



**Bath County, Virginia
COMPREHENSIVE PLAN
2014 – 2019**

Adopted | December 9, 2014



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CHAPTER 1

Introduction

Legal Status and Purpose of the Plan

The General Assembly has determined that every municipality in the Commonwealth shall prepare a comprehensive plan and review it every five years. The requirements for and the procedure by which a Virginia municipality shall prepare such a plan are contained in Title 15.2 of the Code of Virginia:

The comprehensive plan shall be made with the purpose of guiding and accomplishing a coordinated, adjusted and harmonious development of the territory which will, in accordance with the present and probable future needs and resources best promote the health, safety, morals, order, convenience, prosperity and general welfare of the inhabitants.

The Code relates that the plan should be general in nature, and serve both as a guide to development as well as a survey of the locality's various assets and challenges. It should forecast and prepare the community for future changes, such as changes in population size, employment base, environmental quality, and the demand for public services and utilities. It should also identify local citizens' concerns, needs, and aspirations and use them to establish clear goals for the future. In addition, the plan should outline strategies or recommendations that can be used to accomplish such goals.

Official Capacity of the Plan

This 2014 Bath County Comprehensive Plan is an update to the County's existing comprehensive plan, which was adopted in 2007. Upon adoption by the Board of Supervisors, this new Plan replaces and supersedes the 2007 document.

The Plan is not a law or ordinance. It is a guide for decision making and establishes policy guidelines for when, where, and how to provide public utilities, change zoning designations, and facilitate, coordinate, and regulate development.

Establishing the general location and timing of utility extensions is the only policy in the Plan that is implemented upon adoption of the Plan. Other policies are not implemented directly by the Plan, but should be implemented via future changes to the County's development regulations. Such policies would include changes to the provisions of the subdivision and zoning ordinances, and plans for capital improvements.

The Planning Process

Effective planning is a dynamic process, one that both considers and attempts to coordinate many local and regional variables at one time. It is best carried out by the people of the community. They must make choices, set goals, and choose the means by which to achieve them. Generally, in determining the destiny of a locality, the planning process can be characterized by three questions:

What do we have?

What do we want and why?

How do we get it?

The development of the Comprehensive Plan is a community-based effort, one that invites citizens to participate at numerous points along the way. The planning process used for the update of this Plan is summarized below:

- Visioning Workshops – The Central Shenandoah Planning District Commission (CSPDC) led community sessions for the Bath County Comprehensive Plan update. Two were held on June 4, 2013, at the Hot Springs Firehouse, and a third session occurred on July 8, 2013, at the Millboro Elementary School. The purpose of the sessions was to provide an opportunity for residents and businesses to learn about the comprehensive planning process and to provide input and comments about a vision for Bath County.
- Update of Data – CSPDC staff updated relevant tables and figures from the 2007 Plan with the most current available data. Generally, the data for Bath County is presented in a way that either compares it geographically to nearby counties or historically by year.
- Format Changes – The CSPDC generated a number of maps to supplement the text of the chapters.
- Community Meetings – In addition to the three visioning workshops described above, the Planning Commission and staff held several meetings to gather input and update the plan. Special thanks go to the “Comprehensive Plan Committee,” the citizen group largely responsible for the crafting the goals and objectives found throughout this updated plan.
- First Draft of Comprehensive Plan – Beginning in July 2012, the Comprehensive Plan Committee began reviewing and updating the text. Revisions were completed in June 2014. The draft of the plan was presented at the Planning Commission’s July 28, 2014, meeting.
- Public Hearing of Planning Commission – On August 25, 2014, the Bath County Planning Commission held a public hearing on the Comprehensive Plan.

- Recommendation of Planning Commission – On September 22, 2014, the Bath County Planning Commission voted to recommend approval of the Comprehensive Plan to the Bath County Board of Supervisors.
- Consideration by Board of Supervisors – The plan was introduced to the Board of Supervisors at their October 14, 2014, meeting.
- Public Hearing of the Board of Supervisors – The Bath County Board of Supervisors held a public hearing on the Comprehensive Plan on December 9, 2014.
- Plan Adoption – The Bath County Board of Supervisors adopted the 2014-2019 Bath County Comprehensive Plan on December 9, 2014.

Vision and Values

In order to plan effectively, it is essential that Bath County not only learn from past mistakes and successes, but also take inventory of where it is today, versus where it would like to be in the future.

Bath County: Where We Are Today

We see today that we reside in a beautiful, peaceful County that is well known for its popular tourist attractions and natural environment. We see an area rich in history that has evolved as the region has prospered, where preservation efforts hold the potential for connecting cultural values, environmental responsibility, and economic sustainability. In addition to tourism opportunities, we see Bath County as a focal point for many diverse cultural and recreational activities, as well. We take pride in our small-town friendliness and our strong sense of community. We are pleased with the overall quality of our local government and the services it provides at relatively low costs.

Like many communities, we also see that we are in need of improvements. We want to ensure the continuation of quality education for our children, and are concerned about maintaining and paying for high quality education. Maintaining a healthy supply of local jobs is important to us so that our young people can remain in Bath County if they desire. We are also concerned about the number of families living below the poverty level. We see the need for more childcare and elderly care provisions within the County. We see the need to diversify our employment base, while maintaining tourism as an important economic sector. We see the need to practice good stewardship of historic resources. We see that unmanaged growth can degrade our natural environment and rural character, but that a lack of growth can mean a loss of economic opportunity and stagnation. It is important that we achieve and maintain balance in our economic and land use strategies. We see a great deal of energy in our County, and take pride in Bath as it exists today, as well as in what we want it to become.

Bath County: Where Tomorrow Will Lead

According to community discussion, four interrelated themes make up the “key success factors” for Bath’s future. For some residents, one issue may stand out above the others. For some, this issue may be employment. For others, the overriding issue is the continued protection of the environment and the rural areas. For some, education is the basic foundation for being able to achieve everything else. It is this diversity of priorities that makes us a vital community. Regardless of our individual priorities, however, four themes continue to evolve from public discussions. They include:

- Land use/environmental balance
- Economic opportunity
- Social well being
- Educational quality

Our challenge is to integrate and balance these themes so as to maintain a cohesive whole in our County. Although the purpose of this Comprehensive Plan is to focus on our immediate community, we acknowledge the importance of “thinking regionally” when planning for the above. The following provides a more in depth discussion of the four visioning themes.

LAND USE/ENVIRONMENTAL BALANCE

Well-planned, balanced development is what we seek for Bath County. We visualize strong, centralized cores (Hot Springs, Warm Springs, Mitchelltown, and perhaps other planned growth areas) that act as magnets within the County. Future development will grow out gradually from these cores. By centralizing growth, surrounding rural areas can be left to remain predominantly green and open for farming, recreation, and conservation and will also allow us to retain the “small-town” atmosphere we now enjoy. We want any future growth to strengthen our existing communities and neighborhoods, rather than compete with what already exists.

Growing within the limits of our resources is essential as we seek to balance development with the natural environment. Our valuable water resources, in particular, must be conserved and protected. Air quality, too, is essential to maintaining the health and beauty of our County. Beauty and aesthetics, including preservation of our historic character and conservation of our natural resources are vital to us. We want Bath County to remain attractive and distinctive, and by protecting the County’s high quality of life, we expect to continue to attract visitors and new residents.

Strategic Questions

In judging how effectively we are planning for our future, we will ask ourselves the following:
Are we . . .

- protecting our historical and cultural heritage?
- strengthening our existing core areas?
- building on established areas?
- planning for potential future growth?
- protecting the rural areas and open space?
- encouraging new growth to complement existing development?

- protecting our natural resources?
- improving the aesthetics and beauty of our community?
- maintaining those qualities that make us attractive to residents and visitors?
- working within the larger region?

ECONOMIC OPPORTUNITY

The condition of the overall economy determines the availability of jobs, the size of the tax base, and the means by which individuals, families, businesses, and public institutions are able to afford the type of community we envision. Diversified economic growth will provide the County with more stable jobs, better salaries, and more opportunity for our children to stay in the area to work. A diversified economy will contain a significant portion of community based and locally owned businesses, including industry, technology, agriculture, and arts and crafts. It will also keep the County well positioned for advances in technology.

Strategic Questions

In judging how effectively we are planning for our future, we will ask ourselves the following:
Are we . . .

- maintaining steady low unemployment?
- providing a mix of job opportunities for people of various skills/educational levels?
- maintaining a strong tax base?
- retaining and supporting existing businesses?
- encouraging new locally-owned, small business/industries?
- capitalizing on tourism supporting traditional agricultural business?
- supporting the economic role of artisans and craftspeople?
- targeting those types of business/industry which can contribute the most to the area?
- participating in regional economic and job development/training approaches?
- utilizing local funding adequately and efficiently?

SOCIAL WELL BEING

Since the residents of Bath County form the foundation of our society, providing them with the best possible quality of life is important. We want to maintain the high quality of social services currently available in Bath, and assist needy individuals in obtaining relief against poverty. We will continue to participate in funding assistance programs that allow residents access to available, affordable housing. We want to provide our children with suitable daycare opportunities and our elderly residents with appropriate options for living out their lives in Bath County. In addition, we understand the importance of maintaining planned, age-appropriate activities that meet the social and recreational needs of our residents.

Strategic Questions

In judging how effectively we are planning for our future, we will ask ourselves the following: Are we . . .

- increasing the number of households able to rise out of poverty?
- narrowing the gap between the least well off and the most well off households?
- increasing the supply of affordable housing?
- providing appropriate social/recreational programs for the general public?
- addressing the needs of special populations?
- supporting cultural and recreational opportunities for all?

EDUCATIONAL QUALITY

Quality education has been a strength in our County and we seek to continue that. We want to maintain overall quality while addressing the needs of different types of students – those going on to college and those going directly to jobs; the pre-schooler, the adult learner, and the career changer; those who find learning to be difficult and those who need to be challenged. Keeping our public schools matched with our community's needs, and providing adequate funding for education are challenges now and will be in the future, as well. The majority of our local government budget will continue to go into education, so we must be certain that local educational programs continue to provide the County with significant returns, and are supportive of the economic and social elements of the County.

Strategic Questions

In judging how effectively we are planning for our future, we will ask ourselves the following:
Are we . . .

- challenging all learners to their highest potential?
- addressing the needs of both the college-bound and the job-bound student?
- addressing pre-school as well as adult learner needs?
- providing specialized services for those who need them?
- fully utilizing school facilities?
- linking public education at all levels with community needs (parents, employers, community groups)?
- continuing to pursue more educational funding assistance from the State?

Visioning Workshops

On June 4 and July 8, 2013, visioning workshops were held with the assistance of the staff and the CSPDC to solicit input from the public to hear what issues in the community were on the minds of those people who participated in the workshops.

Summary of Public Input Meetings

Staff of the Central Shenandoah Planning District Commission (CSPDC) was invited to lead three community sessions for the Bath County Comprehensive Plan Update. Two were held at the Hot Springs Firehouse on June 4, 2013. The third session occurred at the Millboro Elementary School on July 8, 2013. The purpose of the session was to provide an opportunity for residents and businesses to learn about the planning process and to provide input and comments about a vision for Bath County. The program for each session was the same. The specific agenda is listed below:

- Welcome and Opening Remarks
- What is a Comprehensive Plan?
- Small Group Visioning
- Break
- Large Group Reporting
- Next Steps

The CSPDC summarized the purpose and contents of a comprehensive plan accompanied with a PowerPoint presentation. Following, those in attendance divided into groups of three or four. The groups were presented with three questions:

1. Over the next 10 years, what stays the same in Bath County?
2. Over the next 10 years, what changes in Bath County?
3. What is distinctive about Bath County?

The groups were given approximately ten minutes to respond to each of the three questions. The small groups then reported their responses to all. CSPDC staff facilitated the discussion and recorded the responses on flip charts for all to view. The following reflects the comments from both the afternoon and evening sessions. Comments marked with an asterisk (*) were reported by more than one group.

1. Over the next 10 years, what stays the same in Bath County?

- Natural beauty/views and resources/scenic*
- Lake Moomaw
- Farms
- Dark sky (being able to see the stars)*
- Ridge top protection
- Waterways clean and usable
- Natural conservancy priority (no fracking or wind turbines)
- Park protection
- Remoteness/quietness
- Recreational opportunities
- Small town atmosphere/rural character (“Bath County”)*
- Friendliness, neighborliness
- Old school but high tech
- Historic buildings & neighborhoods/ historic preservation*
- Rich history
- Quality of life
- Tourist destination
- Garth Newel
- No stoplights/ distinction of no traffic light*
- Homestead character
- Homestead as a major employer*
- Low taxes
- Continued support of volunteers*
- Hospital
- Fire/rescue
- School system reputation
- Elementary school for east and west side of mountain
- Vernon Area Rehabilitation Center (VARC) stays here
- Retain land use policy to retain large farms/rural atmosphere
- Keep BARC

2. Over the next 10 years, what changes in Bath County?

- Expand communications and technology/Cell Phone Coverage*/Broadband and Wi-Fi*
- Improve roadways
- Home to new businesses besides tourism
- Stop littering
- Expand library resources and hours
- Indoor heated pool
- Improved recycling/enhanced recycling education
- Expand emergency disaster services
- More job opportunities & job retention*
- Clean jobs/clean, small business*
- Retain doctors
- Younger* and more diverse population/population balance*
- Need controlled growth
- Community Supported Agriculture
- Expansion of Dabney S. Lancaster Community College
- Vocational/Tech program*
- Community center/multipurpose facility that is affordable for event rental
- More life skills education for k-12 students
- More affordable women’s clothing & shopping opportunities
- Laundromat
- Co-op store, hardware store
- Auto parts store

- Hot Spring businesses that serve both tourist and locals, i.e. bakery
- Assisted living facility
- Quality of life businesses/business that serve local residents, i.e. car wash,* health care
- More business zoning
- Beautification of County property
- Removal of blighted structures
- Facade requirements so buildings complement existing properties
- More parking in Hot Springs
- Bike lanes
- Paved rural roads
- Transportation for elderly
- Lower cost of living, i.e. vehicle fuel
- Affordable housing (well-structured)*
- Eliminate land use tax at the local level
- Centrally locate Chamber of Commerce & economic development offices
- Rail spur for industrial park
- Industry in industrial park*
- Use of local funds to attract businesses
- Teen program & activities
- Expansion of sports programs for schools students and adults
- More activities for County residents, i.e. former 4th of July activities
- More female-oriented activities
- Attractive employment
- High-tech and home businesses
- Preparation of environment for youth
- Incentivize youth to stay in Bath
- More electricians, computer tech, logging, and other vocational training and education
- Encourage property buying through incentives
- Bring in young families
- Availability of land
- Availability of builders
- Construction programs
- Fill industrial park
- Entice good, clean business
- Encouragement by citizens and county to use forest land
- Expansion of existing businesses (Bluegrass Woods, Kool-Dri)
- Tax base change
- Explore tax increase keeping lower income citizens in mind (declining population, less fragmentation of land)
- Earmark increase in revenue towards cell phone/internet
- Encourage income for farmers
- Expansion of internet and cell service
- Education of farmers (new technology equals better profit)
- Address drug problem (meth & prescription) through law enforcement, neighborhood watch, education and awareness, support programs, and more community discussion
- Investigate solar use and other natural resources

