or planned extension of public utilities to the extent feasible.

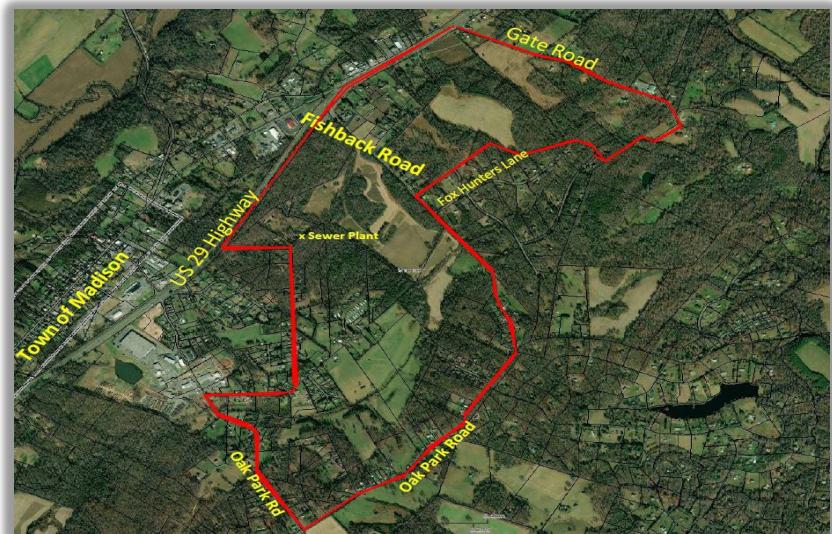
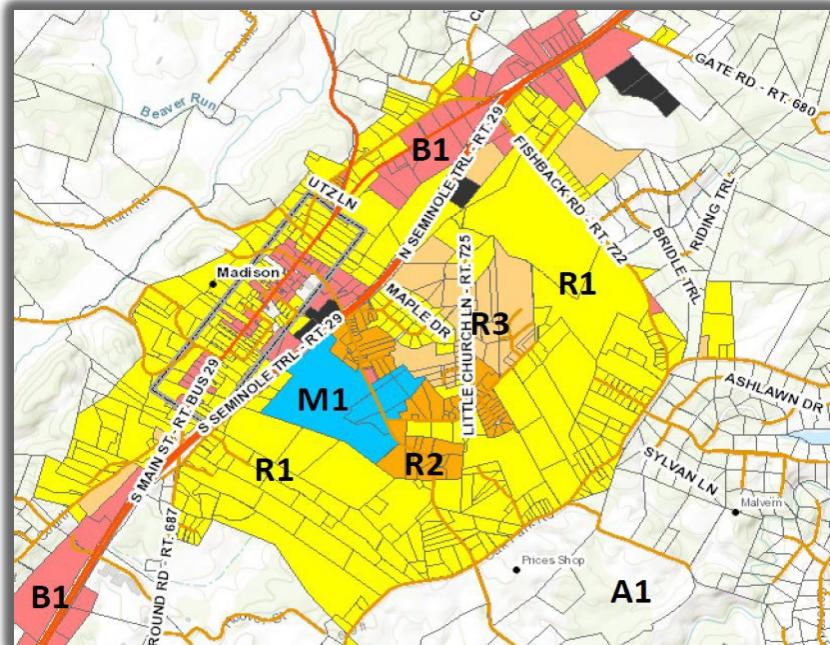


Exhibit A: Residential Growth Area (~850 acres)

3.2) Promote areas adjacent to the Town of Madison and the existing village areas as preferred locations for new housing development.



Existing Zoning near the Town of Madison

3.3) Make necessary improvements and upgrades to existing public utilities to support modestly increased capacity in areas adjacent to the Town of Madison, and encourage private developers to contribute to upgraded capacity in return for potential higher densities and mixed use development.

Goal 4: Continue to recognize U.S. Route 29 as an important commercial corridor and carefully consider new business/commercial activities near the Town of Madison and principal intersections and crossroads, particularly near established commercial locations. (See Appendix A – Route 29 Corridor Study (2012))

4.1) Improve the visual quality and cohesiveness of commercial signage by considering adopting changes to the sign ordinance.

4.2) Direct tourism-driven business growth to locations that are easily accessible and visually attractive.

4.3) Recognize the importance of protecting the Blue Ridge Mountain and agricultural view sheds.

4.4) Encourage well-designed development and redevelopment that creates a pleasing, healthy, livable, and sustainable community.

4.5) Use public spaces to enhance and beautify our communities as well as create and maintain a sense of place and a vibrant living environment.

Economic Development Plan

Introduction

Economic Development is a vital component of the Comprehensive Plan, and the Plan's Vision Statement specifically addresses the dual goals of preserving the County's rural character and scenic beauty while enhancing the local economy and encouraging entrepreneurship.

Madison County is well-positioned for continued economic growth, particularly in tourism and associated sectors. The adoption of strategies to increase and enhance local employment opportunities could reduce out-commuting, ensuring that the County retains its skilled workforce. Additionally, fostering and supporting small businesses, especially in the agricultural and tourism sectors, will be vital. Targeting development and investment in existing industries will continue to expand the economic base and potentially decrease the number of local "out-commuters." Leveraging the proximity to the Washington DC metro area and the County's central location on a significant transportation route could provide for new employment opportunities for appropriately sized economic growth and development.

Workforce and Commuting

As noted previously, Madison County has a high labor force participation and low unemployment rates. In October of 2023, the Virginia Employment Commission estimated Madison County's civilian labor force (those 16 years or older) to be 7,914 individuals with an unemployment rate of 2.3%. While potential employers might consider this low unemployment rate to be a negative statistic, other data discussed above suggest potential elasticity in the labor force. These data indicate over half of Madison County's workforce are "out-commuters," i.e., residents who leave the County for work. Nearby jurisdictions such as Albemarle, Culpeper, and Orange Counties are the employment destinations for many of these out-commuters. Out-commuters can potentially be lured back to Madison County by the availability of good-paying, satisfying jobs in the County.

Work-From-Home Trend

A growing number of Madison County residents, particularly young people who are employed elsewhere, work remotely from home in Madison County. This trend should be studied and possibly encouraged.

Part-Time Farming

Another observed trend in Madison County is that many people engaged in farming do so on a part-time basis and rely on other employment to help support their families. This trend is desirable in that it makes farming possible and helps preserve the rural character of the County.

Expansion and Development of Existing and New Industries and Additional Services

In the 2023 Comprehensive Plan Survey, of 245 survey responses 33.8% (or 83 responses) and 30.6% (or 75 responses) “strongly agree” or “somewhat agree”, respectively, with the statement that “expansion of existing industries, or the development of new appropriately-sized industries would be beneficial to Madison County and would potentially reduce the number of out-commuters and increase those who “live and work” in the County.” On the other hand, 12.6% (or 31 responses) and 6.9% (or 17 responses), respectively, “somewhat disagree” or “strongly disagree” with this statement; and 15.9% (or 39 responses) were “neutral.”

The survey also asked, “What changes and/or initiatives do you believe could improve the quality of life in Madison County?” Out of 241 survey responses the most selected response, or 42.7% (103 responses), was “increased commercial and/or retail development to provide residents with additional services.” Given that ample undeveloped business-zoned land exists, potential new commercial/retail developments would be driven by market forces.

Agritourism, Ecotourism, and Historic Resource Tourism

Agritourism, ecotourism, and historic resource tourism can help support a vibrant rural economy without requiring large, costly infrastructure improvements or severely altering the existing landscape. These economic activities are preferable in most areas of Madison County to activities that detract from scenic beauty and rural character. The protection of natural landscapes also protects the County’s watersheds, wildlife habitats, forests, and open spaces

Data from the Virginia Tourism Corporation shows that direct tourism-related spending in Madison County remained steady between the years 2016 through 2019, with annual tourism spending during this period ranging from \$16.3 million to \$16.7 million. In the 2020 pandemic year, estimated tourism spending decreased to \$15 million, but in 2021 estimated tourism spending rebounded to \$20.7 million. Anecdotally, the post-pandemic increases in tourism spending appear to be consistent with the recent proliferation of short-term rentals and event venue destinations in the County.

The 2023 Comprehensive Plan Survey responses reflect broad support for tourism, and particularly agritourism-related activities. The Survey responses heavily favored the survey choice stating: “The County should encourage tourism-related businesses while balancing the needs and desires of full-time residents.”

Broadband Internet Service

As discussed above in the Factual Considerations Section discussion of “Community Facilities,” Madison County is working diligently to ensure the County-wide availability of high-speed, affordable internet service. Such County-wide service is essential to the economic development of Madison County. Current estimates are for completion in 2025.

Economic Development Goals and Strategies

Goal 1: Promote tourism, tourist/visitor-related enterprises, and agritourism activities as a mechanism to support a vibrant rural economy.

- 1.1) Continue to promote tourism, particularly agritourism, as an important economic resource that does not require large or costly infrastructure improvements and does not alter the County’s rural character.
- 1.2) Recognize that specific tourism-related proposals will be considered on a case-by-case basis and will be evaluated, in part, based upon their specific impacts on traffic, noise, light, natural resources and nearby property owners.
- 1.3) Prioritize smaller scale tourist-related proposals, particularly those containing short-term lodging units, as desirable and consistent with Madison County’s rural charter
- 1.4) Continue to allow one (1) short-term lodging unit on A1, C1, or R1 zoned lots as a by-right use.

Goal 2: Encourage and support entrepreneurship, the expansion of existing businesses, and the establishment of appropriate new enterprises, especially agricultural-related and home-based businesses.

- 2.1) Encourage the expansion of business opportunities in appropriate areas as a mechanism to potentially increase the number of people who both live and work in Madison County.
- 2.2) Study the current state of the agricultural industry, the product value added, and establish a means of identifying and measuring economic activity in Madison County.

- 2.3) Support agricultural-related industries, particularly those with “value added” processes and production methods such as wineries and breweries.
- 2.4) Encourage and foster local producers to provide their products directly to consumers and local markets.
- 2.5) Promote Madison County as a desirable place for remote employment.

Goal 3: Ensure the establishment of new or expanded industries and commercial establishments near principal roadways and designed to mitigate potential negative impacts on the natural environment and any nearby residential areas.

- 3.1) Encourage the location of new or expanded retail and/or commercial establishments on business-zoned lots principally along the U.S. Route 29 Highway corridor, or near existing villages.
- 3.2) Consider the U.S Route 29 Highway corridor as an appropriate location for expansion of existing industries and new industries.
- 3.3) Explore adopting enhancements to the Site Plan Ordinance requiring that new commercial developments be designed to mitigate visual and environmental impacts.
- 3.4) Update the Route 29 Corridor Study

Goal 4: Ensure rapid, sustained development of a County-wide broadband infrastructure so that County homes and businesses have access to fully effective internet service by continuing to work with internet service providers in applying for grants to fund affordable and reliable broadband development throughout Madison County.

Goal 5: Encourage the ongoing initiatives of the Board of Supervisors

- 5.1) Continue work on technology driven economic development initiatives
- 5.2) Continue the Economic Development Committee's work to advance specific and measurable economic development consistent with the needs of the County.

Housing Plan

Introduction

The purpose of the Housing Plan Element is to identify housing goals and strategies that support Madison County's vision and values, and to satisfy the Virginia Code requirement in Code §15.2-2223 concerning "affordable housing."

Adequate, affordable housing for all of Madison County's residents is recognized as an essential component for enhancing the quality of life in the County. This value can be achieved alongside other important values, such as preserving the County's rural character, agricultural resources, and natural beauty, and sustaining and enhancing the County's economy. One of the best ways to protect natural areas, farms, and forests is to encourage the creation of relatively dense, highly livable communities in appropriate designated areas. In Madison County that means planning for greater housing density in and around the Town of Madison and established villages.

Madison County has experienced periods of demand for housing, which have varied depending on the source and nature of the demand. Rural, custom-built homes and old homes acquired by wealthier and older households attracted by the scenic beauty of the area has been one source of demand. Another source of demand has been from households and individuals employed within roughly a one-hour commuting distance from Madison County, some of which may have been priced out of the market for single-family homes closer to their workplaces. Other sources of demand have been for rental housing and for manufactured (*i.e.*, factory-fabricated) homes, apartments and townhouses.

Madison County may be faced with land use conflicts between housing and other uses. Demand for rural housing adds pressure for further subdivision of land for non-farming housing, especially land that is currently used for agricultural purposes.

Supporting the development of new housing near the Town of Madison and existing villages not only protects Madison's rural character and agricultural heritage but fosters a sense of community. Encouraging the build-out of existing villages provides the structure for vibrant neighborhoods with a strong sense of belonging and shared values. Well-planned neighborhoods further promote social interaction, facilitate community engagement, and strengthen ties among residents.

The above cited Virginia Code provision regarding affordable housing requires that comprehensive plans include "the designation of areas and implementation of measures for the construction, rehabilitation and maintenance of affordable housing which is sufficient to meet the needs of current and future residents of all levels of income in the locality while considering the current and future needs of the planning district." These words raise questions of:

- How is the availability of "affordable" housing in Madison County to be measured?
- What are the needs of current and future Madison County residents for more affordable housing than currently exists?

These questions were addressed most recently in a regional housing study issued in February 2021, by the Rappahannock/Rapidan Regional Commission (hereinafter the “RRRC Study”). The RRRC Study states that “potential demand for affordable housing can be seen in those [households] that are paying more than 30% of their income on housing,” and it refers to those households as “cost-burdened households.” Based on this standard, the RRRC Study broadly concludes that, as of the February 2021 date of its issuance, there was a shortage of affordable housing throughout the entire study area encompassing Culpeper, Fauquier, Madison, Orange, and Rappahannock Counties. More specifically, the RRRC Study determined, based on 2018 data, that there were a total of 15,195 “cost-burdened households” throughout the region. There are 5,098 households in Madison with 1,299 considered cost burdened. This represents 26% of all households.

The RRRC Study states that “Housing demand is sourced from two data sets: projected change in population and current needs within the existing population.” It projects a population change for Madison County over the 20-year period between 2020 and 2040 of only +2.4%. This projection compares to +31.2% for Culpeper County, +25.1% for Orange County, and +21.7% for the entire Rappahannock-Rapidan Region.

With regard to housing needs within the then-existing regional population, the RRRC Study focuses primarily on the median prices for home sales and the level of income necessary to afford a median-priced home. It concludes that in all counties within the region there was an “income deficit” to afford median-priced housing ranging from a low of -\$10,647 in Fauquier County to a high of -\$21,625 in Rappahannock County. The income deficit in Madison County was estimated to be -\$18,751.

The above figures, while helpful, do not appear to fully measure demand for affordable housing. To some degree, it would seem that the actual market for affordable housing should be considered. In Madison County, potential developers of affordable housing – ranging from senior housing to housing for younger populations – appear unconvinced to this point by the strength and potential profitability of the local market. That lack of developer interest likely is a function, at least in part, of Madison County’s minimal projected population growth.

Housing Goals and Strategies

Goal 1: Foster a variety of housing options to suit residents and potential residents that preserves and enhances Madison County's rural character and quality of life.

- 1.1) Support a variety of housing options and initiatives appropriate for Madison County and suitable to meet existing and future demand.
- 1.2) In cooperation with the Town of Madison, support new, higher-density housing, including townhouses and apartments, within or adjacent to the Town, ideally served by existing utilities and services.
- 1.3) Explore adopting a planned unit development (PUD) "master plan" ordinance that allows for a mixture of lot densities while integrating conservation and open space into the layout and design.
- 1.4) Continue to allow manufactured (i.e., factory-fabricated) housing as an affordable housing option in all appropriate zoning districts.
- 1.5) Encourage participation in the REALTOR Roundtable meetings by County Planning officials to identify and address the housing needs of Madison County residents.

Goal 2: Encourage the expansion of the range of housing options available for residents of Madison County.

- 2.1) Consider adopting a flexible policy ordinance that allows for the use of Accessory Dwelling Units (ADUs) as a means of providing multi-generational housing enabling seniors and young people to live near family and additional income for homeowners.
- 2.2) Explore the prospective benefits of co-housing or so-called pocket neighborhoods for populations where residents live in private homes, and share facilities with common spaces and resources. This model can be particularly beneficial for people who want to maintain social connections and have access to shared resources.
- 2.3) Promote increasing the availability of services for older adults such as home care, meal delivery, and transportation to help older residents live independently, to continue to support their ability to "age in place."

Goal 3: Recognize and consider the interconnections between housing and the economic condition of the County, both public and private services, tourism attractions, and agricultural activities.

- 3.1) Promote affordable and essential housing for existing and future residents, including prioritizing affordable workforce housing.
- 3.2) Prepare for the County's long-term housing needs in the context of past, and future, population trends. When considering future housing needs, recognize average household sizes and trends.
- 3.3) Recognize the role housing provides in supporting economic development.
- 3.4) Encourage relationships between the public sector and private developers to invest in infrastructure improvements adjacent to the Town of Madison, Route 29 corridor, and/or existing villages that support housing development and stimulate economic growth.
- 3.5) Avoid initiatives that would result in the need to expand unreimbursed service capacity of county services.

Transportation Plan

Introduction

Madison County's transportation system contains a diverse network of primary roads, secondary/local roads, and privately maintained roads and driveways. The County's public road network is maintained by the Virginia Department of Transportation (VDOT) and includes approximately 63 miles of primary roads and 305 miles of secondary roads.

Primary roads are U.S. Route 29 (Seminole Trail/Main Street), U.S. Route 15 (James Madison Highway), Virginia Highway 230 (Wolftown-Hood Road/Orange Road), and Virginia Primary Highway 231 (Blue Ridge Turnpike). Significant secondary roads include VA Route 606 (Desert Road/Novum Road), VA Route 609 (West Hoover Road/Hoover Road), VA Route 621 (Seville Road/Jacks Shop Road/Beautiful Run Road/Good Hope Church Road), VA Route 630 (Thoroughfare Road), VA Route 634 (Oak Park Road), VA Route 631 (Leon Road/Meander Run Road/Fords Shop Road), VA Route 652 (Ruth Road/Gar Mountain Road)VA Route 657 (Thrift Road), VA Route 662 (Shelby Road/Graves Mill Road), and VA Route 670 (Old Blue Ridge Turnpike).