3. What is distinctive about Bath County?

- Small town, local feeling
- Rural character*
- No traffic lights*
- Everyone knows everyone
- Natives
- Very welcoming
- Natural beauty & mountains*
- Dark skies
- Lake Moomaw*
- Douthat State Park
- Caves
- Vernal pools
- Hot springs, iron/sulfur water
- The “waters,” waterways
- The dairies in the northeastern part of County
- Amount of land owned by Nature Conservancy
- Strong emergency preparedness & first responders volunteer community
- Outdoor recreation** – fishing (trout), hiking, hunting (deer, turkey, grouse, quail) birding, biking, camping
- Artisan trails
- Biological Diversity
- Coursey Springs Fish Hatchery
- Bed & breakfasts
- Homestead and golf recreational opportunities*
- Ingalls Field airport
- Beauty
- Sixty percent of County in public ownership or conservation
- Variety of outdoor recreation opportunities (camping, hunting, exercising)
- Stakeholder group
- Natural resources
- Tourism
- Hydro-energy
- Homestead/Garth Newel*
- Bed & breakfasts
- School system benefits (student to teacher ratio, pre-K services, attractive to young families)
- Critical care system
- Harvest Moon Festival and other local festivals

The community input meeting concluded with information about the next steps of the Comprehensive Plan update. The Comprehensive Plan Update Committee, which includes the Planning Commission, will discuss the revisions to the current plan’s chapters at the regularly scheduled Planning Commission meetings except when there is a lengthy business agenda. The Planning Commission meets on the fourth Monday of the month. All were invited and encouraged to attend these meetings.

History

On December 14, 1790, Bath County was created from parts of Augusta, Botetourt, and Greenbrier Counties. Much like its namesake, the English resort city of Bath, Bath County was to become a resort land of national reputation because of its mineral waters. With the formation of the State of West Virginia in the nineteenth century, Bath County became one of the western boundary counties of Virginia.

Early Settlement Patterns

In the early 1700's, western Virginia was very sparsely inhabited. In the lower valley of the South Branch there was a clan of Shawnees, about 150 in total, which was a significant population concentration at that time. For Native Americans, the Valley of Virginia represented a hunting ground. In order to attract deer, buffalo and elk, the Indians burned the grass at the end of each hunting season to keep the area in a condition of prairie. The bottom lands of the Jackson, Cowpasture and Bull Pasture river basins were utilized in this manner for much of the Indians' tenure in Bath County.

The European/American settlement of Bath County began during the 1700's. As was much of the inland mountainous region of the Middle Atlantic, Bath County was settled by members of dissenting Protestant sects escaping religious persecution. The earliest settlers in Bath County were Scotch-Irish Presbyterians from Ulster, Ireland. Among these first settlers was the family of John Lewis, the "father" of Bath County. First settling in the area north of Staunton, Lewis moved west into the Cowpasture area in the 1740's. The Lewis family was followed by other large landholders, some of whose names are still used as place names – such as Jackson and Dickenson.

Between 1746 and 1750, settlers established large farms of several hundred acres. Subsequent surveys in 1750 and 1755, however, showed that few newly formed tracts numbered over one hundred acres. Many of these surveys were for already established landholders or their offspring. Historically, the major portion of the large tracts has been concentrated in the more fertile valleys of the Cowpasture and Jackson Rivers.

Early in the nineteenth century, Bath County was beginning to acquire, along with its permanent agricultural residents, a number of part-time residents who came to the numerous mineral springs in the County. As early as 1750, Thomas Walker, a physician, naturalist, and later guardian of Thomas Jefferson, recorded that he found six invalids using the waters at Hot Springs for medicinal purposes. In 1766, Cuthbert Bullit erected a hotel at Hot Springs; portions of it remained until 1901. Several years after the hotel construction, Bullit petitioned that fifty of his acres be laid off into lots and a town established. The actual drawing for lots took place in 1794, but the proposed town did not become a resort center until Dr. Thomas Goode

purchased the old hotel in 1832. By 1835 there were bath houses, several rows of cabins, and a reputation for very good table fare.

In 1880, M. E. Ingalls, president of the Chesapeake and Ohio Railway, purchased the Warm, Hot, and Healing Springs. In 1890, he formed the Virginia Hot Springs Company, and named the existing hotel at Hot Springs, “The Homestead.” The company constructed a railroad spur of twenty-five miles to connect Hot Springs with the main line of the Chesapeake and Ohio at Covington. The company also made numerous improvements to the old hotel until fire destroyed it in 1901. The present Homestead was built soon after the fire and its tower was constructed in the late 1920’s. During the early part of World War II, the Homestead served as an internment for Japanese officials from the Washington delegations and eastern consulates. Since construction of the Homestead, Hot Springs has been a major Bath County resort center.

Neighboring Warm Springs, however, was the better known resort in the nineteenth century. Warm Springs was already a nationally known summer gathering place for elite society from the South. Planters from the Gulf states, as well as other distant points, traveled by canal boat and stage coach to the mountain resort for the summer months. Many well-to-do Virginians also visited the “springs” for all or part of the warmer months to partake of not only the waters, but of the social life as well. Virginians from the Tidewater region, like the planters from the Deep South, came as much to escape the yellow fever and cholera epidemics of the lowlands as they did to bathe and socialize. Mountainous Bath County provided a safe, healthy environment for those wealthy enough to make the long journey for the summer social season. The white frame bath houses that still remain are visual reminders of Warm Spring’s nineteenth century prominence. Other springs such as Healing Springs and Bath Alum attracted limited numbers of summer residents in the early nineteenth century, but Warm Springs remained the prime resort of the area for the rest of the century.

Bath County, like neighboring Highland County, has been a grazing region from its earliest days. The large river farms comprised nearly all of the tillable land in Bath County and gave the County a more aristocratic social structure than most mountainous areas. Hunting, instead of farming, however, was the basis of livelihood for a number of early Bath County residents living in the areas least suited to farming. Hunters had access to plentiful game (especially buffalo, bear, and turkey). Skins sent to seaports, as well as the bounty from killing wolves, provided a reliable cash return for Bath County hunters.

The first dwellings in the County consisted of small log cabins with the roofs made of long riven shingles held down by weight poles. Later homes were made of hewn logs, and many were covered with frame siding. A few wealthy planters built high-style brick houses such as the Greek Revival house at Hidden Valley.

Because Bath County has attracted visitors since the early nineteenth century, it has escaped the isolation of many Appalachian counties. Through the years many families have built fine homes or rustic cottages to use as part-time dwellings. Historically, there have been three

generalized groups of people in the County: a small number of farmers, tourists and second-home residents, and a laboring class that primarily provides services for tourists and part-time residents.

Historic Assets

Each of the periods of Bath’s colorful history has left the County with a number of historic buildings and sites. These include houses, churches, graveyards, log cabins, schools, business sites, farmhouses and barns, inns, government buildings, and The Homestead hotel. Over the years, some buildings have been destroyed by fires. Many others have been lost to posterity through deterioration and neglect.

The County acknowledges the important role historic assets play in benefiting the area’s culture, economy, and tourism industry and encourages local preservation initiatives to identify, protect, and restore them. Refer to *Tools for Preserving Bath County’s Rural and Historic Character* in the Land Use chapter of this Plan.

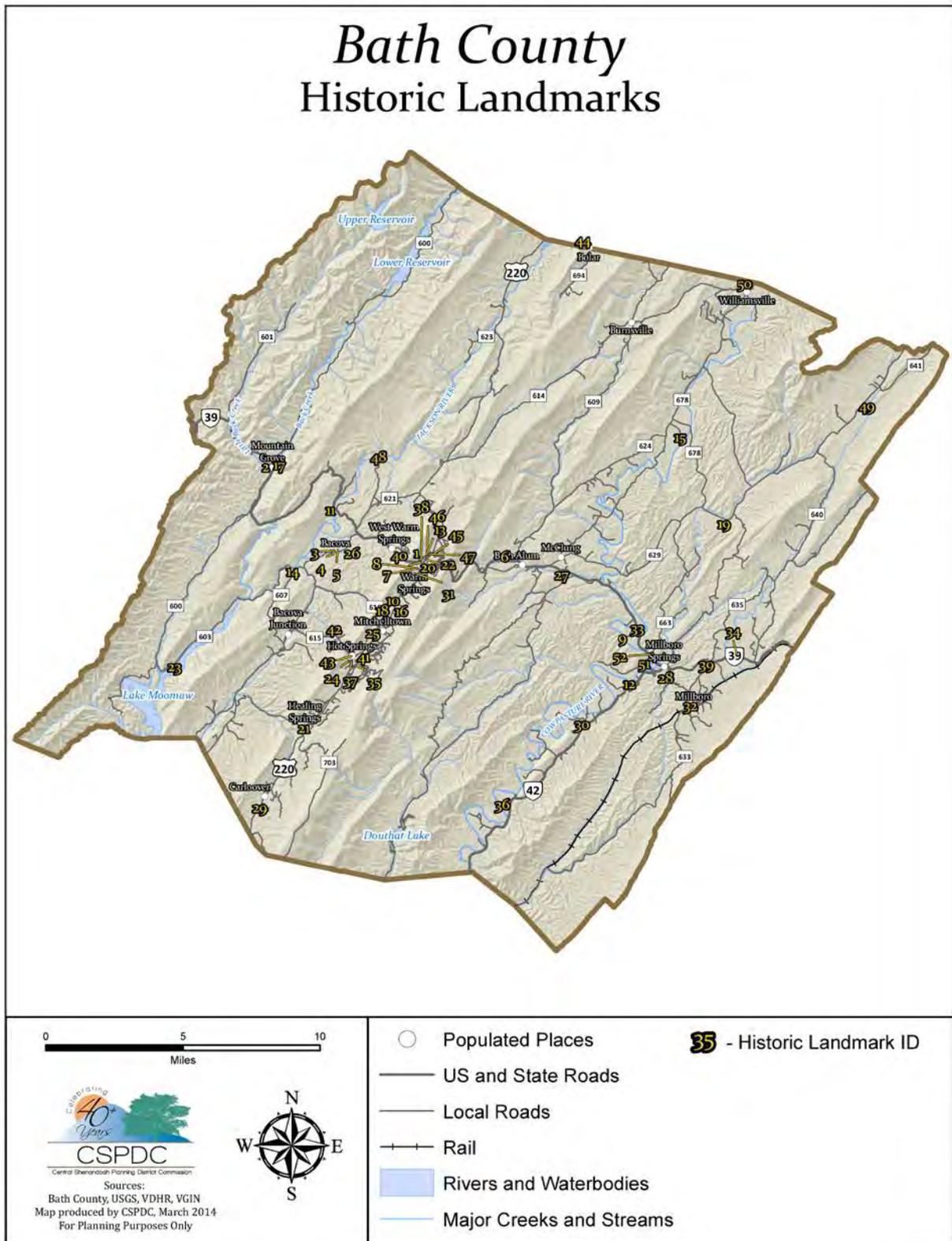
To date, twelve Bath County sites have been designated on both the Virginia Landmarks Register and the National Register of Historic Places. These are Warwickton Hidden Valley Farm, Gristmill Inn Springs, Warm Springs Bath Houses and Pools, Homestead Hotel, Homestead Dairy, Sitlington House, Old Millboro School, Malvern Hall, Mustoe House, Garth Newel, TC Walker School, and Union Hurst School. These sites and some other noteworthy historic assets are listed below and shown on Map 1.1.

Bath County Historic Landmarks

* Included on the Virginia Landmarks Register and the National Register of Historic Places

1	Anderson Cottage	27	McClung House and Store
2	Back Creek Bridge	28	Millboro Springs Girls College
3	Bacova Church	29	Mustoe House*
4	Bacova House	30	Nimrod Hall
5	Bacova Post Office	31	Oakley Farm
6	Bath Alum House and Barn	32	Old Millboro School*
7	Bath County Historical Office	33	River Uplands
8	Bath Courthouse & Sheriff's Office	34	Rock Rest House
9	Big Bend Farm	35	Shrine of the Sacred Heart
10	Boxwood Farm	36	Sitlington House (Old Stone House)*
11	Cameron Clerk's Office	37	St. Luke's Episcopal Church
12	Camp Mont Shenandoah	38	Tannery and Shields House
13	Christ Episcopal Church	39	TC Walker School*
14	Folly Farm	40	The Chimneys
15	Fort Lewis	41	The Homestead*
16	Garth Newel*	42	Union Hurst School*
17	Gatewood House	43	Virginia Hotel
18	Gramercy Farm	44	Virginia Hotel Bolar
19	Green Valley Farm	45	Warm Springs Inn
20	Gristmill Inn Springs*	46	Warm Springs Presbyterian Church
21	Healing Springs Hotel	47	Warm Springs Bath Houses & Pools*
22	Homestead Dairy*	48	Warwickton Hidden Valley Farm*
23	Lake Moomaw	49	Wilderness Farm
24	Malvern Hall*	50	Williamsville Presbyterian Church
25	Maple Ridge	51	Windy Cove Farm
26	Mayse House	52	Windy Cove Presbyterian Church

Map 1.1



Perspectives on Agriculture

Present Issues

Bath County is considered a livestock producing county which takes advantage of grazing land, both hay and pasture, with a minimum amount of crop ground. The high cost of farm inputs (i.e. feed, equipment, fuel and labor) are continuing to hold down profits. Limited markets with participating commodity type products and transportation issues all contribute to limiting diversified enterprises.

Agriculture as a Livelihood

There is an increased opportunity of niche marketing for specialty products and locally grown meat and produce. The addition of two regional USDA meat processing operations can give local producers opportunities to market their product.

Niche marketing opportunities include organic, natural, humanely raised, designated operation, and/or specialty local foods that can compete in a premium market. While organic food is preferred, the majority of the population is still having to purchase food at the lowest prices possible. There is niche marketing to meet the demands of those consumers who prefer a specific production method for the food that they consume.

There is education available through the Virginia Cooperative Extension to help producers explore and choose the best agricultural production practices that are in their interest and will help them achieve the best rate of return.

Labor is a big limiting factor; availability, cost and regulations needing to be met in order to have full-time labor, deter small operations from intensive farming practices.

Fuel crops for biodiesel and ethanol production are impractical due to transportation issues and limited availability of crop land.

Marketing our County Farms

There is a great potential for more cooperative marketing for both livestock and vegetable producers. There is a great potential for additional agritourism, especially Farm Stay, that includes recreation, history, or education as part of the stay. Bath County, along with twelve other localities, participates in a regional agritourism program called Fields of Gold. Fields of Gold collectively promotes the region's farms and their products to visitors and residents through agritourism. This includes visits to a working farm or other agricultural operation to enjoy, learn about, or participate in local agriculture. Fields of Gold also promotes activities

such as farmers' markets, farm-related festivals, and stores and restaurants that feature local farm products.

Property Values

Current land values will be hard to overcome in terms of providing any viable agricultural enterprise that will pay for the land itself. The farm land should be considered investment property and the farming operation will need to be viable and profitable to cover input costs and living expenses, but next to impossible to cover the land cost itself. Therefore it is important to encourage the next generation to continue farming operations and keep agricultural land taxes at a reasonable rate so that the property will continue to be used for agricultural purposes.

Future Growth Scenario

While there is not a tremendous amount of building permits being generated for new homes per year, future construction should be focused in and around certain areas planned for growth and/or higher densities. This will aid farm efforts by discouraging random growth in the more outlying areas of the County. Areas planned for slightly higher densities might be at or near an intersection of two roads, at a village or adjacent to other subdivisions and/or areas with existing or planned public utilities (see Land Use Chapter).

When the County guides the majority of new subdivision growth as stated above, we are effectively planning for areas planned for higher densities and near other conveniences or public uses, resulting in an efficient form of growth.

This is a preferable alternative to the haphazard scenario where 50 houses/lots would be located in scattered subdivisions randomly located throughout the County, resulting in no one area experiencing well-planned, compact growth, and a larger number of properties facing growth pressures from adjacent parcels of land and their increased land values.



DEMOGRAPHICS

CHAPTER 2 Demographics

An understanding of past, present, and future demographic trends provides the essential framework for community planning. Familiarity with such trends helps us plan for future land use needs, as well as for public services and facilities. The following demographic review will help guide our policy-making decisions for community issues such as the following: Will there be increased need for more residential zoning in the near future? How many children can we anticipate will enroll in our schools? Will there be more demand for active or passive recreational activities?

GENERAL POPULATION

Historical Trends

Having a peak population of 8,137 people in 1930, Bath County experienced the majority of its 20th century growth during the 1920s. With the onset of the Great Depression, however, the County steadily lost population for four decades (See Figures 2.1 and 2.2). The 1980 Census, however, reported a trend reversal in which the population increased by 12.87 percent to 5,860. This increase was due, in large part, to the construction of Virginia Power’s Pumped Storage Station. As the project neared completion, population decreased again in the mid-1980s.

Bath County’s population decreased 18.11 percent between 1980 and 1990. Between 1990 and 2000, the County’s population increased 5.19 percent yet decreased again by 6.28 percent between 2000 and 2010 to 4,731 persons.

Figure 2.1

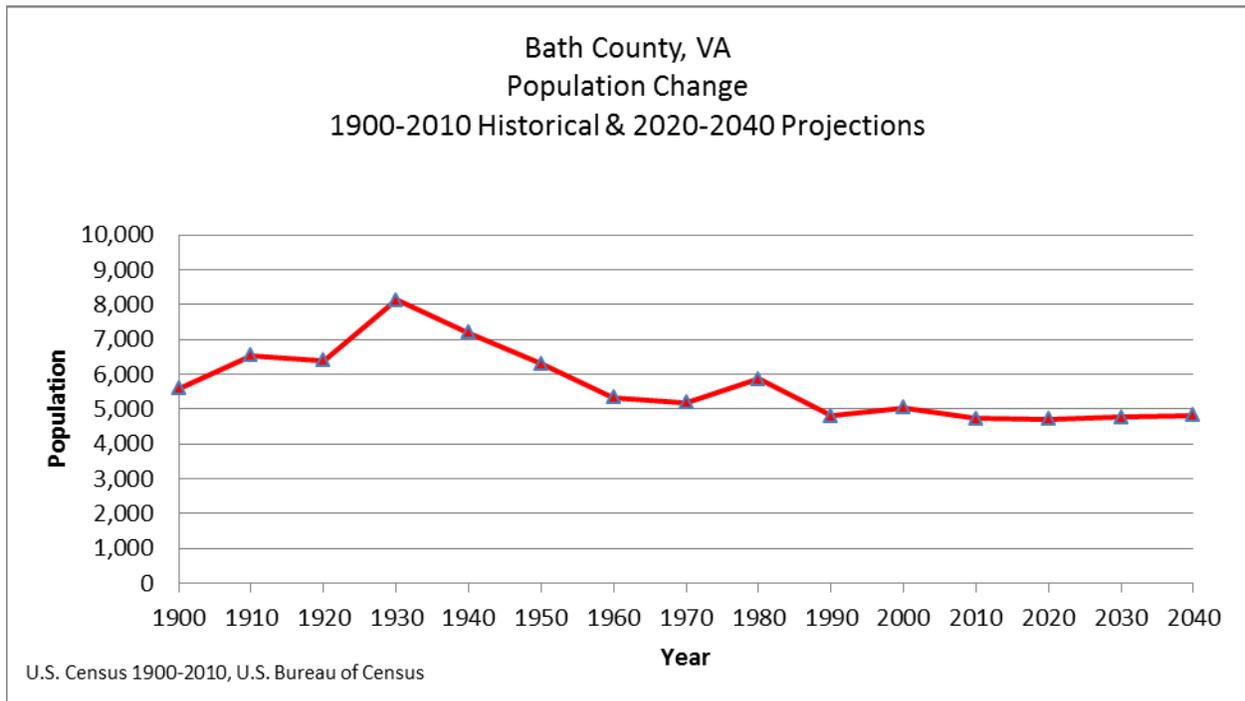
Bath County Population Change 1900-2010 & 2020-2040			
Year	Population	Actual Change	Percentage Change
1900	5,595		
1910	6,538	943	16.85%
1920	6,389	-149	-2.28%
1930	8,137	1748	27.36%
1940	7,191	-946	-11.63%
1950	6,296	-895	-12.45%
1960	5,335	-961	-15.26%
1970	5,192	-143	-2.68%
1980	5,860	668	12.87%
1990	4,799	-1061	-18.11%
2000	5,048	249	5.19%
2010	4,731	-317	-6.28%
Projected			
2020	4,714	-17	-0.36%
2030	4,760	46	0.98%
2040	4,816	56	1.18%

U.S. Census 1900-2010, U.S. Bureau of Census
 Population Projections, Weldon Cooper Center for Public Service

Population Projections

According to the latest population projections published by the Weldon Cooper Center for Public Service, Bath County's population is expected to grow slightly between 2010 and 2040. As reflected in Figures 2.1 and 2.2, a small population decrease is expected from 2010 to 2020, reducing the 2010 population of 4,731 to a population of 4,714 in 2020. However, further estimates from Weldon Cooper project a 0.98 percent increase from 2020 to 2030 and a 1.18 percent increase from 2030 to 2040.

Figure 2.2



Population projections for Bath County paint a relatively level trend line. It should be noted, however, that projected figures have varying degrees of reliability and are used merely to provide insight as to what could happen to population numbers in the absence of any major demographic shifts. Fluctuating trends in economic and living conditions can significantly affect future population growth patterns, as can local planning and policy activities. To a significant degree, population growth can either be encouraged or discouraged by local governments.

MIGRATION FACTORS

Aside from annexation, there are two ways in which a community can maintain population growth. One is by maintaining a higher number of births than deaths (natural increase), and the other is by having new residents move in from elsewhere (migration). Generally, when

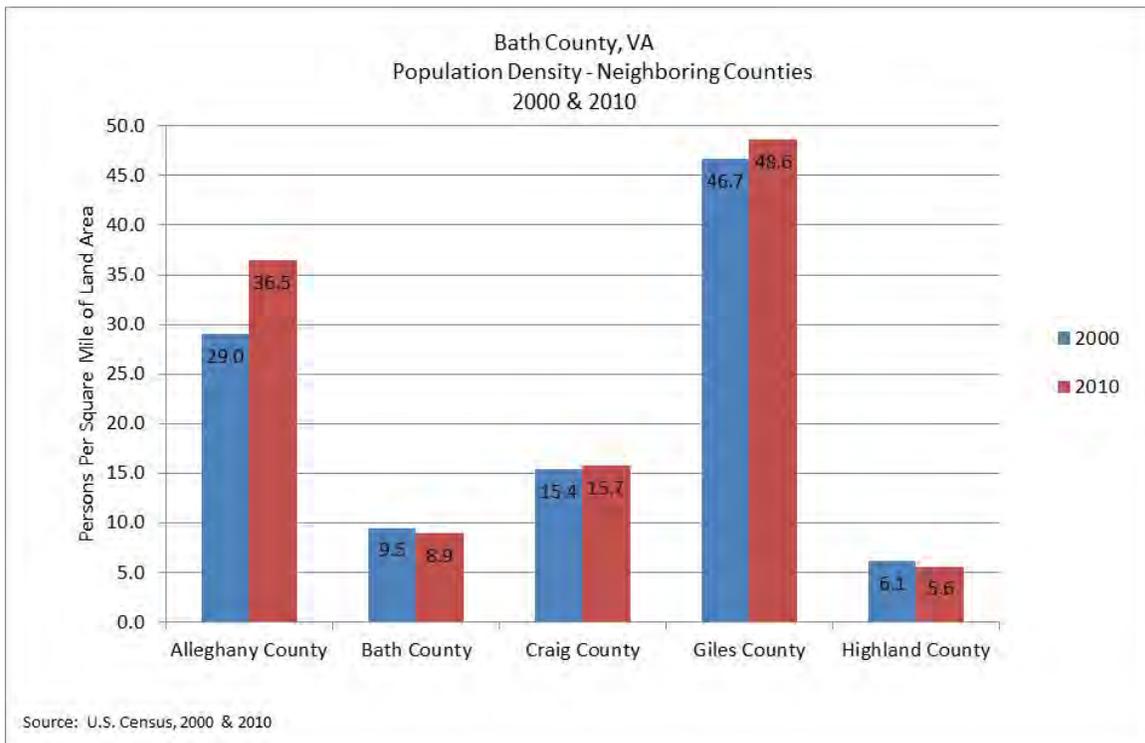
population increases are primarily the result of migration one or more “push-pull” factors are at work. These may include family, job availability, housing affordability, educational opportunities, or cultural/recreational outlets.

Bath County’s population gains are a result of migration. The Weldon Cooper Center estimates the County’s 2012 population at 4,773. This is a 42 person increase from the 2010 Census. Net migration during this time was 105 persons while the natural increase was -63.

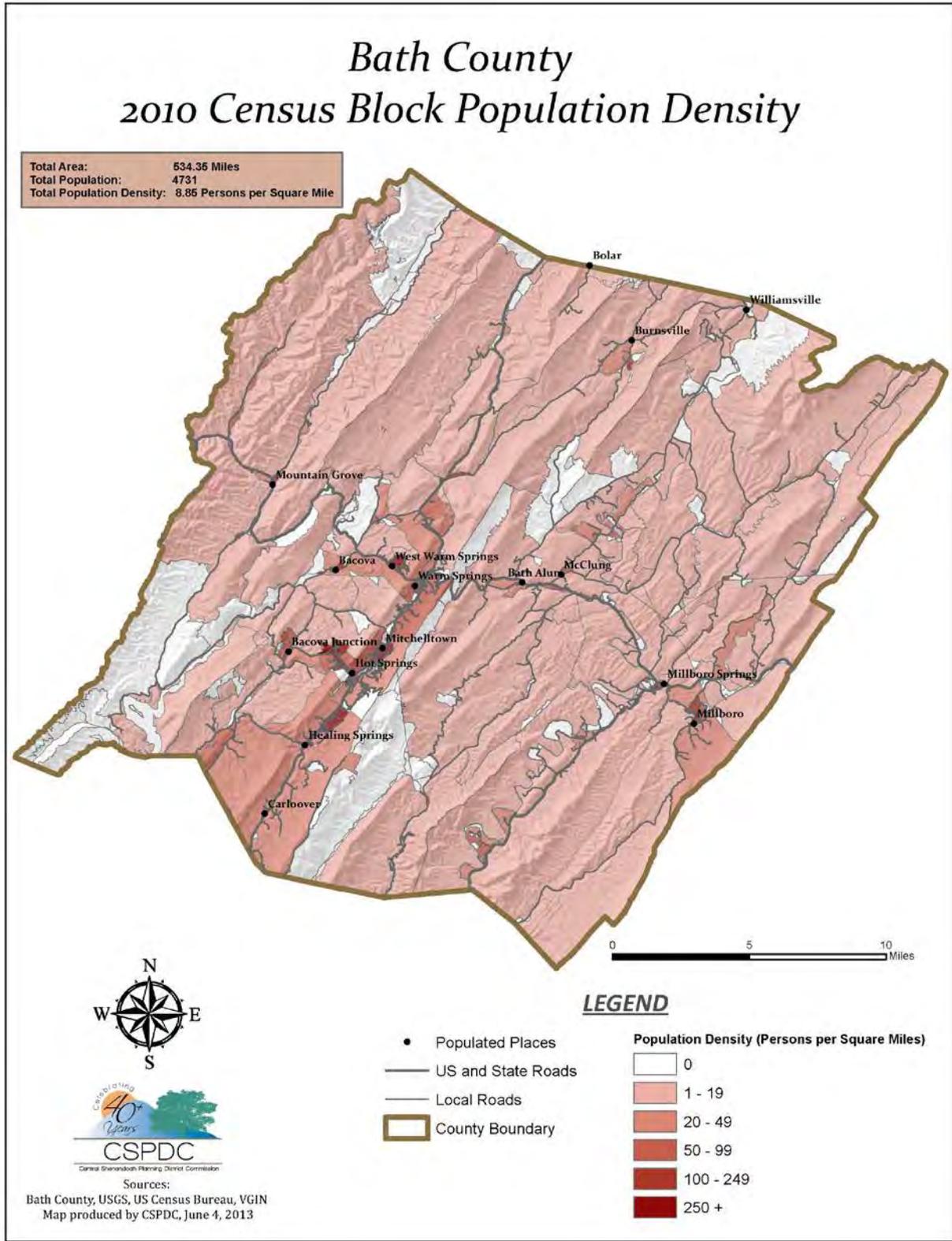
POPULATION DISTRIBUTION

According to the 2010 Census, Bath County has the second smallest population among counties in Virginia. Among counties and cities, Bath County has the third smallest population in Virginia. The County’s small population, coupled with a relatively large land area, results in a very low population density. In 2010, Bath County had a population density of 8.9 persons per square mile. As seen in Figure 2.3, with the exception of Highland County at 5.6 persons per square mile, Bath County had the lowest population density among neighboring counties in 2010. Bath County’s population density is shown in Map 2.1. The average population density for the State was more than 22 times that of Bath County. Map 2.2 shows Bath County’s population and population density by magisterial district.