U.S Route 29 And U.S. Route 15 Corridors

U.S Route 29 and U.S. Route 15 in Madison County, are principal north-south arterial routes and have the highest AADTs in the County. Both highways are important, heavily traveled commuter and commercial transportation routes.

U.S. Route 29 is a United States Numbered Highway that runs for 1,036 miles from Pensacola, Florida to Ellicott City, Maryland. In Madison County, the Highway covers roughly 17 miles and divides the County into eastern and western halves. It is easily the most significant transportation feature in Madison County. In 1980 and 2014, the County produced Route 29 “corridor studies,” a key concept and common goal of which was “shared access”.

U.S. Route 15 is a United States Numbered Highway that runs 791 miles from Walterboro, South Carolina to Painted Post, New York. In Virginia, the Highway covers 229 miles and in Madison County, the Highway’s total length is roughly 5.5 miles, and it bisects the County’s lower southeastern corner.

Shared Access

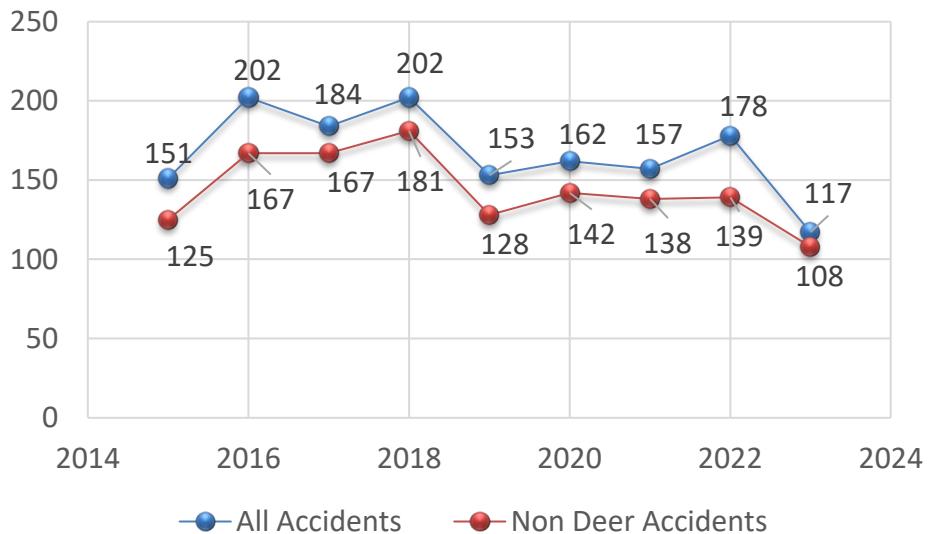
Historically, VDOT has expressed interest in limiting the number of direct accesses from private land onto U.S. Route 29 Highway (and all other principal arterial roadways). One means to achieve this goal and accommodate the needs of new development is to encourage shared entrances and driveways. This can be achieved with adjoining residential parcels but is also common in highway oriented commercial development by encouraging inter-parcel connections. The County is strongly encouraged to seek feedback and collaborate with VDOT to determine the best access management practices and techniques for new commercial and residential development, particularly along the highly traveled Virginia Primary Highways



Yoder's Market and Rt. 29 looking south/southwest

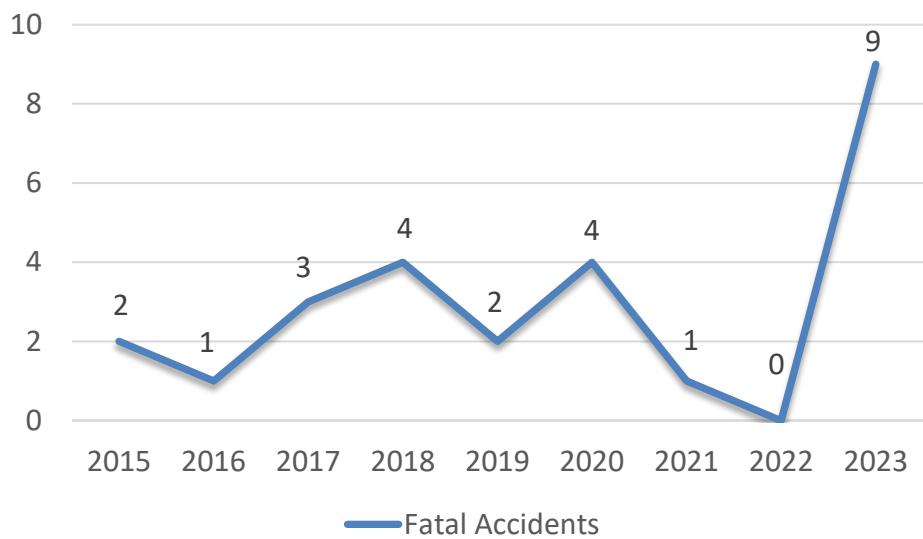
Traffic Accident Data 2015-2023

As shown in this chart, between 2015 and 2023 the total annual number of traffic accidents in Madison County fluctuated from a high of 202 accidents in 2016 and 2018, to a low 117 traffic accidents in 2023. During this eight-year period, the annual average number of traffic accidents was 188 annual accidents.



Fatal Vehicle Accidents 2015 - 2023

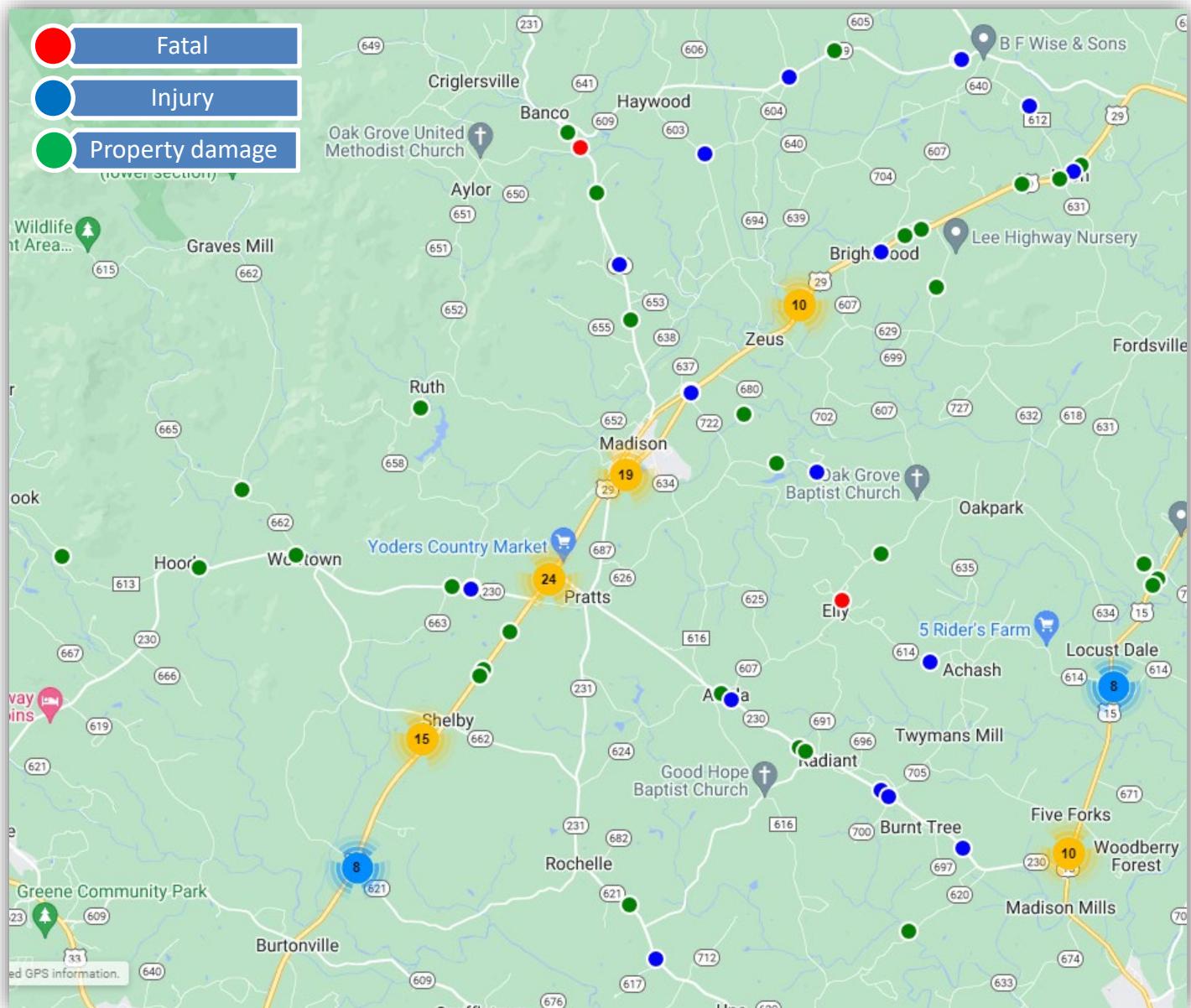
Between 2015 and 2022, fatal traffic incidents in Madison County ranged from zero such accidents in 2022, to four in 2018. However, in 2023, fatal traffic accidents dramatically increased to nine. When compared to previous years, where fatalities remained consistent, 2023 appears to be an anomaly. This trend should be monitored and if increases in fatal accidents continue, increased enforcement, speed changes, and/or improvements to road design to include potential "traffic calming" techniques should be examined.



Traffic Accident Map - 2023

The 2023 traffic accident map shows that a large majority of traffic accidents occurred on primary roads, with accident "hot spots" at the intersection of Wolftown-Hood Road and U.S. Route 29 Highway and the intersection of Orange Road and U.S. Route 15 Highway. For example the map below illustrates the approximate number of crashes in 2023:

- 7 at or near the Shelby (Rt. 662) and Rt. 29 intersection
- 10 near Woodberry Forest
- 19 near the Town of Madison



[Web link: Virginia mapped crashes Madison County 2023](#)

VDOT's FY2023 Six-Year Improvement Plan

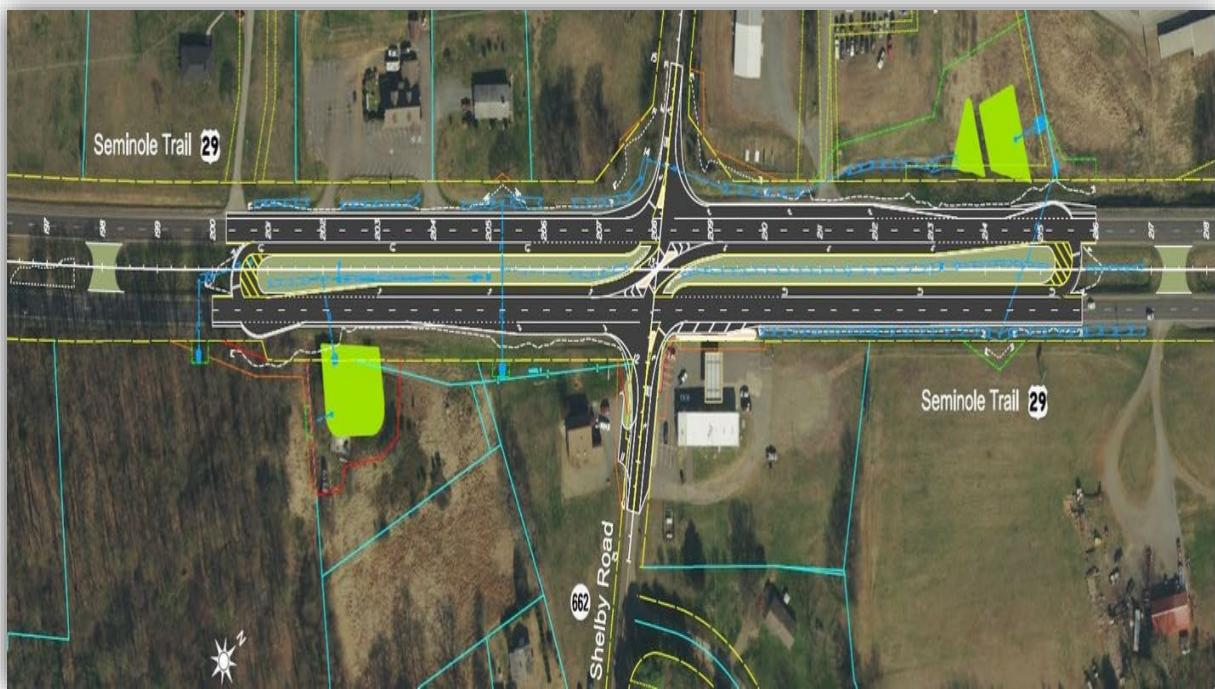
The Six-Year Improvement Program (SYIP) outlines spending for transportation projects proposed for construction, development, or study for the next six years. The SYIP is updated annually, and it identifies planned program funding for the succeeding five fiscal years. The FY2023 Six-Year Improvement Program calls for several improvements in Madison County:

Location	Project	Length	Estimated Cost
Walkers Mill Lane (Route 663)	Surface treat non-hard surface road	1.76 miles	\$514,750
Turner Drive (Route 614)	Surface treat non-hard surface road	0.44 miles	\$157,000
Desert Road (Route 606)	Surface treat non-hard surface road	1.24 miles	\$541,875
Whippoorwill Road (Route 603)	Surface treat non-hard surface road	2.04 miles	\$552,000
Emmett Road (Route 644)	Surface treat non-hard surface road	0.24 miles	\$67,500
Tom Johnson Road (Route 625)	Surface treat non-hard surface road	0.54	\$100,000
Mt. Zion Church Road (Route 635)	Surface treat non-hard surface road	1.73 miles	\$410,000
Wrights Lane (Route 700)	Surface treat non-hard surface road	1.53 miles	\$325,000

Rt. 29 And Shelby Road Intersection – RCUT Improvement

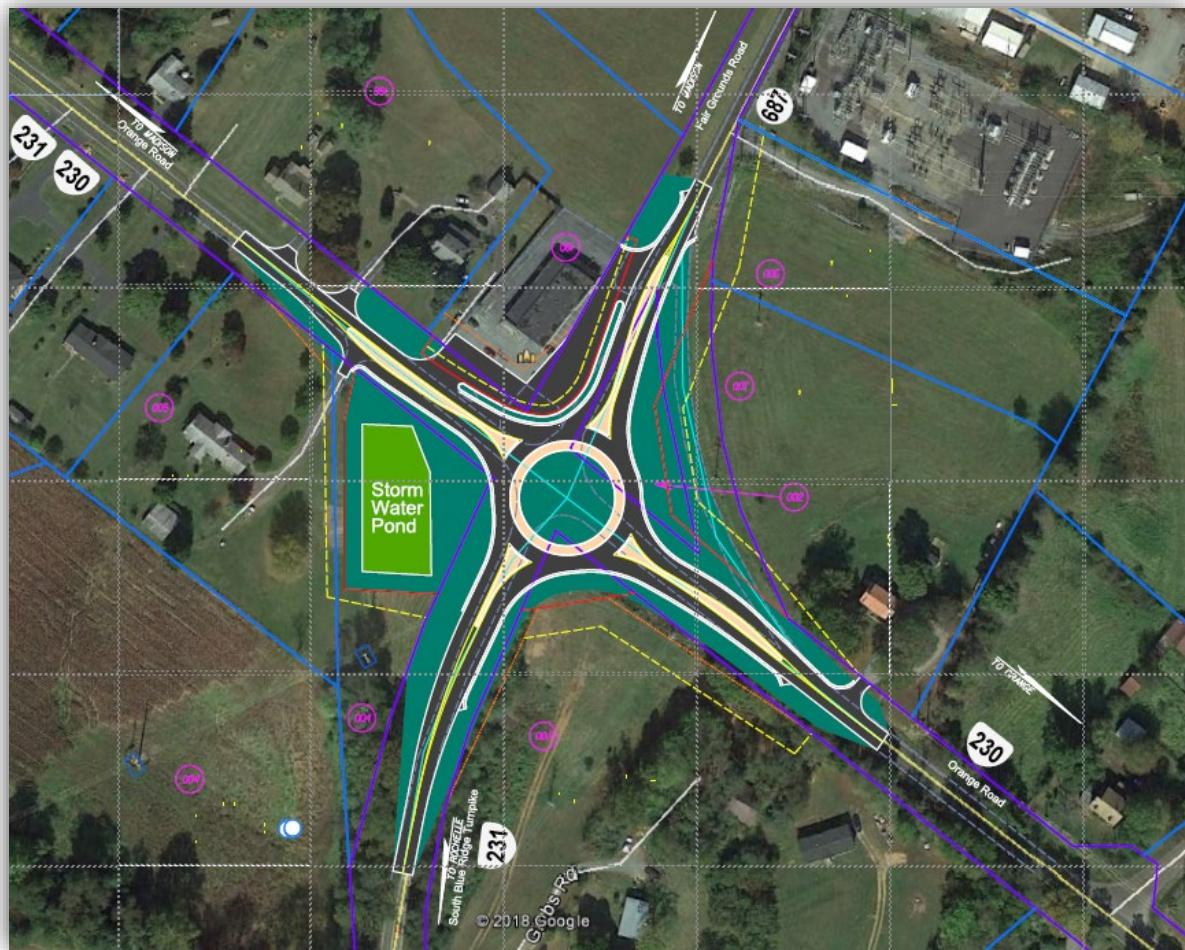
Shelby Road/U.S. Route 29 Highway Improvements: Beginning in 2007, this problematic intersection has a 17-year improvement history when rumble strips were installed on U.S. Route 29 Highway followed by VDOT installed flashing warning lights in 2013. In 2016, VDOT was awarded state and federal funding via the Highway Safety Program for \$1.8 million for a “restricted crossing U-turn or RCUT intersection.” The project’s total estimated cost is \$4.8 million. This project was completed in 2024.

The RCUT intersection, illustrated on the following page (p. 60) differs from a conventional intersection by eliminating the left turn movement from the cross street to enhance safety and reducing crashes by 28 to 49 percent when compared to a stop-controlled intersection, according to the Federal Highway Administration. Crash severity is reduced by 70 percent in fatal crashes and by 42 percent in crashes resulting in injury. To accommodate this movement, the RCUT intersection requires drivers on Shelby Road to turn right onto U.S. Route 29 Highway and then make a U-turn maneuver at a one-way median opening about 900 feet past the intersection. The U-turn crossover location improves sight lines down U.S. Route 29 Highway.