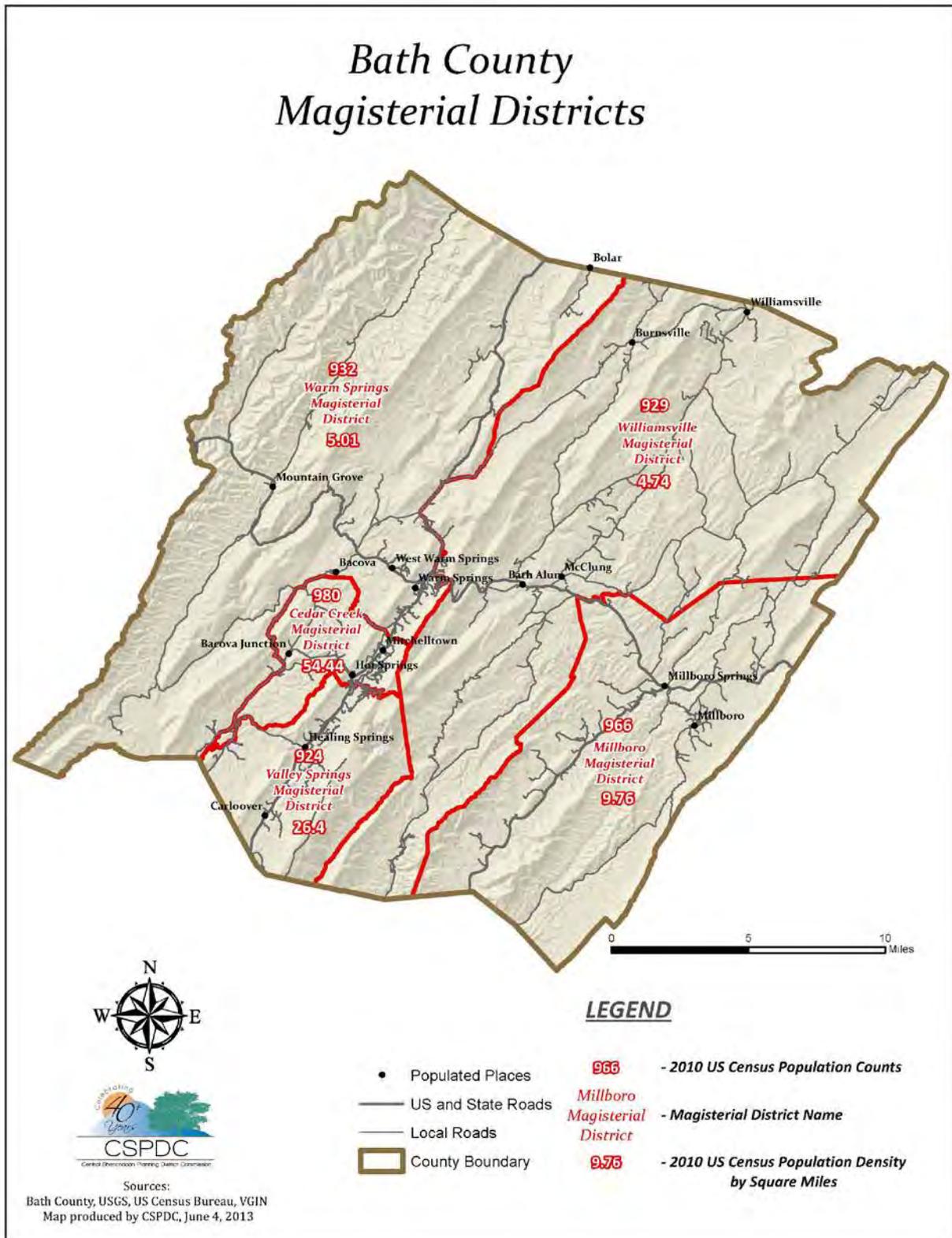
Figure 2.3



Map 2.1



Map 2.2



POPULATION CHARACTERISTICS

Age

Age is an essential tool of community analysis because many of an individual’s needs and behaviors are life-cycle related. Bath County’s median age increased significantly from 39.3 in 1990 to 41.8 in 2000, while the State median age increased from 32.7 to 35.7 years. According to the 2010 U.S. Census, the median age in Bath County was 47.5 years, ten years above the state’s median age of 37.5. Bath County’s median age has increased more than 14 years since 1980.

Trends in Bath County’s age distribution represent a relatively mature age structure that is continuing to grow (See Figure 2.4). While Bath County’s overall population decreased by 6.28 percent between 2000 and 2010, the number of persons over the age of 65 increased by 24.6 percent. During this same time, the number of person under the age of 18 decreased by 24.3 percent. According to the 2010 Census, Bath County’s population comprised 1,052 persons 65 years and older and 804 persons under the age of 18. This is 22.2 percent and 17.0 percent of the total population, respectively.

Between 2000 and 2010, Bath County experienced a 28.8 percent decline in the number of children under the age of five. Additionally, Bath continues to see notable decreases in the number of individuals of child-bearing age. Regardless of the reason for decline, the total number of young children in Bath County can be anticipated to decrease over the next few years. Such decreases may ultimately impact school class size; however, School Board projections for the near future indicate stable enrollment figures. The preceding trends are likely the result of an in-migration of retirees, the increasing life span of all residents, and the out-migration of young adults.

Figure 2.4

Bath County, VA Age and Gender Distribution								
	1980		1990		2000		2010	
	Value	Percent	Value	Percent	Value	Percent	Value	Percent
Under 5	340	5.8%	259	5.4%	222	4.4%	158	3.3%
5 to 20	1,429	24.4%	961	20.0%	969	18.4%	799	16.8%
21 to 24	412	7.0%	259	5.4%	148	3.8%	180	3.8%
25 to 44	1,699	29.0%	1,322	27.5%	1,426	28.2%	1,024	21.6%
45 to 54	577	9.8%	670	14.0%	754	14.9%	778	16.4%
55 to 59	326	5.6%	299	6.2%	353	7.0%	340	7.1%
60 to 64	284	4.8%	283	5.9%	332	6.6%	400	8.5%
65 to 74	437	7.5%	422	8.8%	515	10.2%	610	12.9%
75 to 84	292	5.0%	266	5.5%	250	5.0%	345	7.3%
85 +	64	1.1%	58	1.2%	79	1.6%	97	2.0%
Female	2,834	48.3%	2,360	49.2%	2,516	49.8%	2,341	49.5%
Male	3,026	51.6%	2,439	50.8%	2,532	50.2%	2,390	50.5%
Total	5,860	100.0%	4,799	100.0%	5,048	100.0%	4,731	100.0%

Source: U.S. Census 1980-2010

Race

Bath County's minority population is small and appears to be shrinking at a rate greater than the overall population. According to 2000 Census data, Bath County was home to 373 persons of minority, or 7.4 percent of the total population. In 2010, that number dropped to 299 persons, or 6.3 percent of the total population. Out of Bath County's total population in 2010, 101 persons, or 2.1 percent, reported being Hispanic or Latino (of any race).

Households

Bath County's total population decreased 6.3 percent from 2000 to 2010 although the total number of households increased by 5.3 percent. Generally, this trend is a result of fewer persons per household. In keeping with the national trend toward smaller families, household size in Bath County has declined steadily from 2.51 persons in 1990 to 2.34 in 2000, and again to 2.16 in 2010.

A household includes all the people who occupy a housing unit as their usual place of residence. A household may be a single family, one person living alone, two or more families living together, or any other group of related or unrelated persons who share living arrangements. The U.S. Census recognizes two types of households, a family household and a nonfamily household. A family household is a householder living with one or more people related to him or her by birth marriage, or adoption. A nonfamily householder is a householder living alone or with nonrelatives only.

In 2000, 70.7 percent of all households in Bath County were family households. By 2010, that number dropped to 62.3 percent. The number of married-couple family households in Bath County decreased 9.5 percent between 2000 and 2010 from 1,204 to 1,090 households. The number of female-headed households in Bath County increased from 149 in 1990 to 160 in 2000, and then dropped back to 148 in 2010.

Poverty

Comparisons among different household types in Bath County reveal some potential correlations between sex, age, and income levels. In Bath County, 7.9 percent of all families and 12.7 percent of individuals fell below the poverty level according to the 2007-2011 American Community Survey (ACS) (See Figure 2.5). As shown in Figure 2.6, the poverty level in Bath County is higher than neighboring Highland County and Virginia.

Figure 2.5

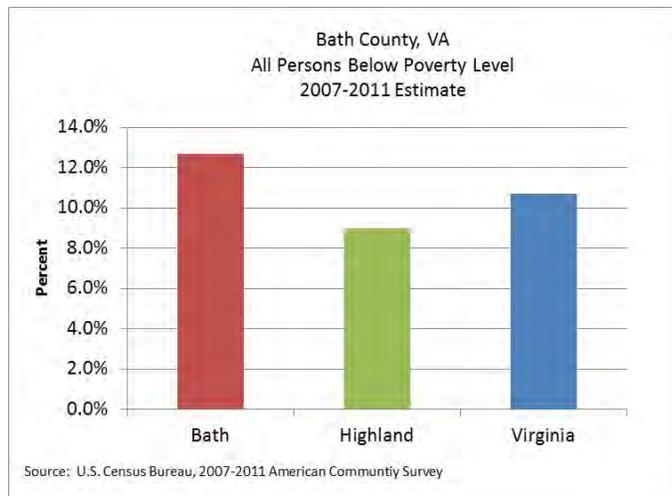
Highland-Bath-Virginia Income Below Poverty Level					
	Estimated Population for whom Poverty Status is Determined	Estimated Number of Family Households	Percent of Families Below Poverty Level	Percent of Families Below Poverty with Female Householder	Percent of Individuals Below Poverty Level
Bath County	4,687	1,449	7.9	26.4	12.7
Highland County	2,350	771	4.7	16.1	9.0
Virginia	7,681,393	2,015,959	7.5	23.9	10.7

Source: U.S. Census Bureau, 2007-2011 American Community Survey

According to the 2007-2011 ACS, of the female-headed households with children under the age of 18, 49.0 percent were living below the poverty level. Although the number of female-headed households decreased from 2000 to 2010, further analysis may be necessary to determine why Bath has so many low income single mothers with children.

Poverty among elderly residents and children is often an issue of concern within many localities. In Bath, 13.6 of all people over age 65 were living below the poverty level while 26.7 percent of people under the age of 18 were living in poverty.

Figure 2.6



Median income is shown in Figure 2.7, below. Both Bath and Highland Counties had median household incomes well beneath the State figure. It should be noted, however, that Virginia's median income is somewhat skewed by wealthy counties in northern and eastern parts of the State. Thus, Bath's median income is generally in line with its neighbors.

Figure 2.7

Bath-Highland-Virginia Median Household Income										
Locality	1979	1989	Number Change 79-89	Percent Change 79-89	1999	Number Change 89-99	Percent Change 89-99	2011	Change 99-2011	Percent Change 99-11*
Bath County	\$13,618	\$24,203	\$10,585	77.7%	\$35,013	\$10,810	44.7%	\$42,423	\$7,410	21.2%
Highland Count	\$13,900	\$20,903	\$7,003	50.4%	\$29,732	\$8,829	42.2%	\$37,286	\$7,554	25.4%
Virginia	\$17,475	\$33,328	\$15,853	90.7%	\$46,677	\$13,349	40.1%	\$61,877	\$15,200	32.6%

Source: U.S. Census Bureau, 1980, 1990, 2000 Census and *2007-2011 American Community Survey

DEMOGRAPHICS GOALS

1. Encourage young adults to stay in Bath County and seek to attract young families with children.
2. Support services for low-to-moderate income residents so that they may lead fulfilling lives and be effective participants in the community.
3. Reduce the number of families living below the poverty level.
4. Plan for the future diversity of the population including suitable services, education, employment, and housing opportunities.
5. Provide assistance, public policy, and support services for the elderly so that they may lead fulfilling lives and be effective participants in the community.

OBJECTIVES

- a. Encourage and expand vocational and work-study programs in the public school system to strengthen the skills of young people and make them more marketable as local employees.
- b. Support age-appropriate activities and programs to meet the social and recreational needs of local children and adults.
- c. Continue to encourage the establishment of child care centers and early childhood education by private organizations.
- d. Support opportunities for the elderly to participate in recreation programs through private and County funded organizations.
- e. Support foster care programs for the elderly, allowing them to live in family situations.
- f. Work with housing authorities and local partners to provide assistance for upgraded housing for low-to-moderate income (LMI) residents and to create new home-ownership and rental opportunities for those making close to the Area Median Income.
- g. Continue to support the construction and operation of assisted-living homes and/or retirement communities for Bath's elderly within the County.

- h. Market the County's small town atmosphere as being an ideal place to raise a family.
- i. Continue to improve upon and market the quality of Bath's public school system.
- j. Continue to find assistance for residents that are elderly and/or disabled in maintaining and making necessary improvements to their homes.
- k. Encourage and attract business to create more job opportunities and support existing businesses in retaining existing jobs.
- l. Expand education opportunities to provide skills to high school students that would allow them to obtain gainful employment upon graduating high school.
- m. Strive to diversify economy base to allow various job skills and employment ages.
- n. Support sports programs for schools, students and adults.



HOUSING

CHAPTER 3 Housing

Ensuring citizens the availability of affordable, quality housing is a worthy goal for all localities. Such assurance reflects a community's ability to respond to the needs of its citizens, as well as to accommodate growth and economic development. Local governments can be influential in shaping the housing delivery system. Public policies can be designed and implemented to ensure that local housing goals are met.

In the year 2010, Bath County had 3,270 housing units, an increase of 12.9 percent from 2000. Owner-occupied housing units accounted for 48.8 percent of the total units (down nearly 8 percent from 2000) while 17.3 percent of the total units were renter occupied and 33.9 percent of total housing units were considered vacant – either not occupied or for seasonal, recreational or occasional use. The large number of vacant units was further illustrated by the fact that 23.7 percent of all housing units were considered seasonal, recreational, or occasional use according to the 2010 Census.

Single-family units made up 88.0 percent of the total housing stock while multi-family units consisted of 4.9 percent and mobile homes had 7.1 percent of the total units (2007-2011 ACS).

From 2002 to 2012, 281 new housing permits were permitted (Weldon Cooper Center for Public Service). With the local market absorbing an average of 26 new housing units per year, it becomes a challenging question for the county to answer as to how we can best plan for the impact that these, and potentially more new homes, will bring to the community. No multi-family homes were built during that same ten-year span.

About two-thirds (67.3 percent) of the housing stock was built prior to 1980. Bath County has its share of older homes as approximately 28 percent of the total housing stock (as of 2011) was built prior to 1940. As for newer construction, one-third (32.7 percent) of the homes in Bath County were built after 1980 compared to 49.3 percent throughout Virginia. About 10 percent of Bath County homes were built in 2000 or later (2007-2011 ACS).

The median value of owner-occupied housing units was \$137,100 according to the 2007-2011 ACS. This figure compared relatively low to Highland County's \$181,900, but both counties trailed the statewide median value of \$254,600. The median gross rent in Bath County was \$937 per month. Highland County was significantly lower at \$561, whereas the statewide median was at \$1,024 (2007-2011 ACS).

In Bath County, 78.8 percent of homeowners with a mortgage were spending less than 30 percent of total household income on housing. Regionally and statewide, people were spending higher percentages of their income on housing – as just 47.9 percent and 64.9 percent

of homeowners in Highland and statewide, respectively, were using less than 30 percent of their income on housing.

AFFORDABLE HOUSING

Having an adequate supply of affordable housing in Bath County, and the proximity of jobs and housing are key principles of Smart Growth and are worthy goals for the County to pursue to improve the lives of all our citizens. On one hand, increasing home values in Bath County are desirable, but it also means that affordable housing becomes scarcer for our teachers, nurses, firefighters, police officers, carpenters, hotel and retail workers, waitresses, and others. This situation is forcing these wage earners to look elsewhere to meet their housing needs, separating them from their workplaces in Bath County and increasing their transportation costs and gasoline usage at a time when gas prices have risen.

Furthermore, some “affordable housing” in the form of older housing stock can easily deteriorate from lack of maintenance investment, prompting the need for potential costly remodeling or even reconstruction of these older homes.

Housing affordability problems are not limited to Bath County alone. As home values continue to increase, more attention has been given to this issue both statewide and nationally. Rather, these problems are regional in nature and warrant that all localities in our region work together for equitable solutions.

Defining Affordable Housing

In 2003 the Virginia General Assembly passed HB 2406 requiring localities, as part of their comprehensive plans, to designate areas and implement measures for the construction, rehabilitation and maintenance of affordable housing that is sufficient to meet the current and future needs of residents of all levels of income in the locality.

So many people may ask, “Just what is affordable housing?” While the answer will vary, depending on an individual’s or family’s ability to pay, the Task Force looked to established definitions as a basis for its work. Section 15.2-2201 of the Code of Virginia states the following:

“Affordable housing” means, as a guideline, housing that is affordable to households with incomes at or below the area median income, provided that the occupant pays not more than 30% of his gross income for gross housing costs, including utilities.

Based on the statistics presented in the 2007-2011 ACS, 78.8 percent of Bath County’s homeowners with a mortgage have access to housing that is affordable to their income bracket,

because they are spending less than 30 percent of their salaries on housing costs. However, Bath County suffers from a lack of housing which is affordable to those making within 80-120 percent of the area median income, which means a yearly salary between \$42,000 and \$63,000 (2007-2011 ACS). If this segment of the population is priced out of the market, community vitality will suffer.

Regardless of established definitions of housing affordability, what is considered affordable to an individual or family depends on their circumstances. In general, whether a house or other dwelling is affordable hinges on the following “affordability variables”. Note: household size and total income determine income status, whereas housing costs determine affordability.

- Family/household size
- Total income
- Selling or rental price of dwelling

While workforce housing is cited as a concern, the County should also be mindful of the following needs across the spectrum:

- Housing for “our public servants”
- Active senior housing
- Housing for those on fixed or retirement incomes
- Assisted living facilities and long-term care facilities
- Fair and accessible housing for disadvantaged populations
- Homeownership & rental housing

Workforce Housing

Many factors influence housing construction costs. The following factors contribute to higher construction costs and can impede efforts to provide affordable housing, particularly to the local workforce.

- Rising land costs
- Land availability
- Lack of high density zoning
- Lack of mixed use zoning
- Design standards
- Lack of local incentives
- Public perception of “affordable housing” – NIMBY

A long-term vision for affordable housing should emphasize an assurance that all housing needs are being met for people at all income levels. However, a high priority for the short-term should be to promote the development of an adequate supply of local housing for wage earners, often referred to as “workforce housing,” which should consist of both homeownership and rental housing choices.

Doing so will enable people who work in Bath County and are already vested in the community to have more viable options to live in Bath County. These endeavors would assist the housing needs for our all of our employees, and could aid in their retention.

Supporting Workforce Housing

After establishing workforce housing as the priority housing need to be addressed in Bath County, the following endeavors should be explored:

Strategy #1: Increase the supply of homes, which sell in the price range of \$100,000. This would be attractive particularly for first-time homebuyers, young persons just out of college starting their careers, public service employees, and active seniors who are looking to downsize. Such housing choices should include both new construction and rehabilitation of existing, deteriorated homes.

Strategy #2: Increase the supply of housing that is affordable to moderate-income households and inclusive of both homeownership and rental opportunities. This is housing that is affordable to those with incomes between 80 percent and 120 percent of area median income, so that no more than 30 percent of household income is spent on housing costs, including basic utilities.

Strategy #3: Create an equitable distribution of workforce housing throughout the County to avoid concentration. Wherever possible, workforce Dwelling Units should be built in both new and in existing neighborhoods and can be distributed evenly between and throughout the village cores and the rural areas of the County.

Strategy #4: Ensure that all workforce housing, both new construction and renovation of older housing, is of high- quality design and compatible with surrounding housing, for long-term sustainability and minimal future maintenance.

Strategy #5: Enhance effectiveness of existing housing assistance programs through local funding.

Strategy #6: Develop partnerships with non-governmental organizations to help implement the workforce housing strategies.

Strategy #7: Stress in the public forum that our affordable housing initiative focuses on building or rehabilitating housing that is affordable to those whose continued service is vital to Bath’s future vitality.

Implementing Housing Strategies

The County could look at the following as means to implement these recommended strategies that support workforce housing:

- Rezoning land to establish new zoning districts, mixed-use zoning districts, and add more uses and higher densities in existing zoning districts -- which will encourage the collocation of jobs and housing, such as the use of Village Centers.
- Rezoning additional lands for more zoning for commercial and industrial uses, thereby providing the potential for more employment opportunities to County residents.
- Adopting a new Affordable Dwelling Unit (ADU) Ordinance as part of the new update to the Land Use Regulations to help our workforce afford to live here.
- Adopting and implementing a Village Initiatives Plan which could provide opportunities for new housing and rehabilitation of existing housing within certain Village Centers.
- Administrative or permitting fees may be reduced or even waived and permitting can be expedited as a means to support affordable housing.

More specifically, an Affordable Dwelling Unit (ADU) Ordinance can be a primary tool for realizing the construction of affordable dwelling units with certain new development applications, providing regulations for and developer incentives to promote the construction of affordable dwelling units as part of new residential development projects. Such an ordinance is enabled by the authority set forth in Section 15.2-2305 of the Code of Virginia, and may follow the text verbatim.

For purposes of example, another locality in Virginia has adopted certain specifics in their ADU ordinance that prescribe:

A rezoning may be approved with an increase in the developable density by no more than 20%, if the applicants consents to a voluntary and enforceable condition in which at least 12.5% of the units are set aside as Affordable Dwelling Units (and density increases of no more than 10% are allowed if at least 6.25% of the units are set aside in a multi-family project application).

In this example, if fifty (50) new housing units are planned and 12.5 percent of the fifty (50) units are set aside as Affordable Dwelling Units, then the Board of Supervisors could grant a density bonus of ten (10) additional units. In this scenario, the applicant must also agree to an enforceable phasing schedule, whereby market rate units must be built and occupied concurrent with a certain percentage of the affordable units, ensuring that both get built.

One final note, approving new subdivisions with low densities can increase housing costs because of the costs associated with providing infrastructure. If the permitted density through zoning is increased, more housing units can typically be built at a lower cost, because the development costs get spread across a greater number of units. A “cluster zoning” or pattern of development can help make this type of development pattern attractive in a rural community due to its decreased road costs and increasing the chances to mix in some affordable dwelling units. Consequently, providing ADU’s will help to increase access to affordable housing for all of our public service workers.

HOUSING SERVICES

Bath County is the recipient of numerous housing programs designed to ensure citizens have access to adequate, affordable housing. Several organizations work together towards meeting the housing needs of low-income households. A prominent example of such funding collaboration in Bath County is the West Warm Springs Community Improvement Project. The three-year project, completed in December 1996, was responsible for rehabilitating 28 houses, demolishing over 20 vacant or dilapidated structures, and connecting 49 households to public sewer and 16 to public water. In addition, 16 households received indoor plumbing for the first time and one individual became a first-time homeowner.

The following is a partial listing of housing providers serving low- and moderate-income individuals and families in Bath County:

Virginia Mountain Housing – provides low-interest, deferred, and forgivable loans for the installation or improvement of indoor plumbing to owners of substandard housing.
930 Cambria St. NE Christiansburg, VA 24073 (540) 382-2002

Virginia Housing Development Authority – through the Single-Family Regional Loan Fund, assists low-income households in purchasing their first home. The program offers low-interest loans with down payment and closing cost assistance, making monthly mortgage payments more affordable.

601 S. Belvidere St. Richmond, VA 23219 (804) 371-7100

(The Waynesboro Redevelopment and Housing Authority currently services Bath County and may be contacted at *1700 New Hope Rd Waynesboro, VA 22980 (540) 946-9230.*)

Rural Development (formerly Farmer’s Home Administration) – offers low-interest loans to very low- and low-income people in rural areas who are lacking adequate housing and unable to obtain loans from private lenders at reasonable rates. Loans may be used to purchase, build, improve, repair, or rehabilitate rural homes and to provide sufficient water and waste disposal systems.

30 East Preston St. Lexington, VA 24450 (540) 248-0246

Total Action Against Poverty (TAP) – provides a variety of programs addressing the needs of low-income individuals, including emergency housing repairs and weatherization.

P.O. Box 2868 Roanoke, VA 24001 (540) 774-7408

Southeast Rural Community Assistance Project (formerly Virginia Water Project) – encourages the development of water and wastewater systems to serve low-income, rural residents at affordable costs.

145 W. Campbell Ave. Roanoke, VA 24001 (540) 345-1184

SHARE Homeless Intervention Program – seeks to prevent the displacement of individuals and families from their homes as a result of eviction or foreclosure, and assists the homeless in securing permanent housing. The program also provides a training and educational component to ensure self-sufficiency.

Waynesboro Redevelopment and Housing Authority 1700 New Hope Rd. Waynesboro, VA 22980 (540) 946-9230

Alleghany Highlands Housing Alliance – strives to alleviate substandard housing conditions in Bath County, via Emergency Home Repair Funds, Indoor Plumbing and Rehabilitation Funds, and the Homeownership Assistance Program.

403 Ridgeway St. Clifton Forge, VA 24422 (540) 862-0263

HOUSING GOALS

1. Maximize the opportunity for a diverse range of housing to serve the varying needs of Bath County's present and future populations.
2. Support residential growth in designated areas and promote suitable infrastructure to support these communities.
3. Ensure that the County's natural beauty, environmental quality, and rural character are not sacrificed when planning for future housing opportunities.
4. Limit residential expansion in designated rural areas that are not appropriate for development or in areas where there are environmental concerns such as limited water or karst topography.

OBJECTIVES

- a. Be responsive to the housing needs of the County's growing elderly population and allow attached or accessory units for elderly parents.
- b. Increase the availability of rental housing; promote the development of mixed use residential with a range of affordability.
- c. Promote the development of affordable, starter, and workforce housing within the County.
- d. Institute a policy to ensure that developers, and not taxpayers, pay for the costs and impacts of development within the County.
- e. Allocate proper and suitable areas for desirable low, medium, and high-density residential development through zoning and through management of public services and infrastructure.
- f. Allow for village centers/mixed use development in designated growth areas.



ECONOMY

CHAPTER 4 Economy

The ability of any community to sustain itself is largely dependent upon its economic assets. Such assets must be understood and cultivated for any community to flourish economically. Bath County, therefore, faces the challenge of capitalizing on economic opportunities without sacrificing the unique character and beauty for which the County has become so well-known.

Bath County is 540 square miles of lush forest land, mountains, lakes and streams which provide for a wide variety of recreational activities that support the tourism economy. These miles of natural beauty enhance the quality of life and the experience for the traveler. At the same time it is also important to recognize that the County is comprised of 55 percent federal and state park lands over which the County has no control.

The County's median household income for 2011 was \$42,423, significantly below the State's median of \$61,877 (U.S. Census Bureau, Small Area Income and Poverty Estimates). The County's median income, however, was higher than some neighboring jurisdictions such as Highland County where median household income was \$37,286. Despite some inconsistent fluctuations during the last few years, the County's median household income increased 19.4 percent from 2001 to 2011.

According to 2007-2011 ACS estimates, 12.7 percent of all people in Bath County were living under the poverty level, which was higher than the State average of 10.7 percent but lower than the national average of 14.3 percent. Of those families with a female-head of household in Bath County, 26.4 percent fell below the poverty level as compared to 23.9 percent in the state and 29.4 percent nationally.

From 2000 to 2012, the total civilian labor force in the County hardly changed from 2,721 to 2,730 persons, whereas the State's civilian labor force increased 17.8 percent. Unemployment fluctuated between 2000 and 2012, peaking at a rate of 7.0 percent in 2010. The County's unemployment rate was 2.6 percent in 2000 and 5.3 percent in 2012. The unemployment rate in Virginia and the region in 2012 was 5.9 percent and 6.0 percent, respectively (Virginia Employment Commission).