Orange Road/South Blue Ridge Turnpike (Pratts) Improvements

The below diagram depicts the planned Pratt's roundabout.



Transportation Goals and Strategies

Goal 1: Recognize the correlation between new land use development, existing highway and road infrastructure, and safety.

- 1.1) Coordinate and collaborate with VDOT to ensure that all new residential and commercial development is harmoniously integrated with nearby existing land uses to the extent possible.
- 1.2) Where feasible, require adjoining commercial lots to share entrances and contain inter-lot/parcel connections.
- 1.3) Utilize and encourage shared entrances for new residential lots to minimize conflict points along County roads.
- 1.4) Consider the number of lots to be served by privately maintained roads/drives.
- 1.5) Protect scenic views and reduce visual impacts of new development along roadways with wooded buffering, landscaping, and downward pointing lighting.
- 1.6) Annually review traffic accident data and partner with local and state law enforcement agencies to identify and determine initiatives and/or actions necessary to reduce traffic accidents and fatalities.
- 1.7) Plan for the safety of all road users. A “complete streets” approach to road design prioritizes safety. Such an approach for Madison County’s developed areas might consider for some areas sidewalks, and crosswalks, to name a few examples.

Goal 2: Acknowledge and promote U.S. Route 29 as the principal corridor in Madison County for traffic and commercial development.

- 2.1) Follow, where appropriate, VDOT's Access Management Design Standards for new commercial and residential entrances along U.S. Route 29.
- 2.2) Recognize the U.S. Route 29 corridor as the appropriate location for new and/or expanded commercial development and encourage such development to be located within a mile of the Highway. (ref. Hwy 29 corridor study)
- 2.3) Emphasize quality design in all new commercial development.
- 2.4) Oppose Route 29 being designated as a restricted access highway.

Goal 3: Work with VDOT and the Rappahannock-Rapidan Regional Commission to evaluate alternative transportation models such as ridesharing and/or vanpooling locations within the County and intercity bus service beyond the County.

Recreation Plan

Introduction

Madison County offers an abundance of recreation opportunities which are major attractions for residents and visitors alike and contribute to community health and well-being. The County has potential to become a premier Shenandoah National Park Gateway Community providing direct access to a multitude of hiking trails, including the two best trails in the Park (Old Rag and Whiteoak Canyon) which alone attract upwards of 100,000 visitors/year. The Old Rag trail is reputedly the single best hiking trail on the East Coast. The Commonwealth of Virginia-owned Rapidan Wildlife Management Area is a 10,356-acre wildlife preserve that straddles Madison and Greene Counties and offers residents and visitors opportunities for horseback riding, hiking, hunting, and fishing.

Madison County's own Hoover Ridge Park is a 182-acre tract which the County purchased in 2002 and features a wide variety of recreation opportunities and facilities including, but not limited to:

- multiple playing fields that accommodate soccer, football, baseball, softball, and Frisbee golf;
- walking and running trails and circuits;
- fitness stations;
- a golf driving range;
- a children's playground;
- a pond accommodating fishing and water safety instruction;
- picnic areas and campgrounds; and
- a farmers' market.

The Park plans to add the following, as future funding allows. These include, but are not limited to:

- an accessible and inclusive playground;
- an accessible, lighted walking path;
- restroom facilities;
- a splash pad;
- a roller hockey rink;
- an upgraded picnic pavilion;
- a concession stand;
- and shade structures.



Picnic Shelter, pond side, Hoover Ridge Park

Besides the above recreation opportunities, Madison County offers many miles of scenic, lightly traveled country roads, many of them unpaved. These country roads underpin the County's rural character and have significant recreational and scenic value. Annually, the County manages a bicycling event called the Tour de Madison which is hugely popular with residents and visitors alike.

Recreation Goals

- Goal 1:** Continue to support and publicize the wide range of recreation opportunities available in Madison County.
- Goal 2:** Continue to collaborate with Shenandoah National Park in pursuing the improvement of parking facilities, visitor amenities, and shuttle services at SNP trailheads.
- Goal 3:** Continue to support the Madison County Parks and Recreation Authority and its enhancement of facilities at Hoover Ridge Park consistent with age demographics.
- Goal 4:** Seek opportunities to partner with other jurisdictions, agencies, and the private sector to fund, develop, and expand recreational opportunities.
- Goal 5:** Promote and protect Madison County's network of unpaved, rural roads, including working with VDOT to consider safety and maintenance alternatives other than paving.

Public Utility and Communications Plan

Communication and Energy Utilities

From time to time, public utilities as described in (State Code) 56-232 as well as communication providers, such as electric power companies, communications companies, and natural gas suppliers undertake the construction or expansion of their services or facilities. The County needs to be made aware of any such projects that affect land use and public services within the county, so that constructive efforts can be made to offset adverse impacts.

Goal: Assure that the actions of electric transmission and distribution companies, gas transmission and distribution companies and communication companies, including cable TV and wireless communications companies, are consistent with and supportive of the County's Comprehensive Plan.

Major Strategies:

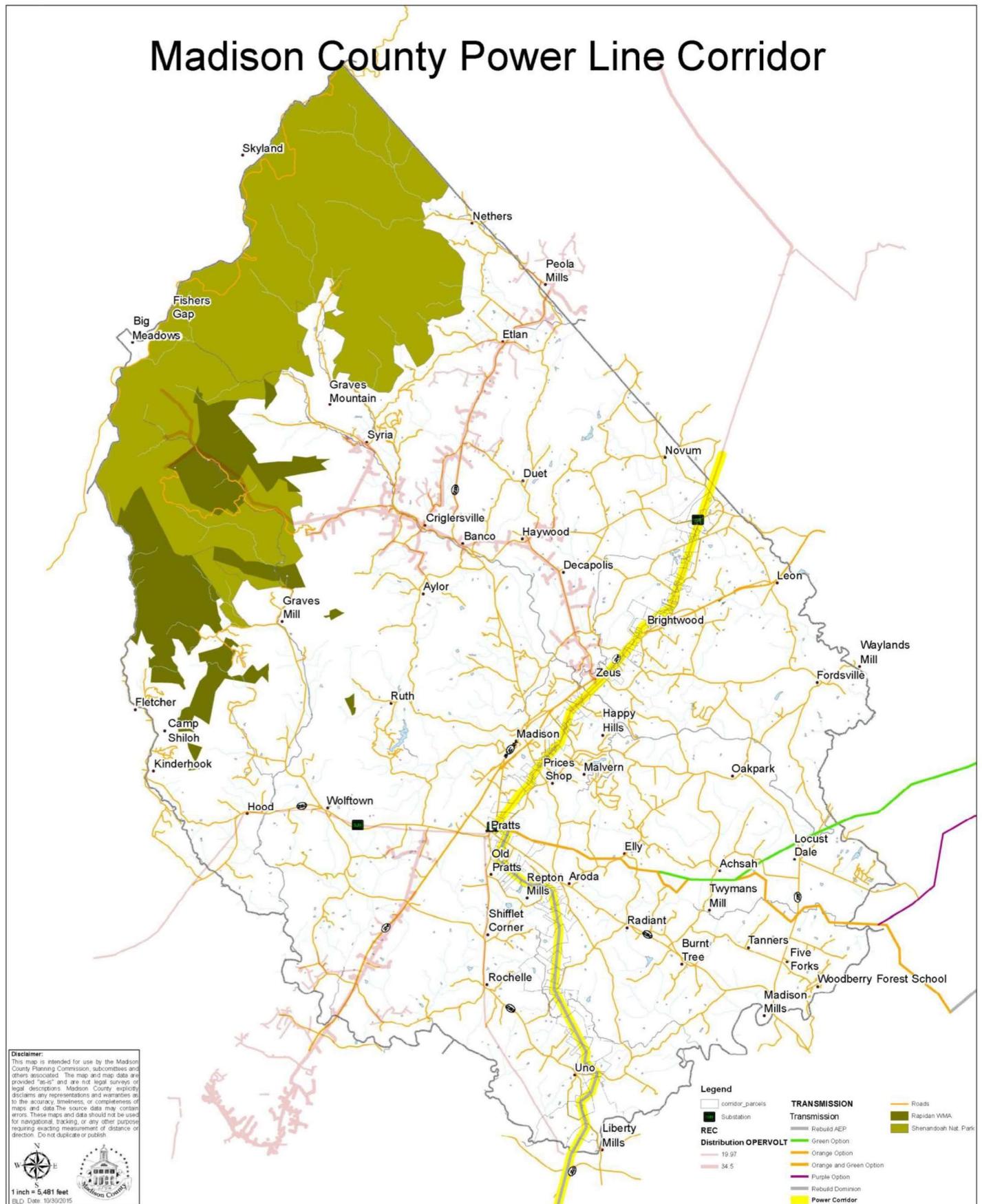
1. Madison County seeks to establish effective, continuing relationships with utility management in order to achieve coordination in planning, design, and development of utility services and facilities that will have an impact on Madison County.
2. Require any utility to provide evidence that is satisfactory to the Planning Commission and the Board of Supervisors that demonstrates the need for expansion.
3. Require utilities to conduct public information hearings in the county at times and places convenient for the Planning Commission, Board of Supervisors and county residents on all proposed facility construction or expansion projects affecting land use and scenic qualities within the County.
4. Where possible, co-locate utilities to mitigate potential negative impacts on the quality of life and safety and welfare of the citizens in the County.
5. Whenever possible, upgrade existing infrastructure before building new to minimize land disturbance by reducing the total number of corridors, thereby reducing land acquisition and rights-of-way cost. Maximizing the use of existing infrastructure may also produce fewer conflicts with nearby land uses, environmental factors and existing structures and improvements.
6. Require utilities to seek minimal adverse aesthetic impact in their expansion considerations in order to better integrate the project in an area and gain community acceptance.

7. Minimize conflicts with developing uses, taking care to preserve prime real estate needed for local community development.
8. Site selection must allow for operations and maintenance access.
9. Minimize encroachment upon residential neighborhoods, established communities, villages, schools, parks and conservation areas when siting expansion.
10. Locate near, but avoid bisecting, development centers or areas planned for future economic development (business, commercial, industrial or residential). When possible any utility sited on the periphery of a development center should be placed underground.
11. In accordance with Virginia Code 56-46.1, any expansion plans must minimize adverse impact on scenic assets. Viewsheds are an essential element of Madison County's community character, scenery, and economic sustainability. Use of topography is encouraged to lessen visibility. Height and design of poles must also be part of this consideration.
12. Where possible, critical wildlife habitat, river and stream corridors should be avoided. Sites with potential for environmental issues should be evaluated for impacts and possible mitigation measures.
13. Encourage utilities to avoid areas with flood, landslide potential, and earth movement potential that may damage their infrastructure.
14. In accordance with Virginia Code 15.2-2223 (C)(8), require the placement of electric transmission lines of 150kv or more to use current rights-of-way within the corridor. The designated utility corridor, as defined herein and shown on the attachment labeled "Power Line Corridor", follows the current rights-of-way coming into Madison from the Gordonsville substation to the Pratts substation to the Decapolis substation towards the Hazel switching station in Culpeper County. Deviations from this corridor would require approval of the governing body in accordance with Virginia Code 15.2-2232.
15. Support the development and implementation of high speed communication services to all county residents. A glance at a map of existing communications towers shows that the majority of such facilities serve only a fraction of Madison County. The current distribution of these facilities demonstrates an absence of regard for the needs of the entire population of Madison County. It is urged that a strategy be adopted to address these needs. This should be the result of a process designed by the Board of Supervisors to draft and maintain a Technology Plan, which would contain the following sections:
 1. Current environment assessment within the County
 2. Vision for the future
 3. Strategy for reaching that vision
 4. Government business process
 5. County infrastructure
 6. Organizational accountability
 7. Key department functions

This Technology Plan would have as its purpose identification of the most efficient and effective manner of serving the entire county for the present and foreseeable future.

16. Explore possibilities of having more communication tax returned to the County in lieu of recent legislation.

Madison County Power Line Corridor



Appendix A: Route 29 Corridor Study (2012)

MADISON COUNTY PLANNING COMMISSION

2014 ROUTE 29 CORRIDOR STUDY

Date

March 2014

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Introduction

Background

The 2012 Comprehensive Plan (The Plan) for Madison County refers to the Route 29 Corridor as “the most appropriate location in Madison County for non-agricultural economic development.” It further recommends that the County “reflect this fact in its policies and plans which should be designed to encourage and direct development in the Route 29 Corridor...”

The goal statement specifically pertaining to the Route 29 corridor recommends that the County:

“Plan for the orderly development of the Route 29 Corridor, allowing business, commercial, industrial, institutional, recreational and residential development in appropriate areas, while preserving areas of open space for agriculture and protecting scenic vistas.”

Objective 1 within this goal is to: “Promote industrial and commercial development in the Route 29 Corridor.” The final strategy under this objective recommends that the County “Commission a contemporary local Route 29 Corridor Study.” This document represents the Planning Commission’s response to this objective.

While the County recognizes the significance and potential economic value of the corridor, the “Rural Economy” discussion in The Plan acknowledges the delicate balance of encouraging business expansion “without succumbing to incremental strip development along Route 29...” As the Corridor Study Committee addressed the above goal statement, it did so while adhering to the following guiding principles:

1. Safety is paramount – changes to the corridor should seek to improve and never negatively impact safety of the users or neighbors of US 29
2. Maintain capacity – changes should maintain or increase volume and speed on the mainline lanes of US 29
3. Optimize access – minimize inefficient and redundant entrances while ensuring easy access to local businesses, homes, schools, and other facilities.
4. Balance function and aesthetics – be sensitive to “scenic vistas” and discourage “incremental strip development” while being receptive to ideas that expand opportunities for desired development

State and National Significance

U.S. Route 29 is part of the National Highway System¹, which reflects its importance to the nation’s economy, defense, and mobility. It extends 1,036 miles from Mt. Hebron, MD to Pensacola, FL². It enters Virginia in Rosslyn and exits in Danville. It is a prominent feature in one of the twelve Corridors of Statewide Significance (CoSS) as identified by the Commonwealth Transportation Board.³ CoSS are

¹ National Highway System, http://www.fhwa.dot.gov/planning/national_highway_system/, accessed January 26, 2014.

² US Highways from US 1 to (US 830), <http://www.us-highways.com/us1830.htm#us029>, accessed January 26, 2014.

³ Corridors of Statewide Significance, http://vtrans.org/significant_corridors.asp, Virginia Office of Intermodal Planning and Investment, accessed January 26, 2014.

truly multimodal and deemed critical to the overall economic well-being of the Commonwealth. As such, the Virginia Department of Transportation (VDOT) is charged with protecting and improving the capacity carrying characteristics and operational efficiency of this route. Route 29 is part of the Seminole Corridor, which also includes US 50 and 28, Washington Metro system's Orange Line, Virginia Railway Express, numerous Local Transit Services, Norfolk Southern Crescent Corridor, Amtrak, Washington Dulles International Airport, Charlottesville Albemarle Airport, and the Lynchburg Regional Airport.

Study Area

More locally, U.S. 29 is a four-lane arterial highway that runs from the Rapidan River at the Greene County Line (central southwest) to Crooked Run at the Culpeper County Line (central northeast). Many more people pass through Madison on a daily basis using Route 29 than actually live in the County. It is easily the most significant transportation facility in the county and, at least economically speaking, one of the most prominent characteristics in general.

For the benefit of this study, the Route 29 Corridor is defined by the right-of-way of the highway and the adjoining land located within 1-mile on either side of the road. This study area has been defined to include the majority of easily accessible land with reasonable development potential. The 1-mile buffer also encompasses related "spurs" to the corridor that are formed by Route 230 near Oak Hill and Pratts, Business 29 to include the Town of Madison, Oak Park Road and significant residential and mixed use development near Brightwood.

The entire County covers approximately 327 square miles of land. The Corridor as represented in this 2013 inventory represents approximately 10% of the County at 32.9 square miles. As was done for the 1980 study, the study area is broken up into six segments of approximately 2.75 miles in length each (see Figure 1). They are numerically identified as segments one through six. Segment one starts at the Greene County line and segment six ends at the Culpeper County line.

Population Density

The 2010 census estimates the county population at 13,308 people. The countywide population density is therefore now just over 40 people per square mile. The census further estimates that approximately 2.6 people live in each *household* in Madison County. While the County does not track *households*, it does maintain a database of addresses. There are a total of 6,790 addresses in the County. At 2.6 persons per household, that means that only about 75% of these addresses can be for households ($75\% \times 6,790 \times 2.6 = 13,240$). Table 1 reports the total address per segment in the Corridor. Assuming the same proportion (75%) of these addresses are households, then approximately 3,470 people live in the Corridor. The population density within the Corridor is approximately 105 people per square mile. The population density outside of the Corridor is therefore about 33 people per square mile. That is, the population density within the Corridor is at least 3 times that of the rest of the County.