It is recognized that tourism represents the dominant industry within the County. Based on economic impact numbers released by the Virginia Tourism Corporation (VTC) in September 2013, the County of Bath realized over \$241,724,502 in tourism expenditures in 2012, a 2.3 percent increase over the prior year of \$236,220,818. According to that same VTC Economic Impact Report, tourism generated 1,613 jobs in the County. Thus the local economy was fueled by 3 out of 5 workers being employed in the tourism industry. This far outpaces the state and regional norms.

Government (federal, state and local) was the sector with the second highest percent employment (18.4 percent) while Construction was third (6.8 percent). The Services sector as a whole comprises over 58 percent of Bath County's workforce filling needed jobs in the hotel/motel, restaurant, and tourism industries. The Agriculture, Forestry and Fishing sector of the economy is the smallest sector, making up just one percent of the total jobs in the County.

The average weekly wage in Bath County in all sectors of the economy increased 22.9 percent, from \$516 to \$634, between 2002 and 2012. During this same time period, Virginia's average weekly wage increased 36.0 percent, from \$700 to \$952. Although it makes up just one percent of the County's workforce, one category where the wages in Bath County exceed the State average is the Agriculture, Forestry and Fishing sector. In Bath County, the average weekly wage for the Agriculture, Forestry & Fishing industry was \$997 in 2012, compared to the State average of \$552.

The County logged nearly \$66.5 million in total taxable sales in 2012, down from almost \$78.0 million in 2002. Of the total taxable sales in 2012, \$49.5 million came from the Accommodation business classification (Virginia Department of Taxation, Weldon Cooper Center).

The total number of farms in the County fell slightly from 120 in 2007 to 116 in 2012 (Census of Agriculture). The total number of acres farmed increased 7.6 percent during the same time. The market value of products sold increased 56.6 percent to a total of just over \$6 million. Of the agricultural products sold from Bath County farms in 2012, 77.9 percent of the total market value was from livestock and poultry and the other 22.1 percent was from crop sales including nursery and greenhouse.

ECONOMY GOALS

1. Retain and/or expand existing businesses and industry.
2. Work to diversify Bath County's economy and lessen its reliance on the tourism/service industry sector.
3. Attract new businesses and small industry that will have a low impact on Bath County's environmental, scenic, and rural character but provide jobs and revenue to the County.
4. Build relationships with regional partners, schools, and local businesses to enhance opportunities for the local labor force, including opportunities for the younger workforce.
5. Attract higher wage positions to the area that will provide increased wages for the adult population.
6. Continue to promote and market tourism in Bath County.
7. Promote, expand, and enhance the local agriculture industry.
8. Encourage the growth of small locally-owned private businesses as opposed to a large-scale "one-size fits all" approach to new business services.

OBJECTIVES

- a. Work with partners such as the Shenandoah Valley Partnership, Central Shenandoah Planning District Commission, Bath County Chamber of Commerce, and existing businesses and industry to retain and/or expand existing businesses and industry.
- b. Diversify the economy by working with appropriate parties that have expressed an interest in locating here, and pursue new businesses that would fit in with the existing environment.
- c. Prepare, with public input, and adopt a strategic plan for the economic development of the County. The strategic plan should identify the strengths and weaknesses of the County and develop an action plan for attracting new industries that are compatible with the County.

1. Target Industries. The strategic plan should research and make recommendations on which types of businesses and industries are most compatible with the County's strengths and assets. The County should focus its business promotion and recruitment efforts on the target industries identified by the strategic plan.
 2. Develop an Existing Industry Program. The strategic plan should make recommendations on how the County should work to improve its outreach efforts for existing businesses and industries.
 3. Recruitment of Business. The strategic plan should make recommendations on strategies the County should employ for recruiting new businesses and industries. The County should be proactive in seeking to recruit new businesses and industries.
 4. Identify Sites. The strategic plan should identify the best potential industrial and business sites which are suitably located and which have adequate land, roads and utilities to support business and industrial development.
 5. Training. The strategic plan should make recommendations for developing a workforce training program to ensure that businesses and industries have a sufficient supply of skilled and well-trained workers available
 6. Financial Incentives for Expanding Existing Businesses. The strategic plan should make recommendations on the establishment of a financial incentive program to encourage and assist existing businesses and industries in expanding their operations.
 7. Financial Incentives for Encouraging New Businesses. The strategic plan should make recommendations on the establishment of a financial incentive program to encourage and assist in the attraction of new businesses and industries to the County.
 8. Marketing Strategies. The strategic plan should make recommendations on how the County can market itself for potential new businesses and industries. The marketing strategies may include improvements to the County's website as it relates to economic development, as well as any other strategies for marketing and promoting the County to its target businesses and industries.
- d. Pursue a partnership program to enhance potential relationships between the schools, local businesses, and other partners to create an enabling environment to enhance opportunities for the local labor force, particularly the younger workforce.

- e. Attract environmentally low-impact, high wage industries, such as those in the areas of technology, home-based, or telecommuting businesses and business incubators. Identify strategies to attract higher wage positions.
- f. Create an inventory of existing buildings and encourage new development to take place in existing vacant buildings, rather than constructing new ones. Encourage property owners, businesses, and investors to take advantage of preservation easements and state and federal rehabilitation tax credits, where available for the restoration of historic structures.
- g. Provide adequate land and facilities for future business and industrial development and ensure that new business and industrial development occur in suitable locations compatible with existing and planned adjacent land uses.
- h. Provide skilled and vocational training in the High School and encourage our local businesses to employ these skilled laborers. Work with Dabney Community College to develop distance learning programs at the Mertz Technical Center to assist in training residents in skills that will increase their earning potential.
- i. Work with local/regional partnerships for developing a strong business retention and expansion program.
- j. Continue to strengthen Bath County's working relationship with agencies such as the Virginia Economic Development Partnership, Shenandoah Valley Partnership, Central Shenandoah Planning District Commission, Economic Development Administration, and the Appalachian Regional Commission.
- k. Continue to support the marketing efforts of the Bath County Office of Tourism designed to attract tourism dollars to the County. Support local tourism and link it to the region's many tourism programs.
- l. Promote historic sites that are accessible to the public as part of the tourist economy.
- m. Maintain the overall high quality of life in the County which serves as a major attraction for new employers and employees. Capitalize on the economic assets of the agricultural landscape, natural beauty, and historic resources.

- n. Promote agriculture to expand and enhance the local agriculture industry, including innovative farming practices, new products, and supporting businesses.
 - 1. Continue to support and encourage the continuing work of the Cooperative Extension Service in providing technical assistance to the local agricultural industry.
 - 2. Assist farmers with farmland preservation efforts. This can be achieved by educating the public about the importance of farmlands (Buy Fresh/Buy Local) and developing a Purchase of Development Rights (PDR) program which are designed to compensate landowners who voluntarily place an agricultural conservation easement on their property.
 - 3. Explore and promote all possibilities for expanding agricultural tourism. Provide farmers with guidance in developing agritourism programs for their existing farms through the “Fields of Gold” program of which the County of Bath is a founding member. Agritourism is defined as an “on-farm activity or event that appeals to the public (city and suburban dwellers) who want to experience life on the farm in brief, enjoyable segments.”
 - 4. Facilitate small scale farming to support the economy of the County and a local farmers market to allow for the sale of these products.
- o. Promote recreational opportunities to enhance tourism.
- p. Take advantage of the public’s interest in maintaining “dark skies” as a tourism attribute and attraction.
- q. Increase the number of telecommuters as a livelihood.
- r. Support adequate setbacks, vegetative buffering, dark sky lighting, and unobtrusive signage in order to protect primary roadways.
- s. Consider developing a design guideline for new construction and renovation of buildings that will maintain community character with respect to the County’s history and natural beauty.



GOVERNMENT & FINANCE

CHAPTER 5

Government & Finance

The role of government is continually changing and should be responsive to the needs of all its citizens. In order for Bath County to best meet the needs of its residents, local obligations must be prioritized and reflected in a strategic plan of governance and funding.

The citizens of Bath County elect a 5-member Board of Supervisors to four-year terms who adopt the annual budget, set policy and direction for the County, and appoint a County Administrator.

The primary local revenue sources for the County are property and other taxes comprising 58 percent of all local revenues in FY2014. Public Service Corporation taxes, service charges, certain fees, fines, grants, and other miscellaneous sources account for the additional local revenues.

The County's total Maintenance, Operations, and Capital expenditures were \$10,590,534 in FY2014, down 28.5 percent from FY2008. Education expenditures account for 47 percent of County expenditures.

For example, elementary, secondary, and other instruction comprised 64 percent of the \$10,434,989 to be spent on Education in FY2014. Operations and Maintenance increased by 0.9 percent, School Food increased by 9.7 percent, and Transportation Services increased by 3.5 percent in a budget that was proposed to be low in growth for FY2014.

Bath County increased its total outstanding debt from \$611,140 in FY2006 to \$775,000 in FY2014. This number has increased due to the \$8.74 million for renovations to Bath County High School that were assumed. Debt Service was \$1,087,438 in the FY2014 budget.

Local revenues collected from the categories of "Permits, Fees, & Licenses" and "Fines and Forfeitures" are well below the state per capita average.

GOVERNMENT & FINANCE GOALS

1. Provide the best possible government service to all residents of Bath County.
2. Strive to increase the County's financial resources.

OBJECTIVES

- a. Continue to use the Capital Improvements Plan and the recommendations of the Planning Commission as a basis for allocating funding for capital projects.
- b. Pursue the benefits of consolidating similar local services, such as those existing in both the school system and the local government.
- c. Aggressively pursue alternative funding sources (i.e. – grants) to provide new revenue streams for capital improvements.
- d. Continue to maintain an adequate fund balance.
- e. Develop a long-term plan that promotes the common interests between businesses and the County.
- f. Fund, provide, and strive to retain adequate staffing levels to meet the needs of the County.



NATURAL ENVIRONMENT

CHAPTER 6

Natural Environment

Nestled in the lush Alleghany Mountains, Bath County is a scenic playground known all over the world. Because of its reputation, the preservation and protection of the County's unique natural resources has become a long-term goal of local citizens who understand the economic potential in preserving our ecological and geographical amenities.

While the County is obligated by state and federal regulations to protect attributes such as air and water quality, and unique habitats, the ultimate responsibility of achieving a healthy balance between economic and environmental interests rests squarely on the shoulders of our citizens.

The purpose of the following information is to identify critical natural resources in the County and recommend strategies for sustaining these resources as the County continues to develop. Bath County is characterized by a humid temperate climate with relatively moist winters and warm summers. The overall topography of the County consists of high, narrow mountain ridges, often with steep slopes, alternating with relatively narrow river valleys (See Map 6.1).

Many areas of the County have slopes that exceed 25 percent – these areas are generally unsuitable for both cultivation and development (See Map 6.2). When combined with conservation practices, these lands may be used for outdoor recreation, wildlife management, watershed protection, and forest purposes.

Bath County's geology consists of sedimentary rocks and is characterized by alternating valleys and ridges stretching from the northeast to the southwest (See Map 6.3). The mountains are generally capped by hard resistant sandstone, while the valleys have soft shale and soluble limestone.

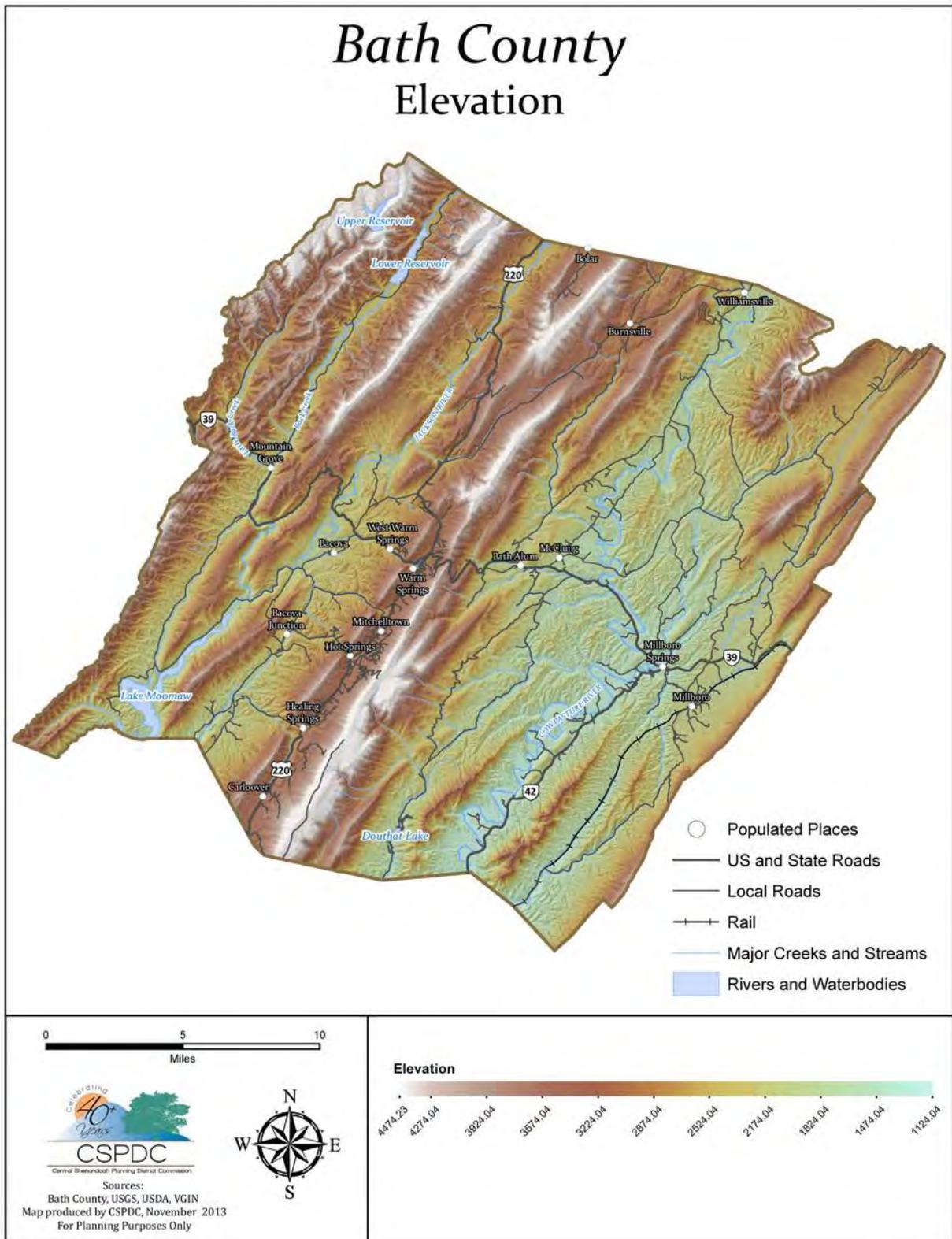
The County contains abundant supplies of impure limestone which can be used as road material and agricultural lime, hydraulic lime, explosives, and natural cement. High calcium limestone, also found in the County, is used for fertilizer, dye, glass, lime, mineral feeds, paper, and Portland cement. Clay material found has been suitable for brick, tile, and pottery (See Map 6.4).