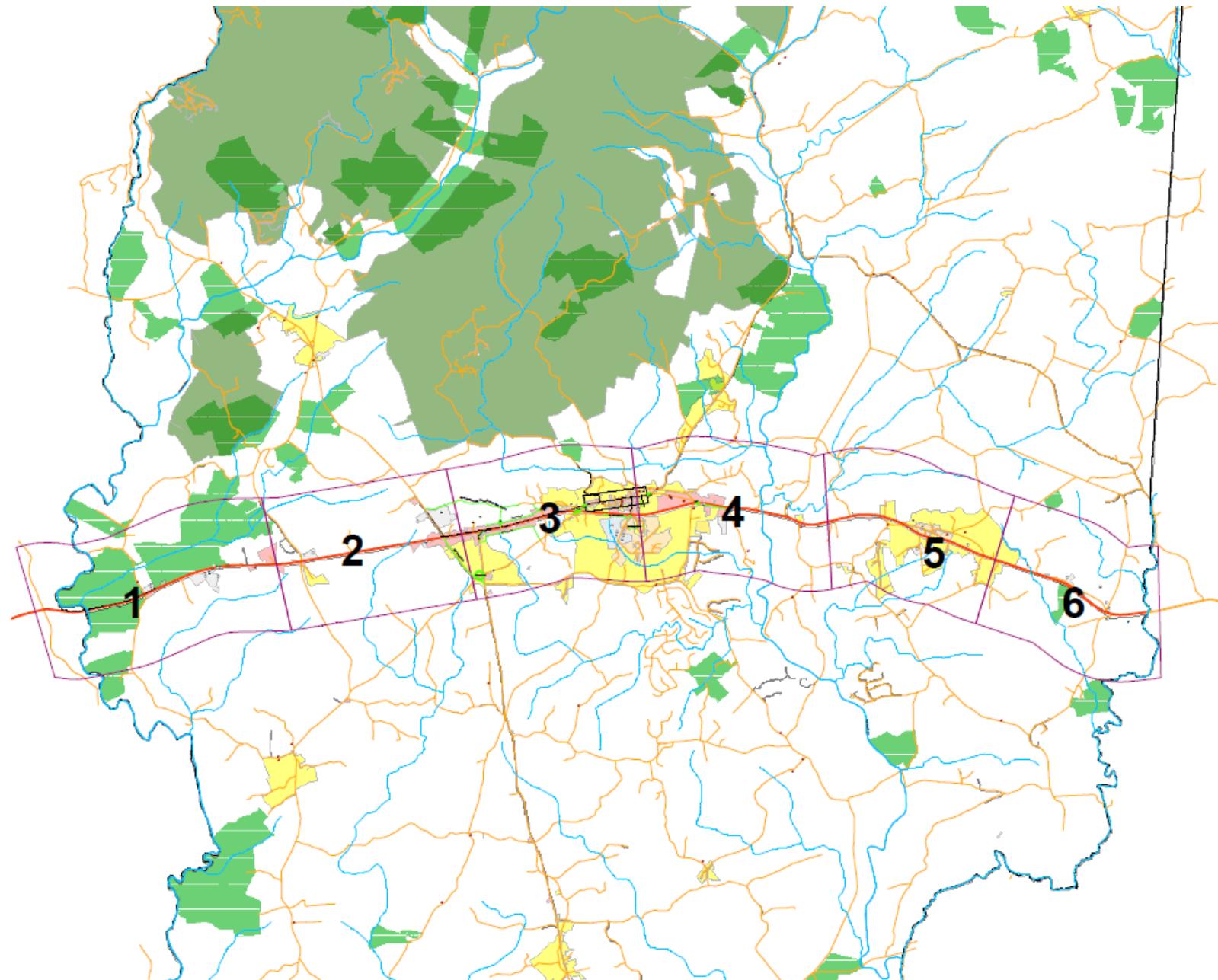


Figure 1. Route 29 Study Area.

Table 1. Address Count by Segment

Section	Total Address Count
Segment 1	108
Segment 2	185
Segment 3	597
Segment 4	367
Segment 5	375
Segment 6	148
Total	1,780

Employment and Commuter Patterns

Employer statistics are difficult to find from within-County sources partly because the County does not license businesses. There are, however, useful statistics available from the Virginia Employment Commission (VEC), which recently published a “Community Profile”⁴ for Madison County. As of 2013 approximately 80% of county employers have addresses that put them within The Corridor. Consequently, it is likely that most residents who live and work within the County (1,361 people) also work within The Corridor. It is interesting to note that this accounts for less than 23% of County workers.

The VEC’s Community Profile also discusses commuting patterns for Madison County workers. Of the approximately 5,950 total workers who live in the County, about 4,590 (77%) of them commute out of the county for work. Of those workers commuting out, 2,500 are commuting to places that likely require them to use some portion of The Corridor (Albemarle, Greene, Fauquier, etc.).

Existing Land Use

Figure 2 is a graphical depiction of the proportion of existing land use in each of the 6 segments that make up the Corridor. Figures 4 through 9 show the same information through maps of existing zoning districts. For the purposes of this summary, land use is assumed to correspond with the existing zoning. For a complete description of each of the relevant zoning districts within the Corridor, please refer to Appendix A - Basic Zoning Districts.

The majority of the Corridor continues to be zoned for Agricultural use – 83%. Segments 2, 3 and 4 collectively contain 90% of the business zoned property in the corridor. Segments 3, 4, and 5 are where the most of the residences are located, as those segments have 94% of the residentially zoned property in the corridor. Segment 3, the only segment for which less than 75% is zoned for agricultural use, is clearly the segment with the most businesses.

⁴ Madison County – Community Profile, Virginia Employment Commission, Richmond, VA August 2013.

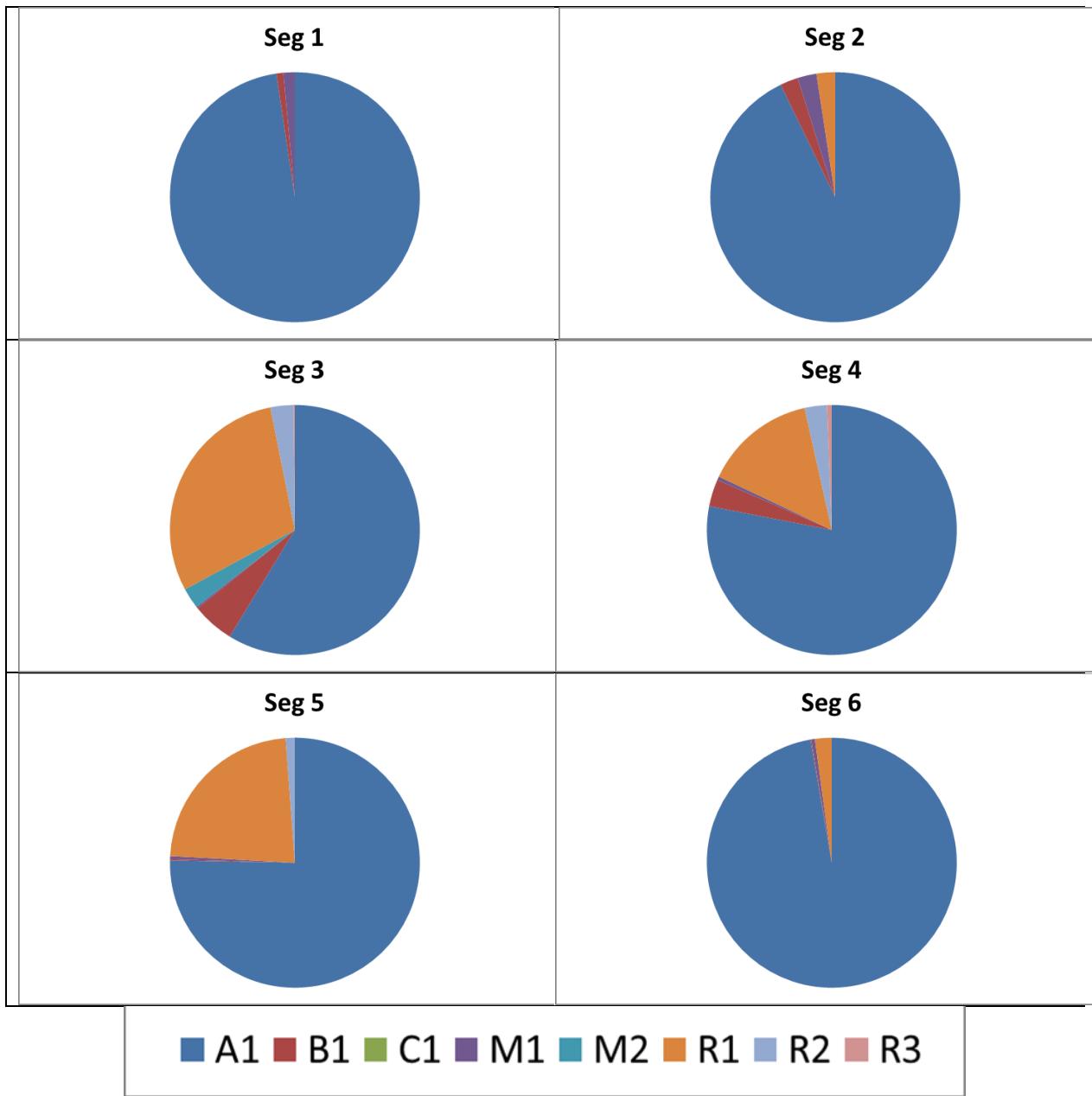


Figure 2. Zoning Distribution by Segment.

Residential

The highest concentrations of residentially zoned property are areas around Pratts along Route 230 to the east and south of US29, property that is adjacent to the Town of Madison, land along Oak Park Road east of the Town, and considerable area surrounding the village of Brightwood. Nearly all of the residential property in the corridor is zoned for lower-density (R1) housing. Corridor wide, approximately 12% is zoned R1, 1.2% is zoned for slightly higher R2 density and only 0.1% permits the highest density residential R3 development.

Commercial

The Town of Madison and points just to the northern and southern termini of Business 29 are the areas of densest commercial activity. There are other "satellite" areas of commercial activity at Shelby and Oak Hill, as well as some very isolated activity in Brightwood. Beyond the property that neighbors The Town, current business zoned land in the corridor appears to have "happened" with little rationality.

Industrial

Industrial use of land in The Corridor has changed little since the last study in 1980, but there are now nearly 300 acres of M1 and M2 zoned property. Larger areas of property that have historically been industrially-zoned include the old Jim Carpenter Company property in Segment 1, a small lot near the substation in Pratts, the property on which the Madison Wood Preservers and formerly Mountain Lumber sits off Route 634 east of 29 (Segment 3) and nominal areas averaging around 15 acres per segment in segments 4, 5, and 6. Newer areas of industrial properties include the "lace factory" property off Jacks Shop Road (rezoned from B-1), and the self-storage and trailer sales properties near Shelby. As was noted in the earlier study, there remains "no clear pattern of industrial location or direction of industrial growth" (RRPDC, 1980).

Public/Semi-Public

The predominant public facilities in the Corridor are the public school buildings, which include the Madison Primary School, Wetsel Middle School, Madison High School, and Waverly Yowell Elementary School. The first three are located within very close proximity in Segment 3. The School Board (the old Elementary school) is also located along the corridor and north of the High School in Segment 3. Waverly Yowell is located on the northern end of the Town of Madison in Segment 4. With the Waverly Yowell facility as an exception, there does appear to be "order" to the development of property for use by the public school system.

Neighboring the Madison Primary School and some shared athletic fields that are used by the Middle and High School is Hoover Ridge Park. This 182 acre property was purchased by the County in 2002 and is now managed by the Parks and Recreation Authority. The park includes walking/running trails, a camp, a pond and various playing fields. A board of local volunteers is actively pursuing a "master plan" for the park that will provide the amenities similar to those shown in Figure 3.

The Parks and Recreation Authority also manages about 4 acres of property on the southern end of the Town of Madison adjoining the American Legion Post Home. This property includes a picnic shelter and a hockey court.

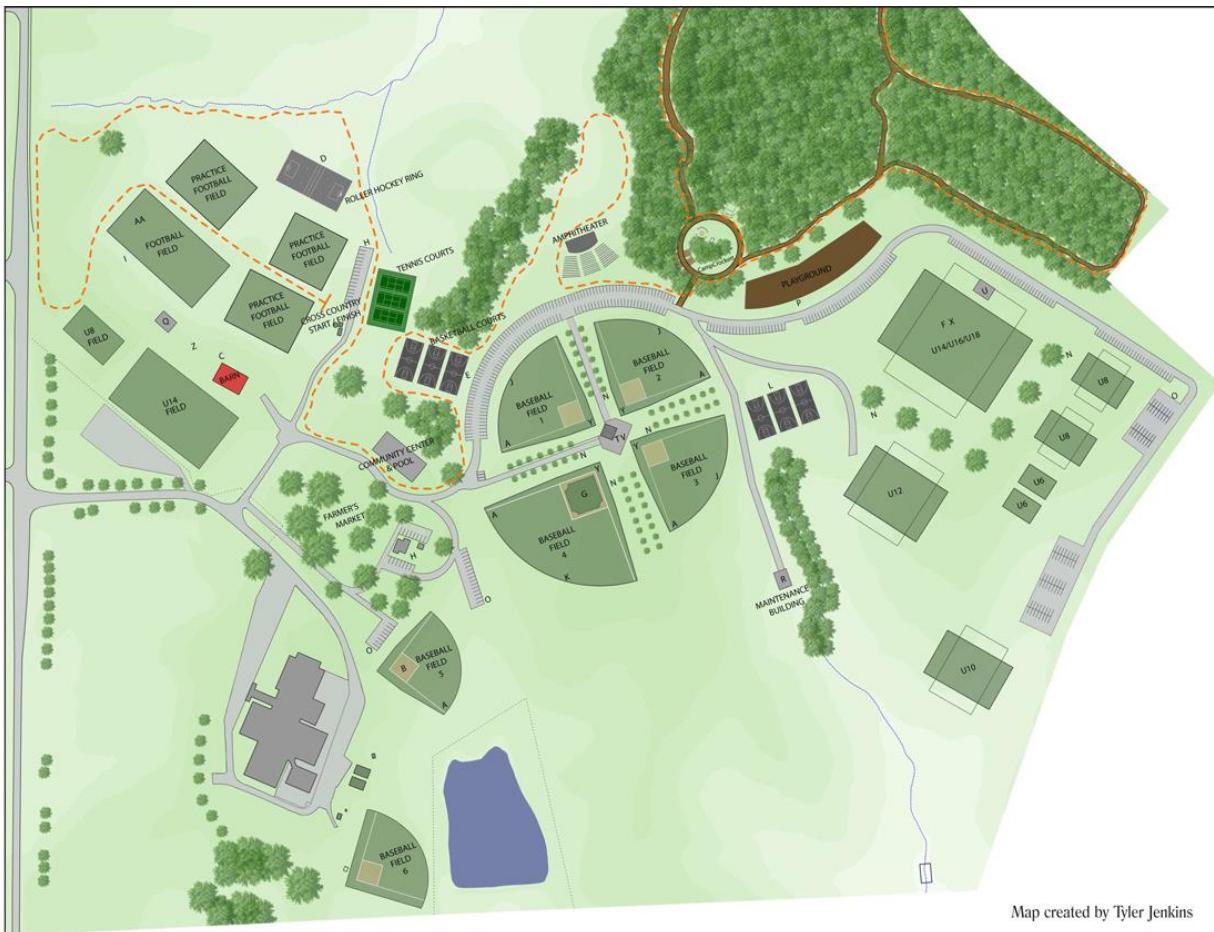


Figure 3. Hoover Ridge Park

A relatively recent addition to the town is a building that was constructed to house a modern daycare center. It sits at the southern end of town just off US 29 Business. Unfortunately, after operating for several years that facility now sits empty.

The Town remains the location for almost all of the County administrative buildings. The old School Board Office on Thrift Road is now the office for the Board of Supervisors. The County extension office is in the center of town in the War Memorial Building. Across Church Street from the Extension office is The Sheriff's Office and Emergency Dispatch Center in the old fire house. Across Business 29 from both of these offices is the Court House and County Clerk's Office. Further north on Business 29 near Kemper's Mansion are the Library and the remaining county administrative offices. This also includes the county Health Department. Continuing north on Business 29 beyond the Waverly Yowell school are the Madison Rescue Squad and, next to the Orange Madison Co-op at the northern-most end of town, is the Volunteer Fire Company.

Open Space

The portion of the corridor that remains primarily devoted (via zoning) to agricultural use is one indication of the amount of open space that remains along the corridor. Although there is no Conservation

(C1) zoning in The Corridor, there are conservation easements that make up 8% of the acreage in the corridor. The majority of this “protected” open space is the Laneway and Lightburn farms on the very southern end of The Corridor (Segment 1). The easements in these two properties make up all but about 100 acres of the 1,696 acres of easement in the entire corridor.

The Town of Madison

The Planning Commission proposes that the Board of Supervisors contact the town of Madison for its input on aspects of the Rt 29 Corridor that concern the town.

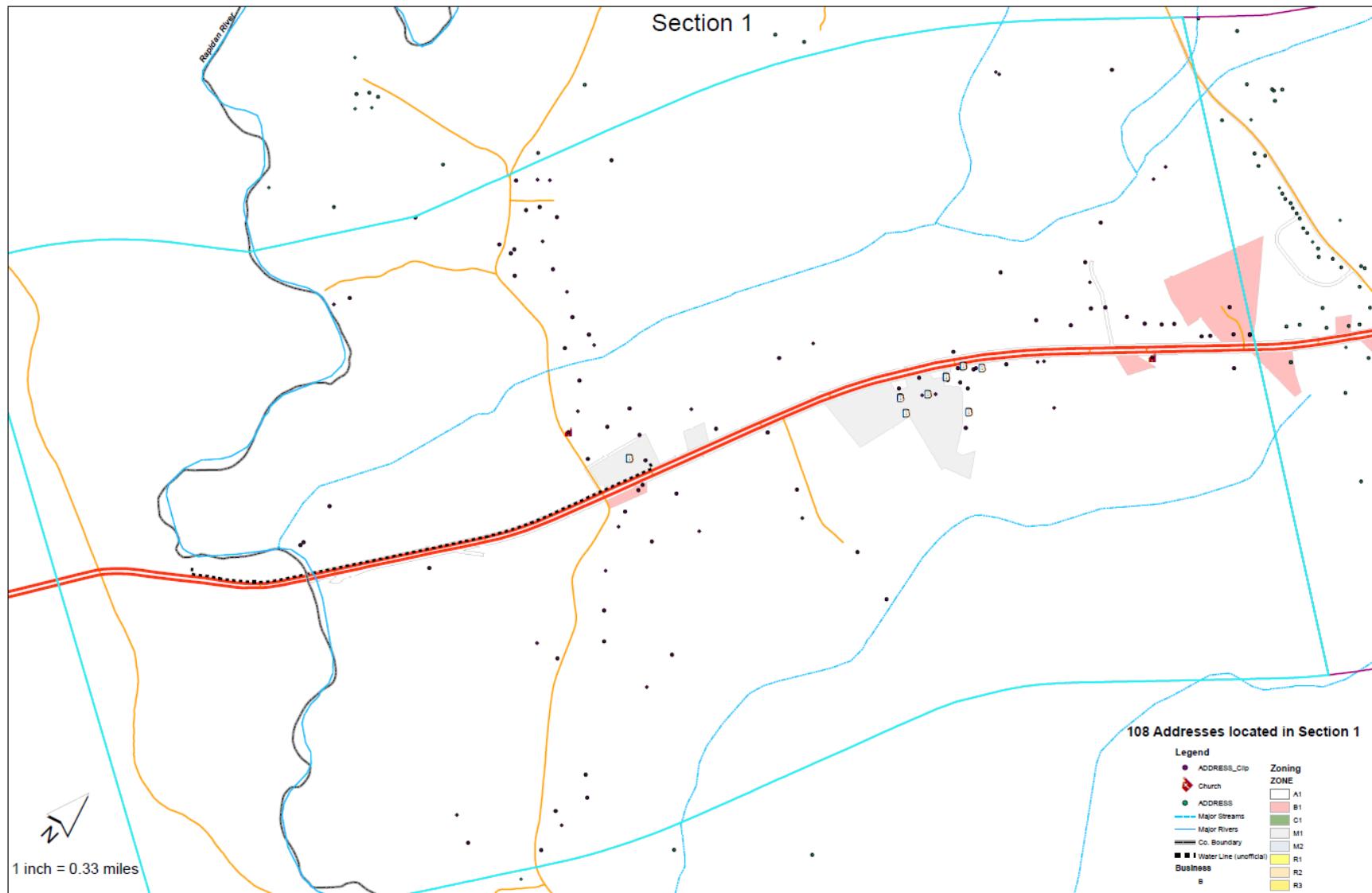


Figure 4. Segment 1 - Existing Zoning and Addresses.

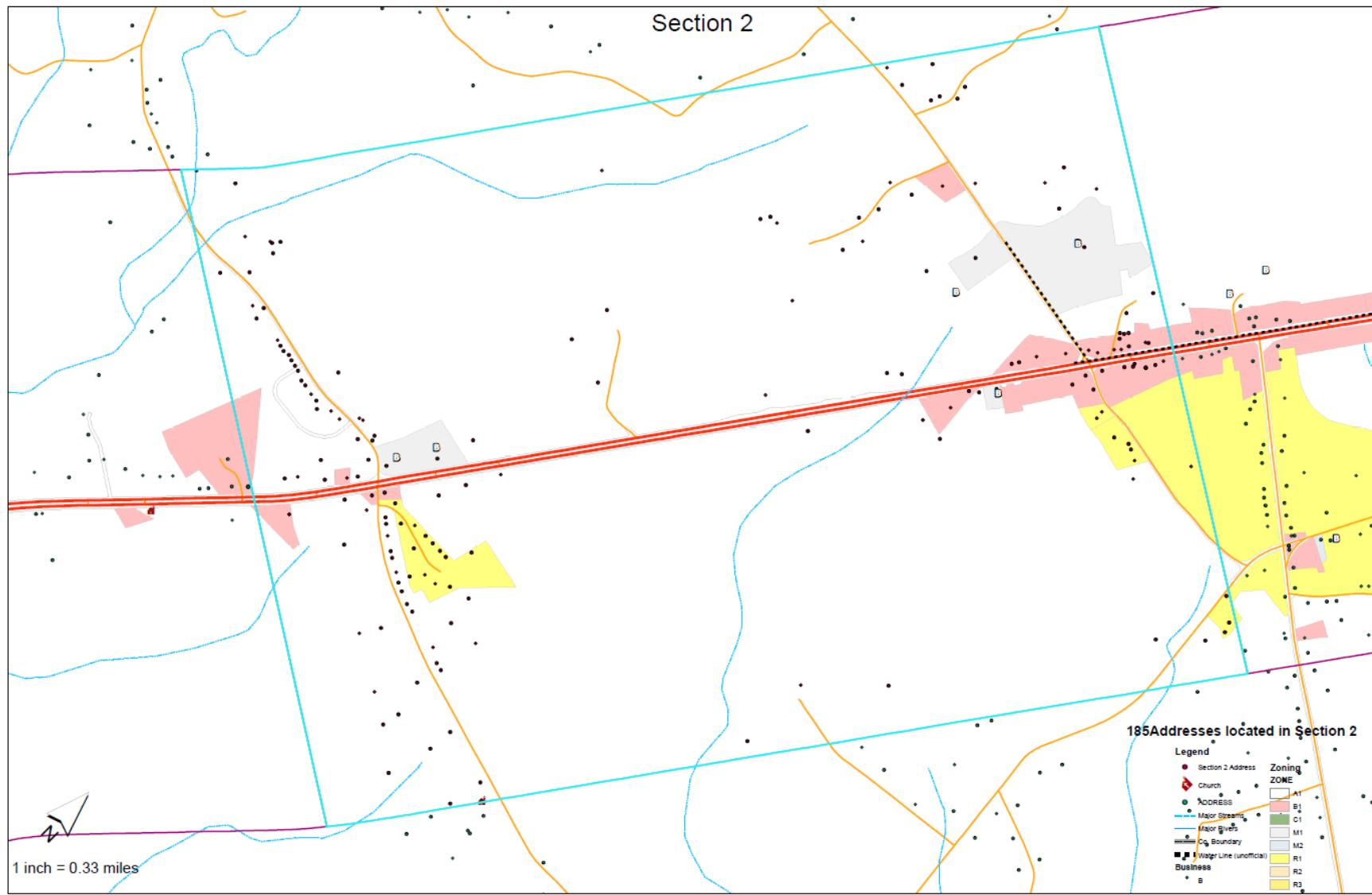


Figure 5. Segment 2 - Existing Zoning and Addresses.

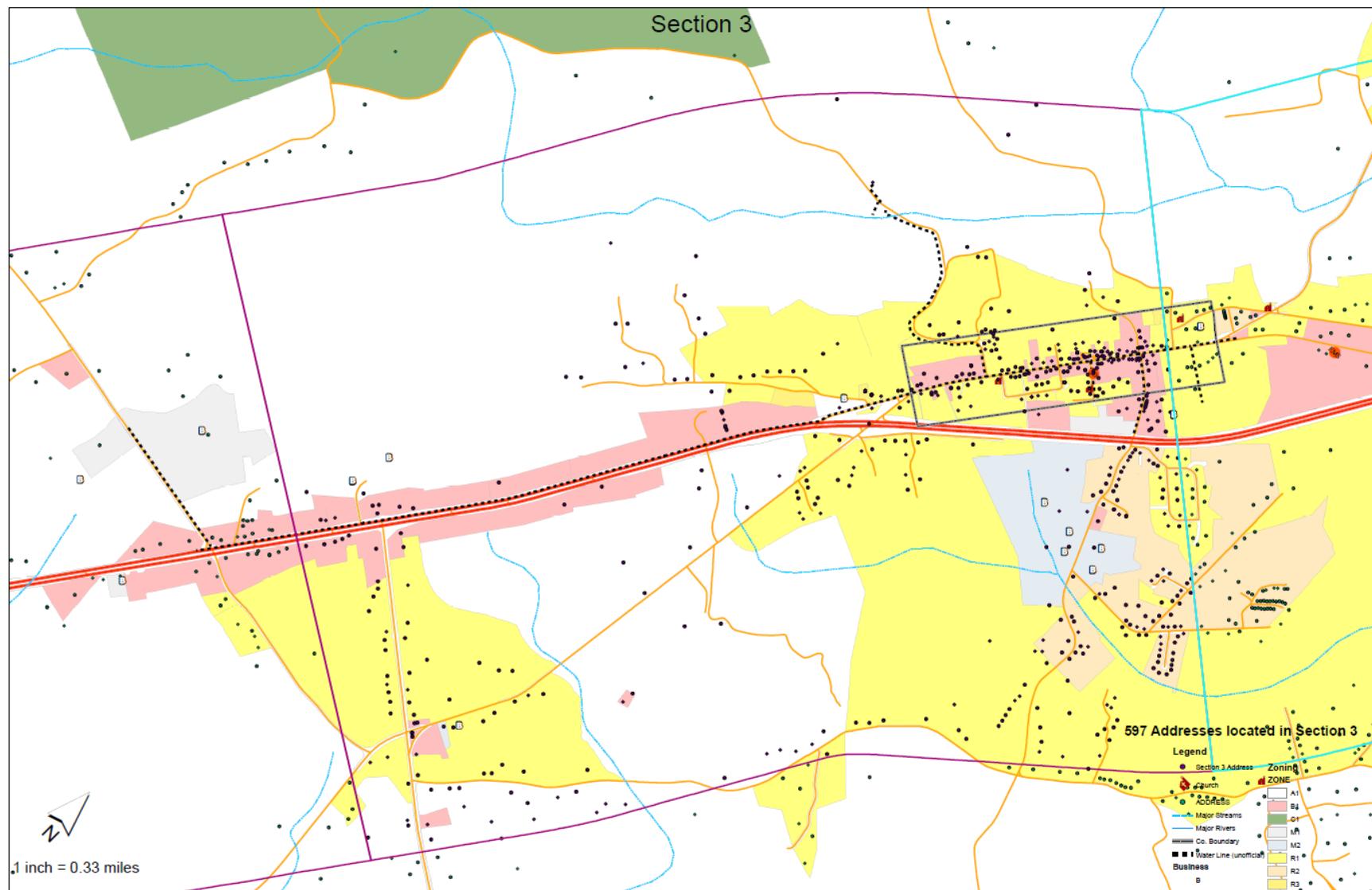


Figure 6. Segment 3 - Existing zoning and addresses.

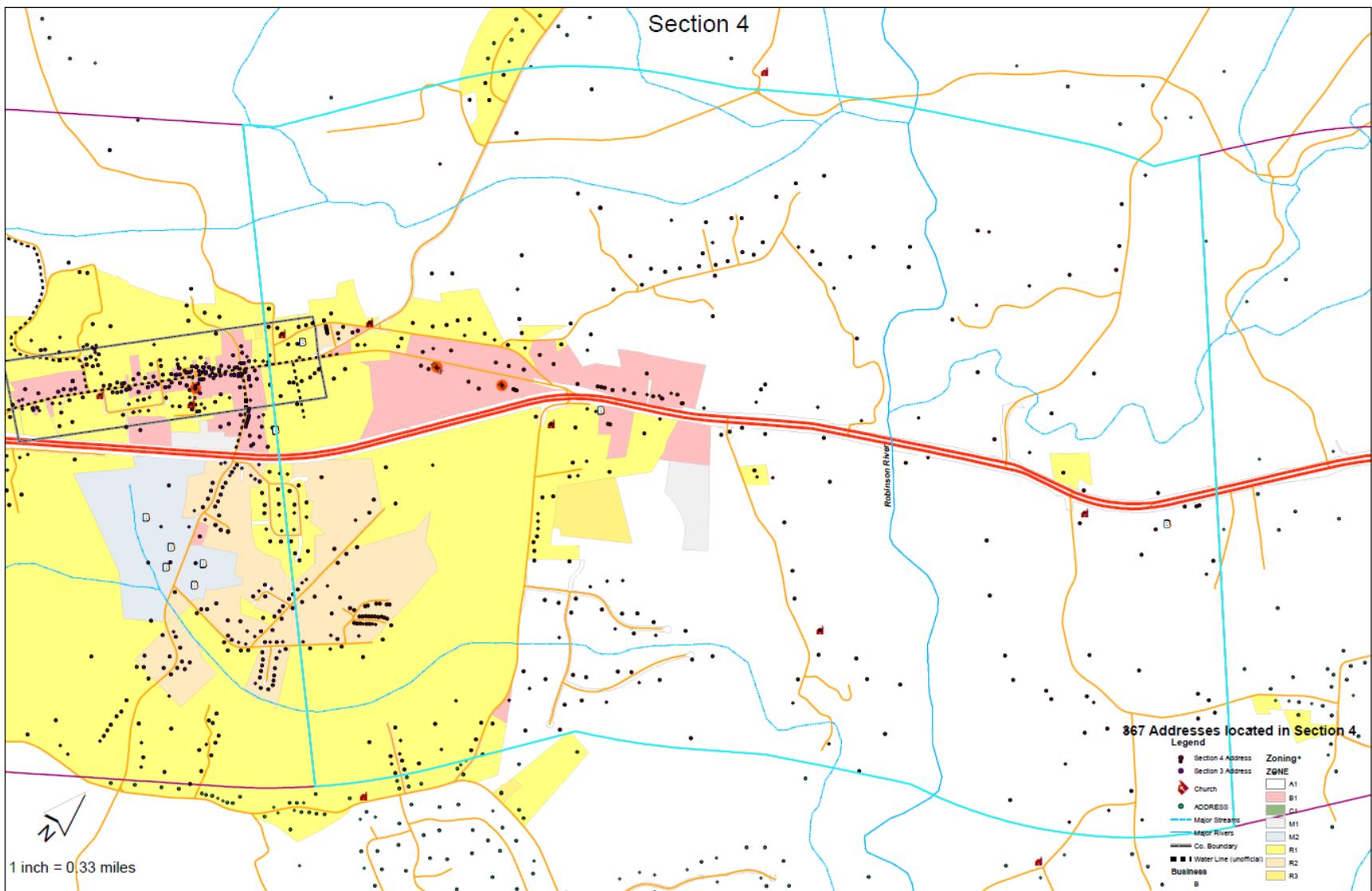


Figure 7. Segment 4 - Existing zoning and addresses.

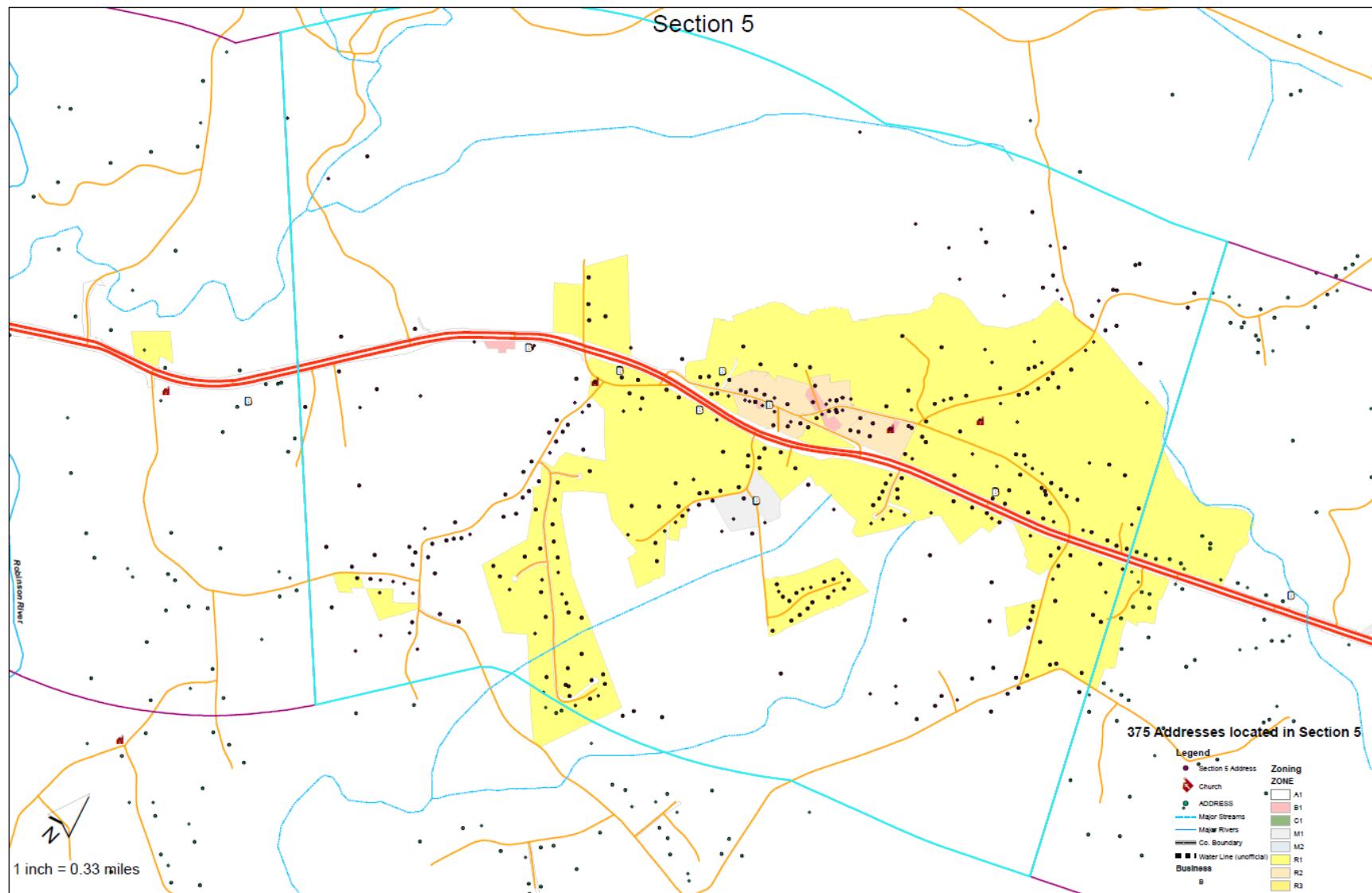


Figure 8. Segment 5 - Existing zoning and addresses.