Much of Bath County and the surrounding areas sit on areas of carbonate rock such as limestone or dolomite where there may be little or no surface drainage. These areas of karst topography often contain many underground caves or a network of caves. Development on karst sinkholes should be avoided (See Map 6.5).

The two largest rivers in the County, the Jackson and the Cowpasture, converge to form the upper reaches of the James River watershed (See Map 6.6). Many of the tributaries and the rivers in Bath County are characterized by floodplains (See Map 6.7). Development in the floodplains should also be avoided.

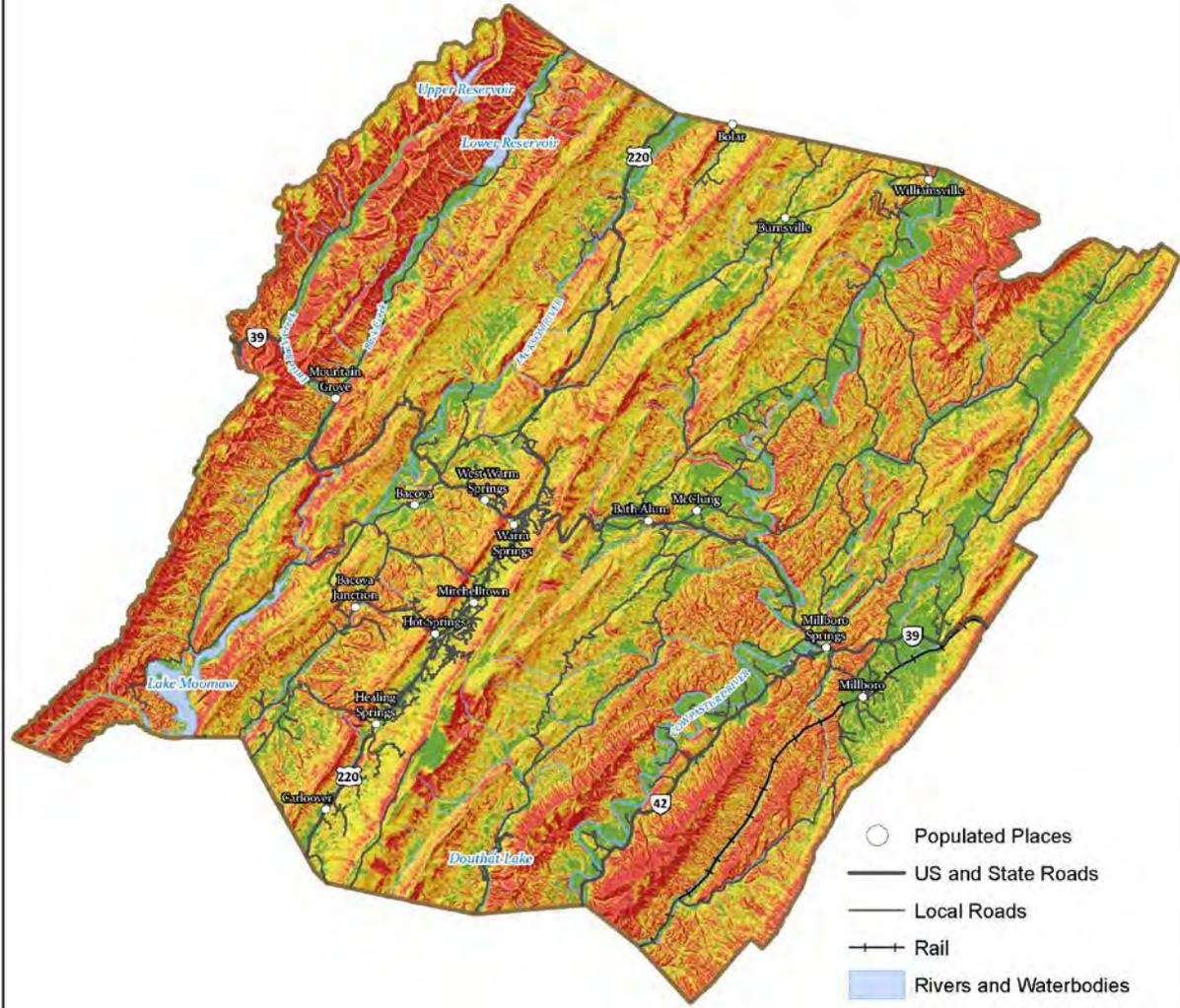
Timber production in the County had a harvest value of \$201,252 in 2010, down from recent years. Nearly 90 percent of the timber harvested was hardwoods (Virginia Department of Forestry, 2010 Locality Value and Volume). While timbering is not a dominant industry in Bath County, forest management is essential to protecting watersheds, wildlife, and outdoor recreation.

Map 6.1

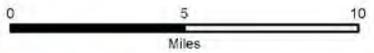


Map 6.2

Bath County Generalized Slope Classification



- Populated Places
- US and State Roads
- Local Roads
- +— Rail
- Rivers and Waterbodies
- Major Creeks and Streams



Sources:
 Bath County, USGS, USDA, VGIN
 Map produced by CSPDC, November 2013
 For Planning Purposes Only

Slope

- Less than or equal to 8%
- Greater than 8% and less than or equal to 16%
- Greater than 16% and less than or equal to 25%
- Greater than 25%

Map 6.3

Bath County

Generalized Geologic Formations



0 5 10
Miles

Sources:
 Bath County, USGS, USDA, VGIN
 Map produced by CSPDC, November 2013
 For Planning Purposes Only

Geologic Formation

- Beekmantown Group
- Bralier Formation
- Chemung Formation
- Hampshire Formation
- Juniata, Oswego, Martinsburg (Reedsville and Dolly Ridge), Eggleston Formation
- Keefer Sandstone, Rose Hill and Tuscarora Formations
- Millboro Shale and Needmore Formation
- Moccasin Formation, Bays Formation, Unit C, Unit B, Unit A
- Pocono Formation
- Ridgeley Sandstone, Helderber and Cayuga Groups

Map 6.4

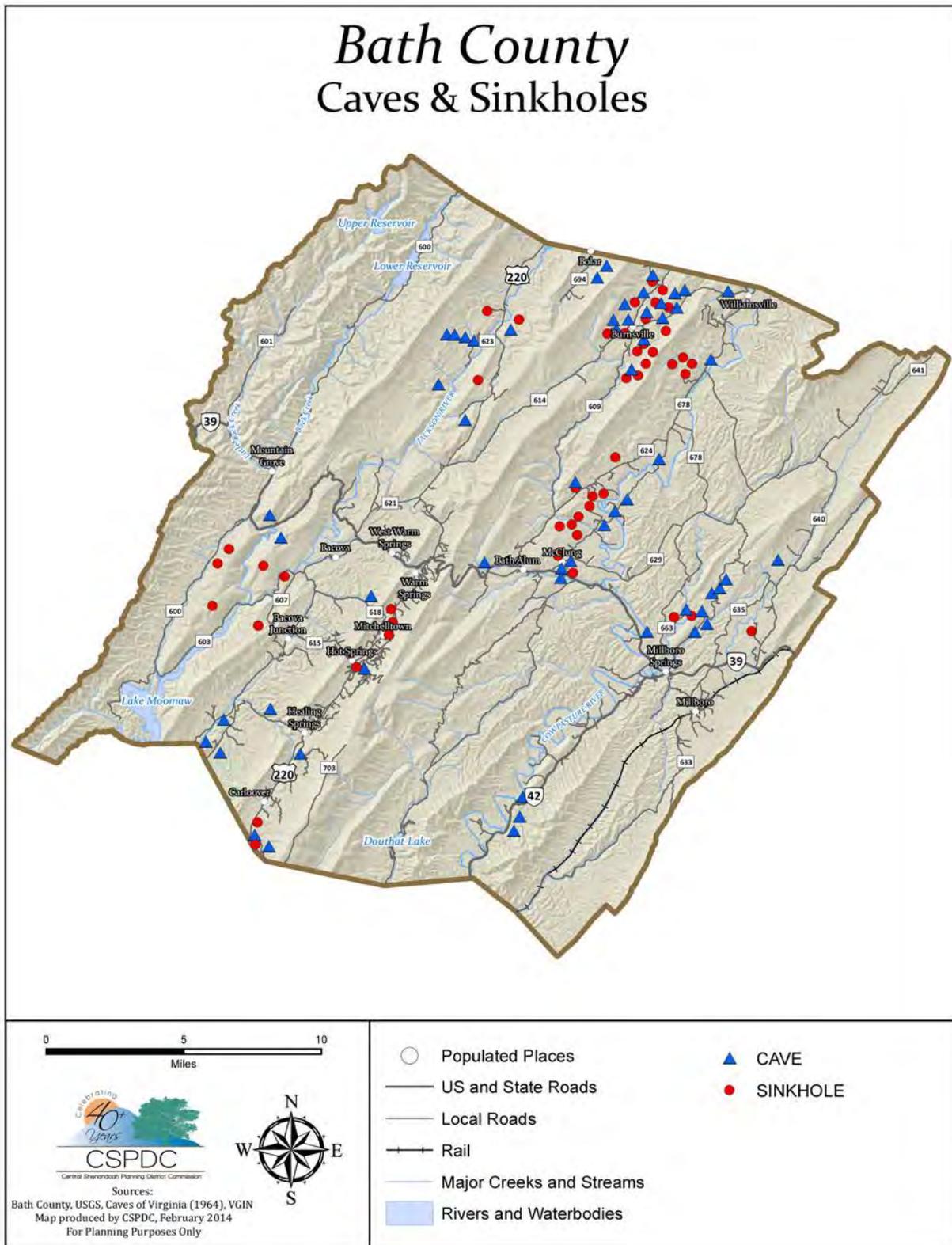
Bath County

Generalized Soil Association

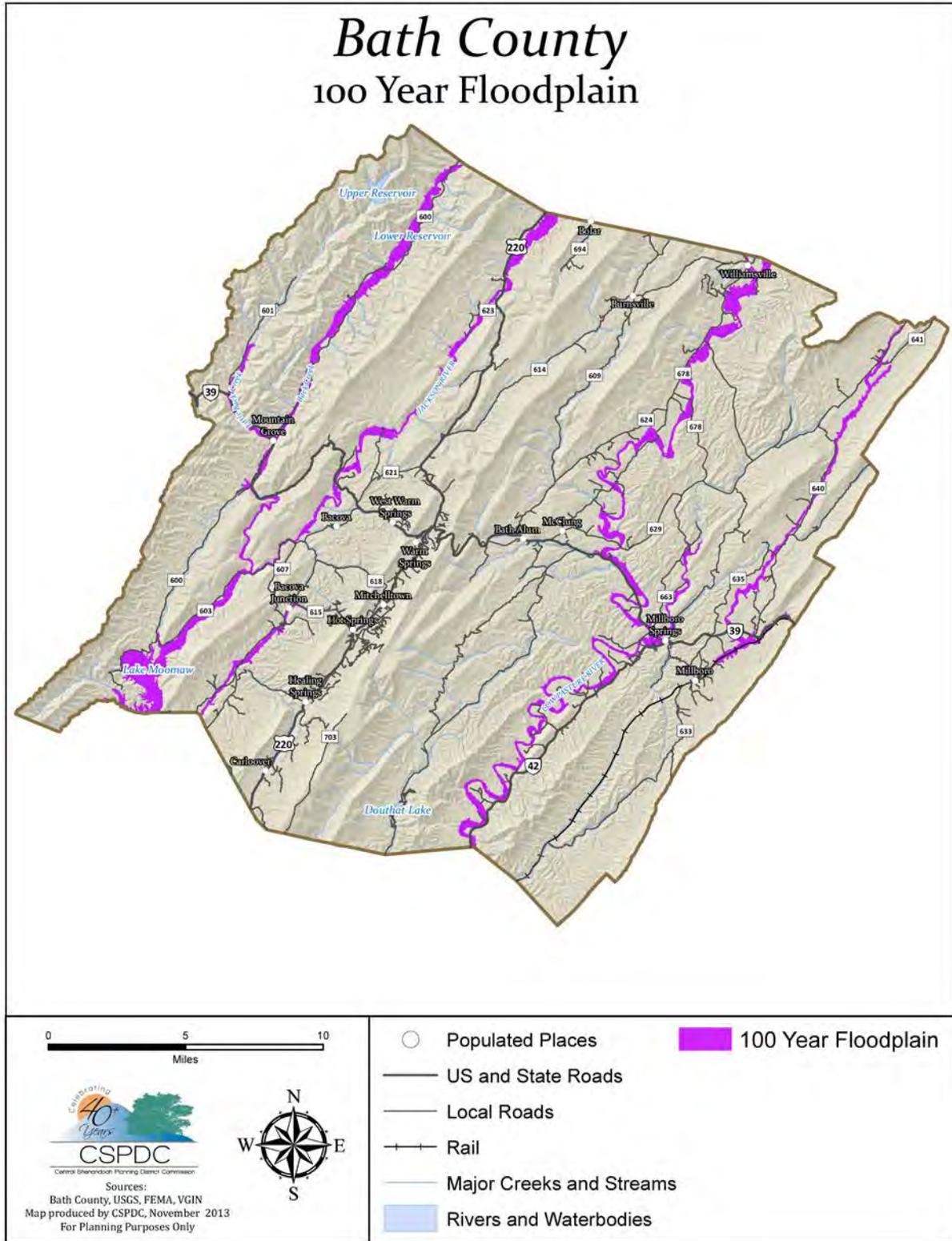


	<ul style="list-style-type: none"> ○ Populated Places — US and State Roads — Local Roads + Rail ■ Rivers and Waterbodies — Major Creeks and Streams 	<p>Soil Type</p> <ul style="list-style-type: none"> ■ Berks-Weikert-Laidig ■ Frederick-Carbo-Timberville ■ Moomaw-Jefferson-Alonzville ■ Opequan-Berks-Blackthorn ■ Shottower-Laidig-Weikert ■ Wallen-Dekalb-Drypond
<p>Sources: Bath County, USGS, USDA, VGIN Map produced by CSPDC, November 2013 For Planning Purposes Only</p>		

Map 6.5



Map 6.7



NATURAL ENVIRONMENT GOALS

1. Preserve and protect air quality in Bath County and the vicinity.
2. Reduce potential environmental problems associated with Karst topography.
3. Conserve the County's soil resources and protect prime soils.
4. Protect local water resources and unique aquatic habitats.
5. Minimize flood-related damage to structures, personal property, and public facilities.