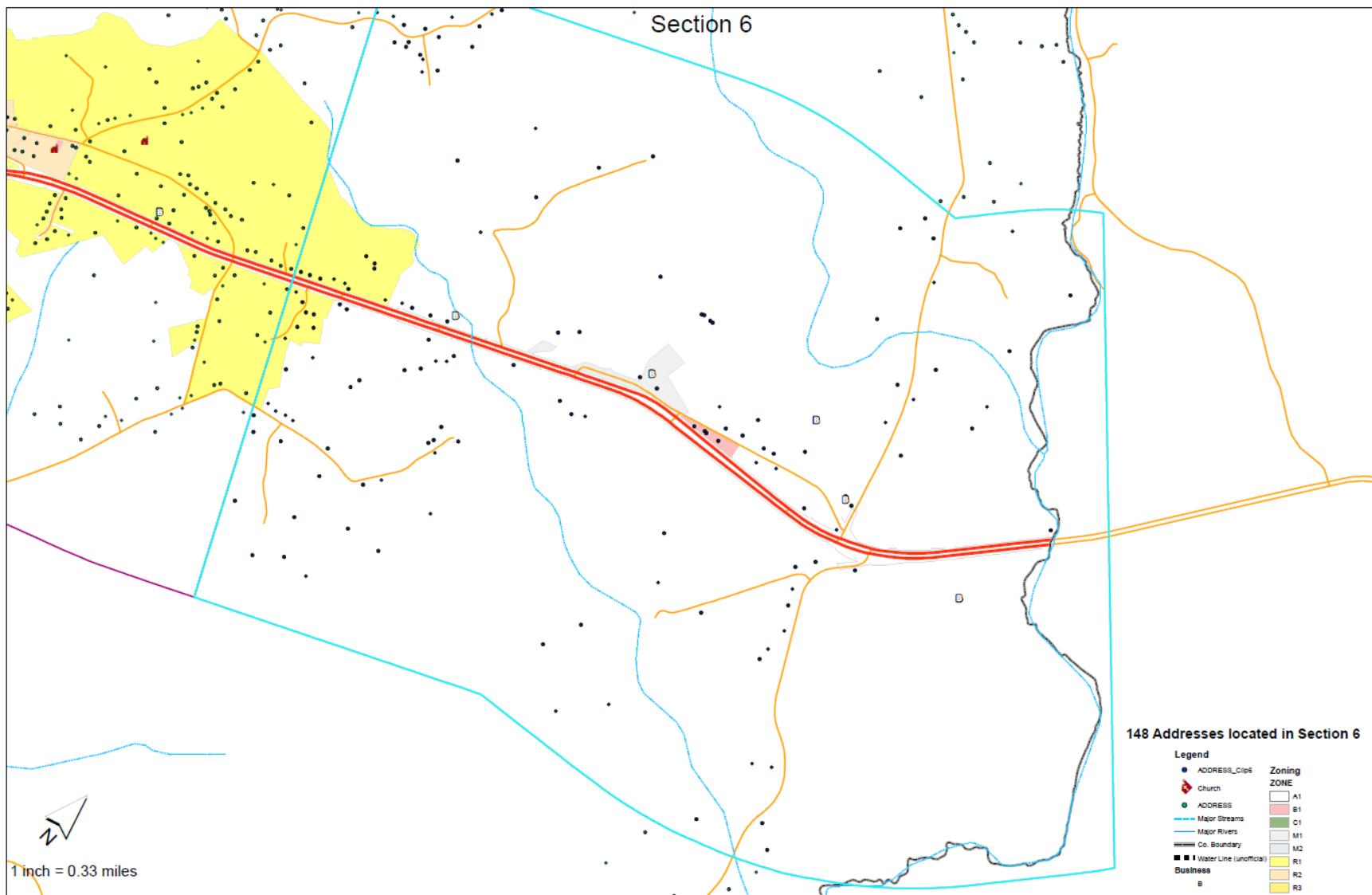


Figure 9. Segment 6 - Existing zoning and addresses.

Utilities

Public Water and Sewage

The 2012 Comprehensive Plan summarizes the County's public water supply and waste water treatment resources. Although intended to represent the entire County, the facilities as described in the Comprehensive Plan are representative of The Corridor and excerpted here for ready reference:

"The Rapidan Service Authority (RSA) is a regional public water and sewer utility serving Madison, Greene, and Orange counties. Madison County does not own or operate a public water or sewer system. The RSA owns a water supply and sewage system that serves the Town of Madison and some adjacent areas of the county. In 2010 the water system had 248 users that use an average of 80,000 gallons per day (GPD). The water treatment plant, which withdraws water from White Oak Run, has a capacity of 250,000 GPD. A storage tank for the system on Courthouse Mountain has a capacity of 500,000 gallons.

The sewage treatment plant at Madison, located east of Route 29 and north of Town, has 149 connections that use an average of 50,000 GPD and is operated at 62 percent of its capacity of 80,000 GPD. The plant could be expanded on the present site if necessary.

Also within Madison County, RSA serves the old lace factory near Shelby, and to the Plow and Hearth facility at Oak Hill. Madison County has no plans to expand the provision of public water and sewer service. Any future water and sewerage facilities in Madison County would be operated and maintained by RSA."

The significant changes since the 1980 study relate primarily to who owns and operates the facilities that have existed since the mid 1970's. The public water supply and distribution system that serves the Town, a system constructed in 1967, was still exclusively the Town's facility when the last Corridor Study was completed. In 1980 the Town's supply system included a 75,000 gallon elevated storage tank at the corner of Thrift Road and Main Street (The Water Tower). The RSA has since replaced that tank with the half-million gallon tank on Courthouse Mountain. The capacity for treating waste water has not changed since 1980 – 80,000 GPD capacity. The lone addition to water supply and treatment is the service from the RSA Rapidan River plant that reaches the old lace factory property and is shown in segment 1 (Figure 3).

The Route 29 Corridor Committee reached out to the RSA (Mr. Dudley Pattie) during preparation of this study. The RSA has no plans to expand or extend public sewer and water service in Madison County. As a matter of policy, the RSA may upgrade existing services, but will only pursue expansion at the County's request.

Telecommunications and Internet Services

Telecommunications have assumed a primary significance in modern commercial (and residential) planning. In addition to the traditional cable and telephone lines that share the Route 29 right-of-way, The Corridor now includes a major trunk line of fiber optic cable. More information about traditional and newer telecommunications services was provided in the 2012 Comprehensive Plan:

"Verizon and other private wireless telecommunications providers have, for years, focused their development efforts along the route 29 corridor. Cable television and internet services, through

Comcast, are available primarily within the Town of Madison and areas of the county adjacent to Town; however, some expansion of cable services into additional areas of the county has occurred within the past five years.

In 2010, FiberLight, LLC completed a 130-mile diversely routed network system, which provides underground capacity between Culpeper and Ashburn, Virginia, and Washington DC....in January 2011 the company announced the establishment of its newest high capacity fiber optic network, a 46-mile direct connection from Culpeper, VA to Charlottesville, VA. The new high-count, underground network will use enhanced fiber for lower latency and will provide a direct connection to Culpeper and Washington, DC...Solutions are provided to telecom carriers, government, enterprise, content providers and web-centric businesses. FiberLight's wholly-owned network has been installed along the Route 29 right-of-way, and there are access points located approximately every 1,000 linear feet."

There was also a “feasibility study” conducted by the Virginia Department of Housing and Community Development for the County in 2009. It’s available at the BOS office.

The infrastructure required to support cellular wireless systems is better developed in The Corridor than anywhere else in the county (Figure 10). With the addition of the tower near Zeus (Segment 4), coverage along Route 29 should be very reliable for users of most major carriers.

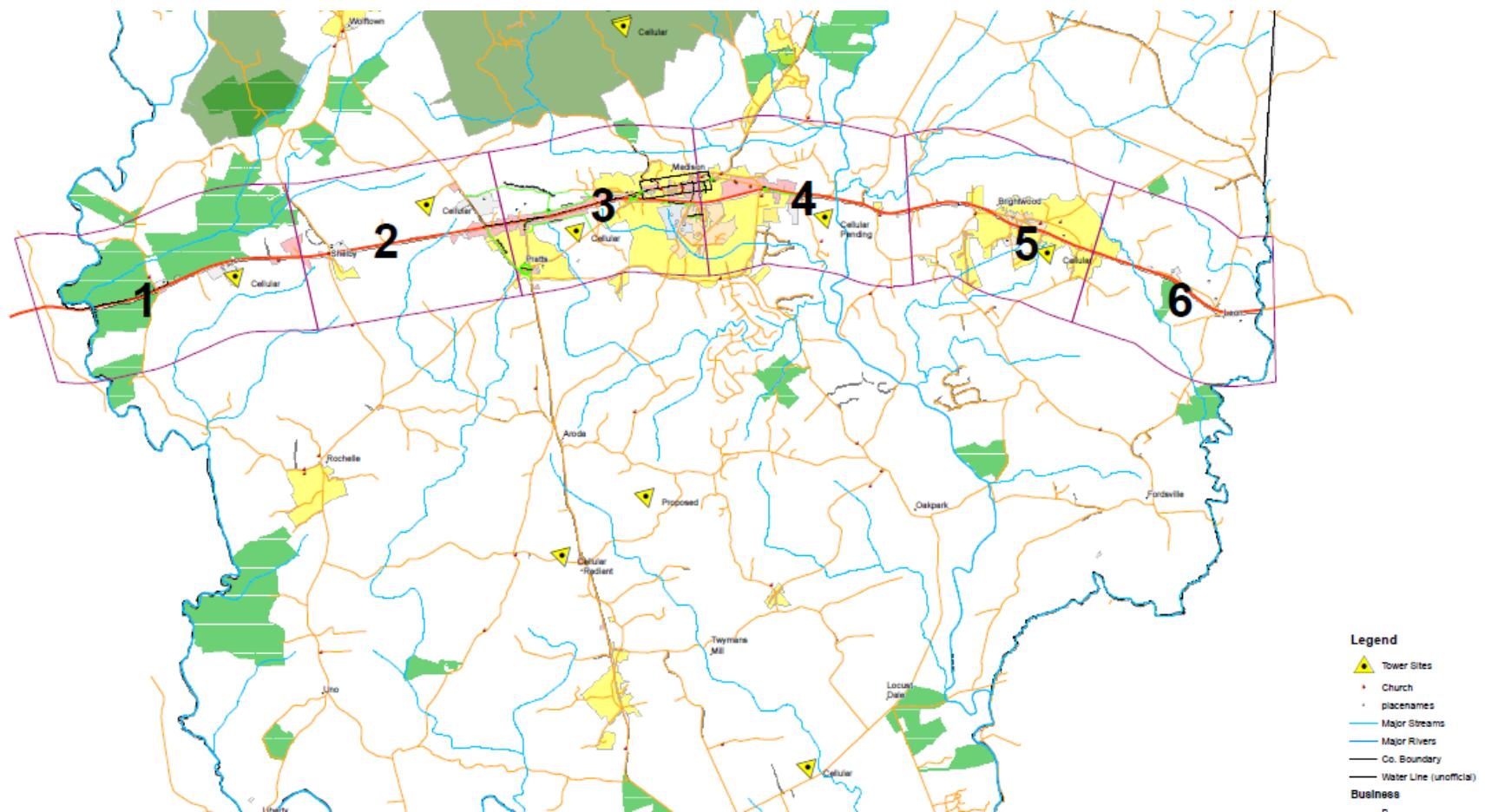


Figure 10. Cellular Wireless Facilities in the Corridor.

Transportation

U.S. 29 is easily the most significant transportation feature in Madison County. The only other US highway is Route 15, but it has no direct interaction with Route 29 within the county. State Route 230, a Virginia primary highway, runs from US 15 to US 33 in Stanardsville in Greene County. SR 230 very much interacts with The Corridor, forming two at-grade intersections near Oak Hill south of the Town of Madison. State Route 231 connects Madison with Gordonsville to the south and Sperryville to the north. It crosses Route 230 at Pratts and runs coincident with US 29 Business through the Town of Madison.

Basic traffic counts for the major transportation facilities in the county with relevance to The Corridor are included in Tables 2 & 3:

Table 2. Average Annual Daily Traffic – Corridor-related US and State Primaries

Route	Segment		2011 AADT	Trucks & Buses
	Start	End		
US 29	Greene County Line	SR 230 Wolftown-Hood Rd	15000	7%
US 29	SR 230 Wolftown-Hood Rd	SR 230, SR 231 Orange Rd	20000	7%
US 29	SR 230, SR 231 Orange Rd	Bus US 29 South of Madison	19000	7%
US 29	Bus US 29 South of Madison	Bus US 29 North of Madison	17000	7%
US 29	Bus US 29 North of Madison	56-607 Ridgeview Rd; Lillards Ford Rd	16000	7%
US 29	56-607 Ridgeview Rd; Lillards Ford Rd	Culpeper County Line	15000	7%
VA 230	Greene County Line	US 29 S Seminole Trail	3000	3%
VA 230, VA 231	US 29, SR 231, S Seminole Trail	SR 231, S Blue Ridge Tpke	3300	3%
VA 230	SR 231, S Blue Ridge Tpke	56-607 Elly Rd	3100	4%
VA 231	Orange County Line	SR 230 Orange Rd; 56-686 Fairgrounds Rd	1200	3%
VA 230, VA 231	SR 230 Orange Rd; 56-686 Fairgrounds Rd	US 29 S Seminole Trail	3300	3%
US 29, VA 231	SR 230 Orange Rd	Bus US 29 Main St	19000	7%
Bus US 29, VA 231	US 29 S Seminole Trail	SCL Madison	3600	5%
Bus US 29, VA 231	SCL Madison	N Blue Ridge Turnpike	3600	5%
VA 231	Bus US 29 Main St	NCL Madison	3200	10%
VA 231	NCL Madison	56-670 Old Blue Ridge Tpke	3800	3%

Table 3. Average Annual Daily Traffic – Corridor-Related Secondary Roads.

Route	Segment		2011 AADT
	Start	End	
Oak Park Rd	56-616 Carpenters Mill Rd; 56-626 Oneals Rd	US 29 Seminole Trail	2500
Washington St	US 29 Seminole Trail	ECL Madison	3000
Washington St	ECL Madison	Bus US 29 Main St	3000
Fairgrounds Rd Connector	SR 230 Orange Rd; SR 231, S Blue Ridge Tpke	56-687 Fairgrounds Rd	1600
Fishback Rd	56-634 Oak Park Rd	FR-1057 Restoration Lane	1300
Madison High School	Bus US 29 Main St	Madison High School	350
Madison Elementary School	Madison Elementary School	56-687 Fairgrounds Rd	180
Mountaineer Lane	US 29 S Seminole Trail	Madison High School	1300
Mountaineer Lane	William H Wetzel Middle School	56-687 Fairgrounds Rd	740
Primary School Dr	56-687 Fairgrounds Rd	Madison Primary School	850

Table 4 summarizes the latest (2011) traffic accident counts by segment. The specific locations for these accidents are available upon request.

Table 4. 2011 Crash Statistics.

Segment	2005 – 2009		2011 Crashes (most recent)
	Total	Five-Yr. Avg.	
1	73	15	5
2	45	9	8
3	31	6	20
4	48	10	11
5	89	18	7
6	68	14	4
Total	354		55

“Orderly” Development

General Planning Guidelines

The 1980 Corridor Study provides some generic guidance on planning that remains relevant to the current review. Rather than recreate this guidance, pertinent sections are repeated here:

“In the course of establishing optimum land uses, several tools are available to aid in the analysis. Existing land use patterns and transportation characteristics have been previously discussed. Suitability criteria for difference land use types are described below to illustrate these different needs.

Residential

Soil and subsoil conditions should be such that excavations and utility installations may be performed in an economical manner. Flood prone sites and those with shallow water tables are also to be avoided. Adequate site drainage is essential to a residential site.

A slope of 2% is generally considered the minimum for residential sites where ground frost is probable. Slopes greater than 20 – 30% are very expensive and impractical to build upon. The availability of water supply and sanitary sewage disposal facilities is among the most important factors to be considered. Under no circumstances should any major residential development proceed without first resolving its water and sewer needs.

The site selection process also involves the need to isolate or buffer the potential site from local hazards and nuisances. These may be in the form of noise, smoke, dust, odors or potential accidents.

Proximity to existing or potential employment, schools, churches, and shopping areas, and recreation must also be seriously considered. Along with this, safety, capacity, and proximity to transportation routes are also necessary considerations.

Commercial

The site selection process for commercial areas is in many ways similar to that of residential areas. But there are additional considerations to be made for potential commercial areas. For instance, it must be located on or very near major transportation routes. It must also be located near an existing customer source. Because of the need for large amounts of flat land for parking and general access, slopes greater than 8% are considered economically impractical for commercial development.

Industrial

Industrial site selection involves a more extensive checklist than residential and commercial. First, it is necessary to find a site with suitable soil characteristics and a suitable slope. As slope increases, sites become less desirable as industrial locations. A 3% grade is considered the maximum for uninhibited trucking operation. Small scale industry without a large demand for trucking is possible on slopes up to about 7%.

Another important site consideration is the availability of water and sewer facilities. The amount of water needed is dependent upon the type of industry. However, a sufficient quantity is necessary to meet any cleaning, drinking, heating, or sprinkler system needs. Also dependent

upon the type of industry is the type and quantity of effluent produced. Sewerage facilities must be provided to meet these needs. These facilities may be provided by a public sewer system, or on-site "package" treatment plants.

Proximity to raw materials as well as to the product market place is also a major consideration. In addition, it is necessary for a labor supply to be located nearby, possibly requiring additional commercial and residential development. Incompatibility arises however, when industry locates immediately adjacent to existing residential development. This incompatibility is due to the impact of noise, smoke, dust, etc., produced by the industry, on the residential area. Because of the increase in trucking and automobile traffic in the area, safety problems may also arise. For essentially the same reasons, problems also surface when industry locates near community schools, and major commercial areas.

Finally, industrial sites should be located in such a manner as to provide quick, easy, and safe access to major transportation routes. This may require construction of new roads as well as improvement of existing roads to safely accommodate the increased truck and automobile traffic load.

General Transportation/VDOT Concerns

An initial draft of this Corridor Study was forwarded to planners with VDOT's Culpeper District to communicate the County's general priorities and to receive feedback on the various ideas that are presented. VDOT's review⁵ was thorough and provided very constructive feedback. Key concepts and common goals expressed through the feedback are summarized here:

Shared Access: VDOT is very interested in limiting the number of direct accesses from private land onto Route 29 (and all other principal arterial roadways). One means to achieve this goal and also accommodate the needs of new development as well as redeveloping parcels is to require shared accesses. This can be done with neighboring parcels but is also commonly done by allowing a greater depth in the commercial zoning along a highway which encourages commercial development internal to a site and not just strung along the roadway frontage.

VDOT is more likely to permit an access point on a major roadway for a single user if there is a committed plan for additional development that will share that access point in the future. A committed plan could include an approved development plan or a long-range road network included in the comprehensive plan or another official County document that shows the access will be shared in the future.

The County now has five signals in the short distance adjacent to the town and south of town to Route 230. The elimination of some of these signals can be achieved relatively easily and not create major inconveniences for the residents of Madison County or other travelers. Removal of the signals could be achieved by replacing them with bridges and perhaps the extension of some surface streets which would provide new connections in the road network. VDOT generally supports fewer signals, which would reduce through travel time and eliminate locations where

⁵ Email correspondence between Dan Painter, VDOT Culpeper and Kevin McGhee, Madison PC, October 2013.

accidents are more likely to occur. VDOT would likewise be supportive of future development along the corridor that does not add new signals to the system in the Madison County area.

VDOT has conducted previous studies of general traffic flow near the Town of Madison and along the corridor and has identified several locations where roundabouts may function very well. The benefits that would be realized from these roundabouts include; the likely reduction in serious accidents, the elimination of the potential for signalizing these intersections in the future, the visual enhancement that can be achieved with these features, and the removal of potentially confusing traffic movements, a factor that becomes a bigger concern as the area residents age.

County Policy/Relevance to 2012 Comprehensive Plan

“Orderly development” of Route 29 should adhere to the philosophy and intent as expressed in the most current Comprehensive Plan, the official planning document of the County. The Goals and Objectives of the 2012 Plan include many direct and not-so-direct references to development of The Corridor. For ready reference and for further clarification, specific excerpts from The Plan are presented by category and corresponding page number in Appendix B. A summary by primary topic area is provided in the next section.

Natural Resources, Agriculture and Forestry

The connection of Natural Resources, Agriculture and Forestry topics to The Corridor has more to do with what the County should avoid than what it should pursue. Protecting open space and working agricultural lands are key goals of these sections of The Plan. Specific strategies with relevance to The Corridor include those that refer to the availability (or lack thereof) of public water and sewer and its use to generally restrain and direct higher density residential development.

Recreation

Recreation is a County-wide concern. The Hoover Ride property is a prominent and tangible example of the County’s desire to provide recreation facilities to its citizens. The Plan also mentions improved “pedestrian access” within the Town of Madison. Extending pedestrian and safe bicycle access to the school properties and Hoover Ridge Park is perhaps one secondary benefit of potential transportation improvements within The Corridor.

Retail and Other Businesses, and Economic Development

One very specific (and relevant) objective expressed under these topic areas was the prevention of “commercial strip development” along major roadways within the County. This section is also very deliberate about limiting access points and maintaining minimum spacing between entrances. This section of The Plan also recommends the establishment of a “review committee for future site locations and areas of development”, a task that The Route 29 Subcommittee has, at least temporarily, assumed for this more focused study area.

The Economic Development section acknowledges Route 29 as an economic growth area, but also encourages development along other primary roads. It also mentions the County’s role in providing for public services and facilities necessary to accommodate this development.

Residential Land Use

The goals and objectives in this section were preoccupied with directing residential development, particularly higher-density housing, away from land well suited for farming and conservation. It again emphasizes provision of public sewer and water services to help direct residential development, and mentions several villages along The Corridor that may be appropriate as residential growth districts.

Transportation – General and the Route 29 Corridor

These two sections of The Plan constitute a comprehensive vision for the County as it pertains to The Corridor and transportation in general. Both emphasize accommodating development along major transportation routes without compromising their safety and efficiency. They likewise include frequent mention of the desire for development to conform to the present character of the roads and the land adjoining them, as well as an emphasis on protecting “scenic vistas”.

Specific strategies for meeting the stated objectives include the oft-mentioned provision of public water and sewer to influence development of residential, retail, and industrial land. These sections also discuss access control and spacing, service roads, sign regulations, setback requirements, tree retention, and commuter parking among worthy concerns for development along highways.

The section on the Route 29 Corridor recognizes the desire to promote industrial and commercial development, while ensuring this happens in accordance with relevant ordinances and regulations and in keeping with the character of the County. It likewise acknowledges the imperative to maximize safety and minimize impact on existing traffic flow. Preserving scenic quality to promote tourism and general quality of life are a final objective.

Communication and Energy, Water and Sewer Utilities

The sections of The Plan that address public and communication utilities do not specifically mention The Corridor, but do address infrastructure with highest presence and use near Route 29. The goals discuss coordination with transmission and distribution companies and the desire to minimize intrusion of related facilities on the County landscape. The discussion about public water and sewer once again references its likely value in influencing future residential growth.

Possible Land Use/Zoning Revisions

Residential

There is substantial under-utilized residentially zoned property in The Corridor (see existing zoning maps, Figures 4 through 9). Depending on residential growth that may be prompted by business/industrial development, it may be necessary to up-zone some R-1 zoned districts to higher density R-2 and R-3 districts, but no specific new A-1 zoned land areas are identified for rezoning for residential use.

Business/Industrial

Numerous areas are identified for rezoning or “right-zoning” to either the actual current land use or the use that is consistent with neighboring property use, existing infrastructure, or infrastructure that

could be installed or constructed with relative ease. Specific suggestions are listed by Corridor segment below:

Segment 2/Shelby:

There are several existing properties that are engaged in light industrial /commercial activities that could be rezoned to accommodate more flexibility in future use. Specific locations are found both at Shelby and near Oak Hill. There is also property near the County-owned transfer station that could be rezoned to accommodate industrial use with minimal disturbance to neighboring property owners.

Opportunity also exists to expand business zoning along Route 230 from US29 towards Wolftown. With appropriate coordination in transportation improvements (see next section) additional B1 zoning may work well on both the north and south sides of Route 230, as well as along US29 to the north and, to a lesser extent, the south side of Oak Hill.

Segment 3/Madison South

The most logical commercial growth in this segment risks the sort of “strip development” that the County would prefer to avoid. For this reason, it is essential that business growth along both sides of US29 from Route 230 to Fairgrounds Road be coordinated with necessary infrastructure improvement and/or additions (see Proposed Transportation Improvements). Permitting business-oriented land development through this segment without adversely affecting flow along and interaction with mainline US29 will likely require reverse-frontage roads parallel to and along both sides of the corridor.

Segment 4/Madison North

Expected zoning revisions in the segment should be minimal for the foreseeable future and can likely be limited to an extension of business zoning on the eastern side of US29 from Fishback Road to Gate Road. The proposed transportation improvements to accommodate commercial use here should also seek to improve access to/from the planned Rescue Squad facility.

Section 6/James City

Should business growth pressures require it, the land adjoining the parallel road behind James City Enterprises may accommodate up-zoning to B1. Otherwise, there appears to be very little warranted revision to land use in this segment.

Possible Transportation Additions/Revisions

Figures 11 & 12 are important transportation improvements and alternatives that may be necessary to effectively accommodate commercial development of The Corridor without compromising three of the four “Guiding Principles” (see Introduction) relating to safety, capacity, and accessibility. The proposed changes/additions/extensions are shown in bright green and described below.

South

Figure 11 covers possible changes south of The Town. It includes a roundabout at Pratts that would improve safety at the SR 230/231 interchange and move the main alignment of 230 to eliminate the cross-over on US29 near VDOT's Area Headquarters office. Additional southern options include service roads to accommodate commercial development along The Corridor without adding access points and congestion along the main alignment. Figure 11 also illustrates a proposed grade separated intersection at the southern end of Business 29, which will improve access from the Town to the public school complex and the Hoover Ridge facilities. It will also dramatically improve safe movement of school buses as they move from the primary public school properties to the Waverly Yowell School on the northern end of Town.

North

Figure 12 represents a much more limited menu of possible changes that would improve access and safety in an area north of the first. It includes extending the frontage road east of the Corridor in front of the MWP factory to meet Oak Park Road. Among other things it would provide safe access to the grade separated interchange on the southern end of town and greatly reduce the use of the intersection at Oak Park Road/Washington Street. A complementing change proposed here is an alternative entrance to the Maple Drive neighborhood, the current access point being a perpetual challenge to function and safety of the interchange of Oak Park Road and US 29.

At the northern end of Business 29 is another proposed grade separated interchange, this time with Fishback Road and Business 29. An extension of Restoration Lane is also proposed here as a longer-term improvement to provide safe southbound US 29 access for the future Rescue Squad facility.

General

Should any or all of these suggestions be considered in the future, the County is encouraged to adhere to the 900-feet spacing requirement between access points as recommended in the 2012 Comprehensive Plan. Exceptions may be warranted with VDOT approval. The County should follow VDOT's requirements for principal arterials⁶ and always seek the safest alternative.

⁶

http://www.virginiadot.org/projects/resources/access_management/12.27.11/Access_M._Principal_Arterial_24VAC30-72_Regulations_1.2012.pdf

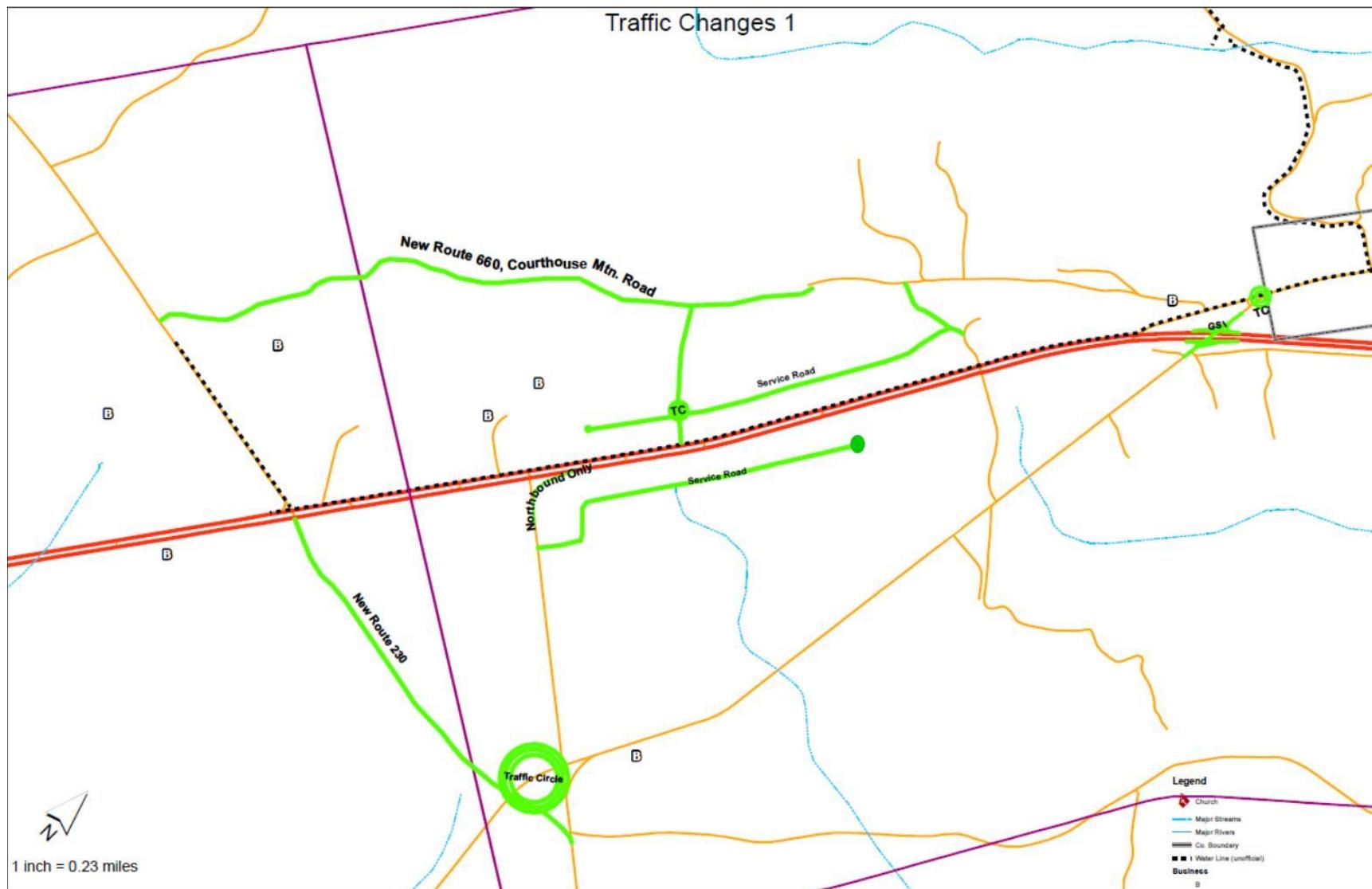


Figure 11. Proposed Transportation Improvements - South.

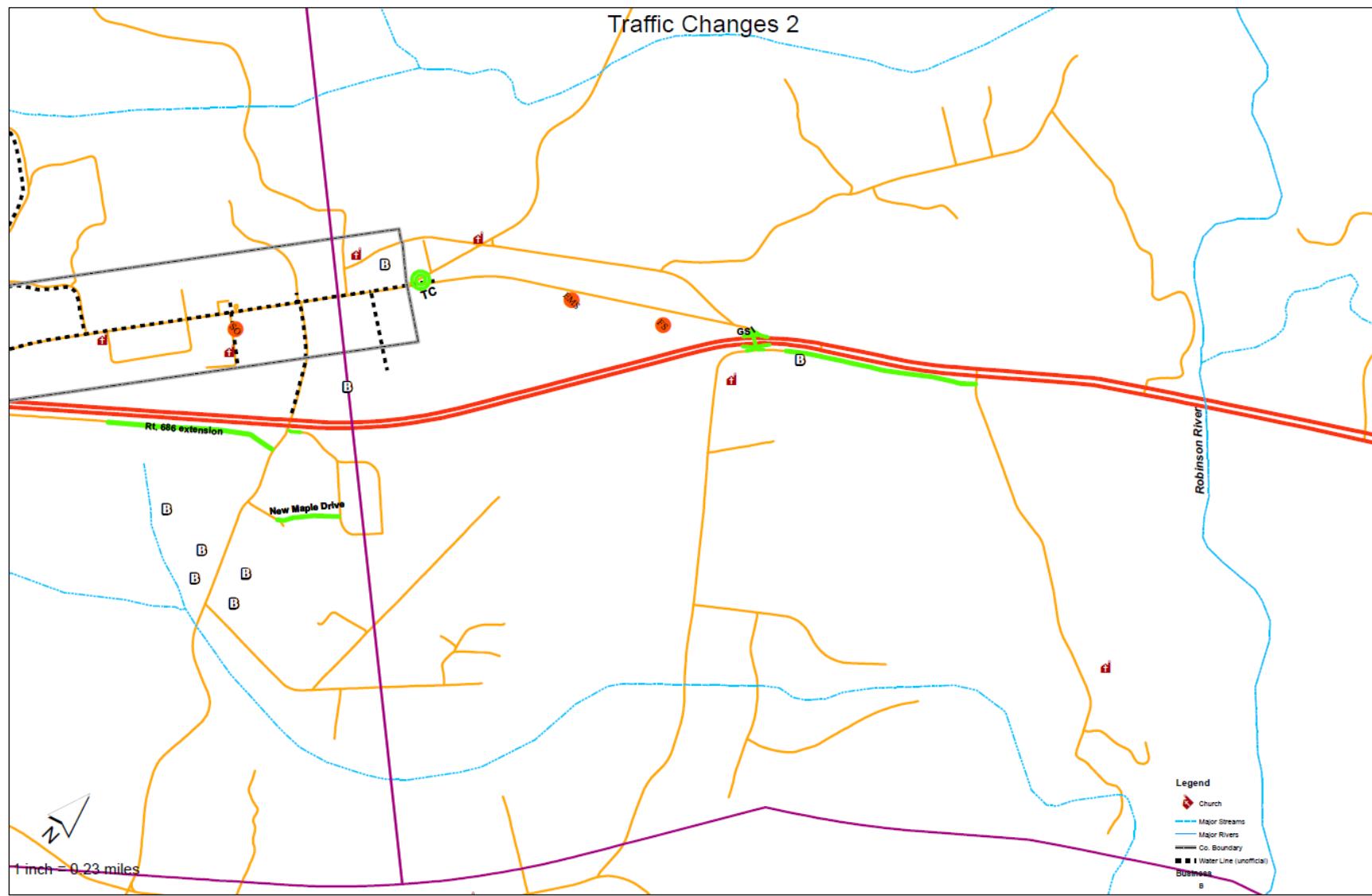


Figure 12. Transportation Improvements - North.

Implementation

The Board of Supervisors adopted this report as an official addendum to the 2012 Comprehensive Plan.

Zoning

When considering the possible revisions to land use like those identified in this study, it is essential to couple zoning changes with a commitment to necessary transportation improvements. The service roads that would run parallel to Route 29 are particularly important.

The County should be particularly aggressive in “marketing” those existing business-zoned properties that are not currently engaged in their highest and best use. Business prospects that propose “adaptive reuse” should receive particular preference. The County should also recognize the inherent burden that existing structures, parking areas, etc., represent to some businesses and take steps to also encourage proposals that might involve entirely new development of property.

Transportation Improvements

There are two types of transportation improvements discussed in this report:

1. Those that would improve traffic flow and safety regardless of whether new development occurred of any type. Examples include the grade separated interchanges at the north and south end of the Town of Madison and the traffic circle at the junction of Rt 230 and 231.
2. Service roads that would run parallel to US 29 which only become relevant (and perhaps essential) with added business and/or light industrial growth.

Incorporate the transportation improvements identified in number 1 above into the Rappahannock Rapidan Regional Commission’s Rural Long Range Plan and the VDOT Six-Year Plan.

Appendix A - Basic Zoning Districts

A basic description of each zoning district, taken from the County's Zoning ordinance (October 2012), is provided in the following sections. Note that there remains a district, Conservation (C-1), that is not represented in The Corridor and therefore not described.

Agricultural, A-1

This district is established for the purpose of accommodating all types of rural, open land uses such as agriculture, and forestry, along with kindred rural occupations. The basic aim is to promote farming as a continuing way of life in Madison County. The agricultural area should maintain a low development density allowing farm and local estate residences. Intensive suburban growth is less feasible. The permitted uses are broad enough to allow expanded residential uses in pre-planned and staged locations recognizing future trends of orderly growth, and at the same time discouraging random scattering of such uses throughout the district.

The minimum lot area for permitted uses is 3 acres (per use).

Residential Limited, R-1

This district is established to provide quiet, low density residential areas in the portions of the county where they currently exist and where expansion of such low density areas can reasonably occur. The regulations of this district are designed to promote harmonious residential communities and suitable environments for family life. Permitted uses thus are limited to relatively low concentrations of single family dwellings and complementary uses such as schools, churches, and parks and public facilities that serve the district's residents more intense uses such as commercial and industrial are considered inappropriate.

The minimum lot area for permitted uses is 1.5 acres without public sewer and water and 1.0 acre when public sewer and water are provided.

Residential General, R-2

This district is established for the purpose of accommodating a variety of residential types including single family detached, single family semi-detached, and single family attached units.

The district is designed to create viable rural residential neighborhood environments suitable for a mix of family types especially those with children. The district also is created to provide an alternative to the single family detached housing unit and to encourage the orderly planning and development of residential village communities. Therefore, the district should be located in those portions of Madison County within, adjacent to, or very near to existing villages or settlements where neighborhoods currently exist. All commercial, industrial and agricultural uses are excluded.

Development in this district may utilize individual wells or sewage disposal systems, provided that all applicable State Health Department and State Water Control Board regulations are met.

The minimum lot area for permitted uses shall be 1.5 acres without public water and sewer systems, and 0.75 acre with public water and sewer. The required area may be greater if the Health Official determines necessary to accommodate on-site water and sanitary disposal systems.

Residential Multiple Family, R-3

A new addition since the 1980 study, this district is established to provide a mixture of multi-family dwellings, such as apartments, at a density not to exceed eight dwelling units per acre. This district is designed to be part of a viable residential neighborhood environment which includes households of varying types, including those with children. Because this zone permits the highest residential density in Madison County, development within an R-3 zone must include the

careful design and construction of recreation and pedestrian circulation improvements, parking areas, and the adequate provision of usable open space.

To insure orderly planning and development under this zone in conjunction with other residential neighborhoods, this zone shall be located adjacent to R-2 zones, or within or adjacent to existing towns, villages, or settlements of Madison County. An R-3 zone shall only be established where public water and sewer facilities are available. Further, this zone requires adequate, safe access to protect its residents and the surrounding uses. Therefore, the zone shall be located adjacent to a major transportation route or traffic collector of the County.

The minimum lot area shall be 10,000 square feet plus 2,000 square feet for each additional dwelling unit. The Administrator may require a greater area if considered necessary by the Health Official. No development within this district shall have density greater than 8 dwelling units per gross acre of site area nor shall buildings on any parcel within this district cover more than 35% of the total lot area.

Business, General B-1

This district is established for the purpose of accommodating general commercial and business uses to which the public requires direct and frequent access. Thus, it will normally be located on arterial highways which are adjacent to or in close proximity to population centers. The district is not to be characterized either by constant heavy trucking other than stocking and retailing of retail goods, or by an nuisance factors other than occasioned by incidental light and noise of congregation of people and passenger vehicles.

There are no area requirements, except for permitted uses utilizing an individual sewage disposal system. The required area for any such use shall be approved by the Health Official.

Industrial, Limited M-1

This district is established to permit certain light to median industrial uses near a labor supply for which satisfactory evidence is presented that such uses, either by right or special use permit, will not adversely affect any contiguous district by reason of odor, glare, smoke, dust, vibration, noise, sight, or contamination of water air, and land. Such establishments shall not result in any unusual danger of fire, explosion, drowning, or hazard of life or limb.

With the exception of meeting the regulation of the State Health Department and the Virginia Department of Transportation, there are no minimum lot area requirements for this district.

Industrial, General M-2

This district is established to permit certain general industrial uses which may create some nuisance, and which are not properly associated with, nor particularly compatible with, residential, institutional, and neighborhood commercial service establishments. It is specifically the intent of this district to encourage the construction of and the continued use of land for heavy commercial and industrial purposes, and to prohibit residential and neighborhood commercial uses and to prohibit any other use which would substantially interfere with the development, continuation, or expansion of commercial and industrial uses in the district.

To insure that the district has a minimal impact on Madison County's existing environment and character, it must be carefully planned and developed. The location of the district must have a close proximity to public water and public sewer and major highways. Further, gentle to moderate topography and suitable soils should be present.

With the exception of meeting the regulation of the State Health Department and the Virginia Department of Transportation, there are no minimum lot area requirements for this district.

Appendix B – Relevance to 2012 Comprehensive Plan

Natural Resources (Page 66)

Goal 1: Protect and enhance the forest, open spaces, and working lands that support the county's quality of life and economic base.

Objective 2 – Conserve significant natural resources and working lands through a combination of voluntary economic and regulatory programs.

Strategy 5 – Continue to limit municipal water and sewer expansion to areas planned for residential growth.

Strategy 8 – Ensure that new construction adapt to existing topography and setting and that land disturbances are kept to a minimum.

Strategy 9 – Discourage development that may cause environmental damage to sensitive areas.

Goal 2: Promote and sustain agriculture and forestry as the highest priority industries in the county.

Objective 1 – Limit residential development in Agriculture and Conservation Zones.

Strategy 2 – Do not permit extension of water and sewer service other than to areas of the County planned for higher density residential development.

Recreation (Page 71)

Goal 1: Provide adequate and appropriate recreational opportunities to meet the current and future needs of Madison County citizens

Objective 1 – Provide recreational facilities, lands and programs commensurate with citizens' identified recreation preferences

Strategy 5 - Encourage walking for healthy and leisure needs and facilitate pedestrian access to businesses by extending sidewalks downtown in cooperation with the Town of Madison and the Madison Main Street Project.

Objective 2 – Ensure Madison County's subdivision and zoning ordinances make provision for recreational facilities in conjunction with new development and private recreation ventures.

Strategy 3 – Encourage new development to dedicate right-of-way and construct sidewalks, bikeways and greenway trails for transportation and recreation purposes and construct such facilities concurrent with road improvements.

Agriculture and Forestry (Page 74)

Goal 2: Maintain agriculture and forestry as the primary land uses in the county.

Objective 1 – Develop a plan for providing land owners options for the voluntary preservation of farm and forest lands.

Strategy 7 – Continue to limit municipal water and sewer expansion to areas planned for residential growth.

Retail and Other Businesses (Page 76)

Goal 1: Encourage retail and service business development that serves the need of county residents and visitors and is compatible and consistent with the rural, open and scenic character of the County.

Objective 3 – Prevent unplanned commercial strip development along arterial and collector highways

Strategy 1 - Highway access points should be spaced not less than 600 feet on primary roadways (SR 230 and 231). Spacing on entrances on Route 29 and Route 15 should be a minimum of 900 feet and should correspond with median crossover points approved by VDOT. (Note that VDOT regulations prohibit the construction of private access points on the bypass sections of Route 29).

Strategy 2 – Prohibit incremental commercial and service rezoning at locations no in conformity with the Comprehensive Plan

Strategy 4 – Establish a review committee for future site locations and areas for development

Economic Development (Pages 78 – 80)

Goal 1: Plan for a substantial increase in economic development activities in the County, with attention directed to attracting firms that will expand employment opportunities, regional efforts with surrounding counties, current forestry and agricultural business and tourism-based businesses.

Objective 2 – Promote light industrial and commercial development that can, through substantial tax revenues, assist the county in meeting needs for public services and facilities.

Strategy 1 – Designate through zoning specific areas of the County intended for industrial and commercial use. Although Route 29 is the primary designated economic growth area for the County, other primary roads should be considered for comprehensive growth in specific designated areas.

Residential Land Use and Development (Pages 81 – 83)

Goal 1: Maintain agriculture and forestry as the primary land uses in the county, and preserve agricultural and conservation land use where such use is most sustainable. Promote a hierarchical use structure in those areas that favors farming and forestry to residential development.

Objective – In reviewing residential development plans proposed in Agriculture and Conservation zones, work with the applicants to maintain farmlands that are large enough to permit continued farming and to provide adequate separation between farming and residential activities.

Strategy 9 – Discourage extension of public water and sewer service to areas that are more appropriate for agricultural and conservation use.

Goal 3: Provide for moderate growth in the county's housing stock and encourage such growth to occur in areas that will accommodate public water and sewer service.

Objective – Channel intense residential development to areas served by public water and sewer systems or where such service would be appropriate.

Strategy 1 – Develop criteria that will pre-qualify land as appropriate for residential development. Areas in the vicinity of the Town of Madison and other village areas are candidates for designation as residential growth districts.

Strategy 2 - Encourage that all future residential land divisions resulting in lots of less than three acres be located in areas where public water and sewer service either exists or can be reasonably accommodated.

Transportation – Route 29 Corridor (Pages 85 – 87)

Goal 1: Plan for the orderly development of the Route 29 Corridor, allowing business, commercial, industrial, institutional, recreational and residential development in appropriate areas, while preserving areas of open space for agriculture and protecting scenic vistas.

Objective 1 – Promote industrial and commercial development in the Route 29 Corridor.

Strategy 1 - Designate along both sides of Route 29, a Highway Corridor Overlay District for commercial, industrial, institutional, recreational, open space, agricultural and residential development with appropriate design standards and performance criteria for development within each area of the corridor.

Strategy 2 – Plan for the provision of public water and sewer in appropriate areas of the Route 29 Corridor.

Strategy 3 – Develop a marketing program to attract appropriate industries and businesses to the corridor.

Strategy 4 – Establish within the corridor sites with approved utilities and other infrastructure elements needed and desirable for industrial development

Strategy 5 – Commission a contemporary local Route 29 corridor study

Objective 2 – Assure that industrial and business/commercial development in the Route 29 Corridor is carried out in accordance with relevant County ordinances and regulations, with careful review of proposed site development plans.

Strategy 1 – Develop and adopt performance criteria to be used in approving sites for industrial development....

Strategy 2 – Maintain a cautious and sensible approach regarding zoning and rezoning for commercial and industrial development in the Route 29 Corridor.

Objective 3- Require that access to activities along Route 29 be designed for maximum safety and minimum adverse effects on traffic flow.

Strategy 1 – Continue a minimum of 900 feet between entrances on Route 29. Exceptions could be made for parcels only if no other means....

Strategy 2 – Explore opportunities to encourage the construction of service roads and shared access points for existing and future development.

Strategy 3 – Encourage the safe use of existing intersection for future development.

Objective 4 – Control future development along route 29 Corridor. Protect the scenic quality of Route 29 and recognize the value of the view from the road. The County's concern with preserving the quality of life of its residents, as well as its desire to promote tourism, are major reasons for protecting the scenic quality of route 29.

Strategy 1 – Encourage all new development to have increased setback distances, as practical, from the right-of-way line of Route 29.

Strategy 2 - Develop and adopt regulations for signs of all types; discourage the use of freestanding advertising signs in the Corridor.

Strategy 3 – Identify scenic vistas and develop a program for protecting their character

Strategy 4 – Encourage the retention of trees within the Corridor and promote the planting of new trees to protect and enhance the visual quality of the Corridor.

Transportation – Generally (Pages 97 – 90)

Goal 1: Plan for and encourage the development of a more efficient transportation system designed to facilitate the safe and convenient movement of people and goods within the county as well as between the county and other localities.

Objective 2 – Develop and implement a land use plan that makes optimum use of existing transportation facilities and avoids overloading those facilities, in order to prevent congestion, safety hazards, and unnecessary expenditures to increase capacity.

Strategy 1 – Utilize the access guidelines associated with the various DPT road classification in the review and approval of development proposals

Strategy 2 - Require the use of service roads and shared access to arterial and high-volume collector roads to increase the distance between entrances in order to sustain a reasonable level of traffic flow and prevent accidents.

Strategy 4 – Continue a minimum of 600 feet between entrances....; increase Rt 15 requirements to 900 feet and maintain 900 feet requirements on Route 29.

Objective 3 – Promote ridesharing, vanpooling, bikeways, and public transportation as options to reduce traffic volumes and expand the transportation alternatives available to local and regional commuters.

Strategy 1 – Support VDOT efforts to develop commuter park-and-ride lots in the vicinity of Route 29, Route 230, Route 662, Leon, Oak Hill, and Shelby areas and town vicinity.

Strategy 2 – participate in regional programs to encourage ride sharing.

Objective 4 – Develop, with the cooperation of landowners, a program to promote a quality of development that preserves or enhances the view from the road to establish a positive image for the county and undergird tourism; such a program may include:

Strategy 1 – Encourage the retention of trees and wooded areas along roads and highways and the planting of trees and shrubs.

Strategy 2 – Encourage efforts to maintain the scenic qualities of Route 231, now officially designated a Virginia Byway, including anti-litter drives, the voluntary placement of properties under scenic easements, and other efforts to maintain the scenic qualities of the Byway.

Strategy 3 – Prepare and adopt development standards for the scenic view areas along the roads and highways, as identified on the Comprehensive Plan Map. The intent of these standards would be to permit development in accordance with guidelines that protect against construction of the type, size, or character that would not be in harmony with the existing landscape.

Goal 2: Recognize and plan for the correlation between new land use development and the existing highway systems that will support them.

Objective – Require new land uses to improve existing highway systems in relation to the added impact of new development.

Strategy 1 – With the assistance of VDOT staff, require any new development to provide traffic studies detailing specific impacts to the public access system.

Strategy 2 – Design impact thresholds where road improvements will be required to be added by the private sector.

Communication and Energy Utilities (Pages 90-91)

Goal 1: Assure that the actions of publicly regulated energy, gas transmission and distribution companies and communication companies, including cable TV and wireless communications companies, are consistent with and supportive of the County's Comprehensive Plan.

Objective 2 – To minimize the intrusion of utility facilities and equipment on the scenic qualities of Madison County.

Strategy 1 - Establish effective, continuing relationships with utility management in order to achieve coordination in planning, design, and development of utility facilities that will have an impact on Madison County.

Strategy3 – Support the development and implementation of high speed communication services to all county residents. A glance at a map.....(see CP). Note this strategy proposes that the Commission draft and maintain a "Technology Plan."

Water and Sewer Utilities (Pages 91 & 92)

Goal: Assure the provision of adequate, safe water supply and sewage collection, treatment and disposal for new development.

Objective 1 – Plan for the majority of new, high-density development to occur in a pattern that is capable of being served by central water and sewer systems at the lowest possible cost consistent with other County goals and objectives.

Strategy 1 – Designate areas where residential development will be encouraged, and coordinate with RSA concerning the provision of public water and sewer service in these areas.

APPENDIX C – VDOT’s REVIEW

October 18, 2013

Mr. Kevin McGhee:

I want to “Thank You” for the opportunity to review the draft of the Madison County Route 29 Corridor – 2013 “Pre-Study” report that the Madison County Transportation Committee has developed over the past year. The “Pre-Study” is well written and contains many good ideas for improving the operation of Route 29 and the local road network adjacent to Route 29 in Madison County. Many of these ideas were discussed in the meetings I attended with the committee earlier in the year so I was glad to see they made it through your vetting process. The comments below are intended to be constructive as the review of the report moves forward. I have added a couple of additional ideas/concepts that I would like to suggest that may benefit the document if they are included. In addition to offering comments on the content of the draft report, I couldn’t help myself and added some suggested grammar and spelling changes.

The Commonwealth of Virginia has designated some key roadways as Corridors of Statewide Significance (CoSS). The importance of this designation is that these routes are viewed as being critical to the economic wellbeing of the commonwealth. They serve as major corridors for both interstate and intrastate commerce as well as serving both regional and local mobility needs. Route 29 is designated as a CoSS. VDOT is charged with protecting and improving the capacity carrying characteristics and operational efficiency of this route. The report already contains potential improvements that will aid VDOT in achieving its goal so it might be beneficial to include a brief mention of the Corridor of Statewide Significance concept and description.

VDOT is very interested in limiting the number of direct accesses from private land onto Route 29 (and all other principal arterial roadways). One means to achieve this goal and also accommodate the needs of new development as well as redeveloping parcels is to require shared accesses. This can be done with neighboring parcels but is also commonly done by allowing a greater depth in the commercial zoning along a highway which encourages commercial development internal to a site and not just strung along the roadway frontage.

In some instances, VDOT is willing to permit an access point on a major roadway for a single user if there is a committed plan for additional development that will share that access point in the future. A committed plan could include an approved development plan or a long-range road network included in the comprehensive plan or another official County document that shows the access will be shared in the future.

The draft plan discusses that elimination of two signals in Madison County on Route 29. The fact that Madison County has five signals in the short distance adjacent to the town and down to Route 230 has not gone unnoticed by many in the traveling public. The elimination of some of these signals can be achieved relatively easily and not create major inconveniences for the residents of Madison County or other travelers. Removal of the signals could be achieved by replacing them with bridges and perhaps the extension of some surface streets which would provide new connections in the road network. This discussion is already contained in the draft report but it is valuable to point out that such a removal would reduce travel time for vehicles on Route 29 and eliminate locations where accidents are likely to occur. Since VDOT is interested in the removal of some signals it should also be mentioned that it would be counter-productive to add any new signals to the system in the Madison County area.

The draft plan contains a discussion about potentially constructing two roundabouts on Route 231, one at both ends of the Town of Madison. It appears that both of these could function very well. The benefits that would be realized from these roundabouts include; the reduction of the possibility of accidents at the two three legged intersections, the

elimination of the potential for ever having to signalize these intersections, the visual enhancement that would be made to the town, and the removal of potentially confusing traffic movements which will become a bigger concern as the area residents age.

It would be helpful if the proposed projects were added to comprehensive plan. This will allow them to remain visible to all people as future developments are proposed along the Route 29 corridor. It also will help to get the projects added to the Rappahannock Rapidan Regional Commission's Rural Long Range Plan and the VDOT Six-Year Plan. The County may want to consider investigating the use of "revenue sharing" as a means to accomplish some of the improvements. This would allow for some of the projects to move forward much sooner than waiting for VDOT to fund a 100 percent.

Other potential projects that have been included in the draft report such as creating new access into the Maple Drive area and the extension of Restoration Lane all make sense and can be achieved over time as the opportunities become available. VDOT number one concern is providing a safe road system to the citizens of Virginia and the improvement projects contained within the draft report all would contribute to increasing safety on our road network.

I hope the above comments will be helpful in making the report a stronger and more useful document. As the draft report moves through the County's review process I will make myself available to attend any meetings that you may feel that my presence would be a help. As a resident of Madison County as well as a VDOT employee, I am concern with how development occurs along Route 29 and how such development will impact the safety and operational efficiency of that highway.

Sincerely,

Dan Painter

End of Document