OBJECTIVES

- a. Seek the establishment of clean industries that do not produce harmful emissions.
- b. Support regional efforts to reduce automobile use through programs such as Rideshare.
- c. Consider geologic concentrations in areas before designating land uses.
- d. Consider an ordinance to address construction, development, or site disturbance in areas with known Karst features.
- e. Work with the Department of Environmental Quality to monitor mineral resource exploration activities so as to ensure groundwater resources are not contaminated.
- f. Encourage developers to complete a detailed, site-specific soil survey before construction.
- g. Acknowledge the County's potential for affecting soil and water quality on a regional scale by supporting the County's Erosion and Sediment Control Ordinance. Support state/federal programs that improve nutrient run-off for agriculture programs.
- h. Utilize zoning, subdivision, and site plan requirements to reduce the amount of impervious surface built in watersheds.
- i. Pursue cooperative programs with neighboring counties to reduce pollutant discharges into streams and rivers.
- j. Require all industries desiring to locate in the County to meet and maintain water quality standards as may be set forth by regulation/law.

- k. Encourage property owners in the floodplain to retain undeveloped property in a natural state.
- l. Prohibit further subdivision of lots in the floodplain for development.
- m. Consider designating environmentally sensitive areas with C-1 Conservation zoning, perpetually protecting such areas from development.
- n. Adhere to the Virginia Department of Forestry's Code of Silviculture Best Management Practices.



TRANSPORTATION

CHAPTER 7

Transportation

Transportation is a word that means different things to different people. To most individuals, it means a car; to the truck driver or bicyclist it means roads; to a child it means sidewalks; to the elderly or handicapped it means buses or lift-equipped vans; to the pilot it means airports; to the trainmaster it means railroads; but, to everyone it means a link. Transportation is the thread that links people with places. Moving people around and through Bath County is an important issue and decision-makers will rely on this transportation element for guidance in making future transportation decisions which will affect not only how people are transported but also how public dollars are to be spent.

In addition, transportation plays an important role in influencing growth patterns. The creation or improvement of roads can open land to development, change travel routes in ways that immediately change individual land use decisions, and eventually can redirect land use patterns. Because of this close interrelationship, the transportation element must be developed and reviewed in terms of its consistency with other elements of the comprehensive plan, especially the land use element.

INVENTORY/EXISTING TRANSPORTATION FACILITIES

Bath County is served by a number of primary and secondary roadways, a general aviation airport, private taxi and limousine services, and several motor freight carriers.

Roadways – The Virginia Department of Transportation (VDOT) classifies major roads in the state by the way they function within the road network. The functional classification system is the process by which streets and highways are grouped into classes, or systems, according to the part that any particular road or street plays in serving the flow of trips through a highway network. A roadway's functional usage is based on mobility and accessibility. Mobility is measured in respect to the ability of traffic to pass through a defined area in a reasonable amount of time. Accessibility is measured in terms of the road systems capability to provide access to and between land use activities within a defined area (Refer to Map 7.1).

VDOT uses the functional classification system to determine federal-aid highway program funding eligibility, applicable geometric design standards of the VDOT Road and Bridge Design Manual, determining maintenance payment amounts that a locality will receive if the locality has responsibility for road maintenance, access management features, highway performance monitoring system federal reporting, secondary street acceptance requirements, as well as National Highway System (NHS) facility performance standards determined by Federal Highway Administration (FHWA). Functional classifications applicable to Bath County are as follows:

Primary Roads – Primary roads are generally routes providing service which is relatively continuous and of relatively high traffic volume, long average trip length, high operating speed, and high mobility importance. Every United States (U.S.) numbered highway is a primary road, as well as numbered State highways below 600.

The primary roads in Bath County can be further classified as minor arterials. Minor arterials normally perform the tasks of: linking cities and large towns, helping developed areas of the state stay within a reasonable distance of arterial highways, providing service to corridors with trip lengths and travel density greater than those served by collectors or local roads, and providing for relatively high overall speeds, with minimum interface to through movement.

The primary roads in Bath County are:

U.S. Route 220 – Bath County’s main north-south highway. It provides a direct connection to Covington, Clifton Forge, and Interstate 64 to the south, and to Highland County and northeastern West Virginia to the north.

State Route 39 – The County’s major east-west highway. It passes through Brattons Bridge, Bath Alum, West Warm Springs, and Mountain Grove, and provides access to Lexington, Route 11, and Interstate 81 to the east and Marlinton, West Virginia, and U.S. Route 219 to the west.

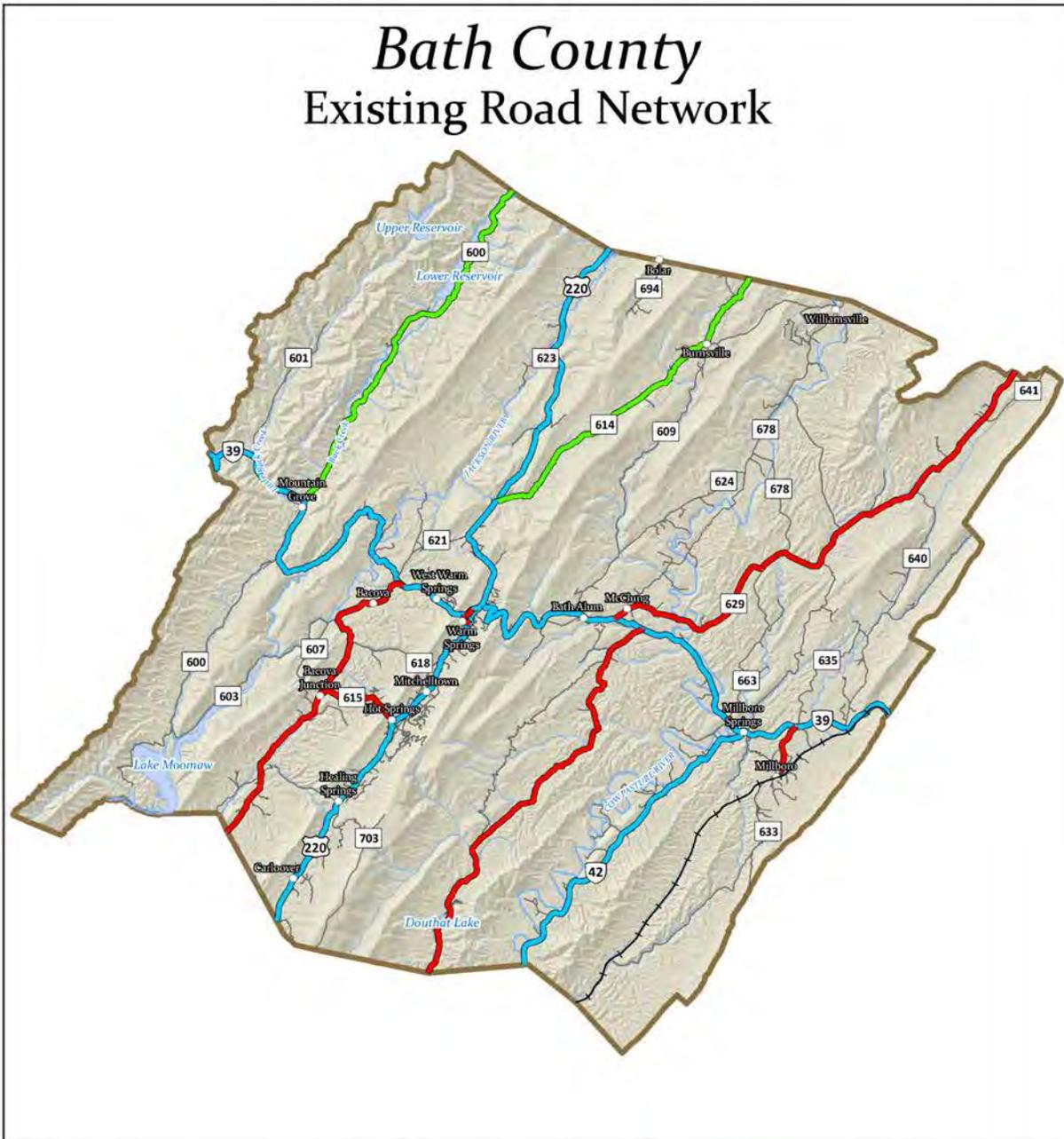
State Route 42 – Passing through Nimrod Hall, Millboro Springs, and Brattons Bridge, it serves the southeastern quadrant of the County. Route 42 provides access to U.S. Route 60 and Interstate 64 to the south and Staunton and Interstate 81 to the north.

Secondary Roads – Secondary roads are those with average traffic volumes, trip lengths, and operating speeds. Secondary roads also collect and distribute traffic between local roads and primary roads and serve as a link between land access and mobility needs. There are more than 243 miles of secondary roads in Bath County providing access to housing, jobs, medical facilities, and shopping. VDOT does all maintenance of Bath County Roads, including snow removal. Secondary facilities are maintained in an acceptable manner by including needed maintenance and repair projects in the State’s Six Year Improvement Program (SYIP).

The secondary roadways in Bath County, like the primary roads, can be further classified into groups of major collectors and minor collectors. Major collectors typically perform the job of providing service to any county seat not on an arterial system and to larger towns not directly served by higher systems, linking the former to nearby larger towns or routes of higher classification, and serving the more important intra-economy travel corridors. Minor collectors, generally spaced at intervals consistent with population density, perform the following tasks: collecting traffic from local roads and bring all developed areas within a reasonable distance of a collector road, providing service to the remaining smaller communities, and linking local traffic generators with their rural hinterland.

Map 7.1

Bath County Existing Road Network



	<ul style="list-style-type: none"> Populated Places Local Roads Rail Rivers and Waterbodies Major Creeks and Streams 	<p>Federal Functional Classification</p> <ul style="list-style-type: none"> Minor Arterial Major Collector Minor Collector
<p>Sources: Bath County, USGS, VDOT, VGIN Map produced by CSPDC, November 2013 For Planning Purposes Only</p>		

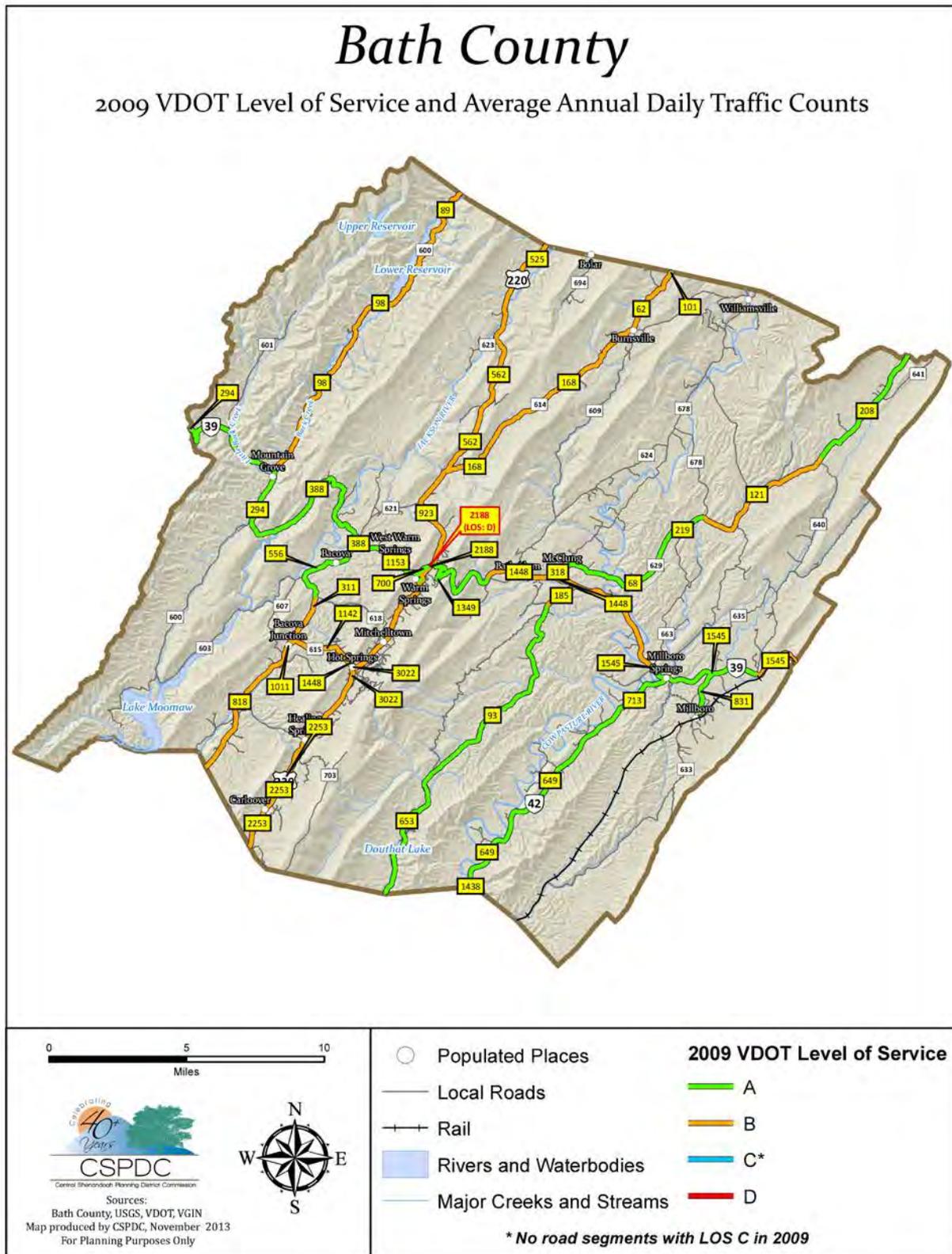
Existing Network Level of Service

Maintaining acceptable levels of service (LOS) on roadways is essential to preserving and enhancing interregional mobility, increasing transportation efficiency, and coordinating transportation and land development. Levels of service are qualitative measures describing operating conditions of roadways and are given designations from A through F, with A representing the best operating conditions and F the worst. Level of service C is the generally accepted minimum operating standard for rural primary roadways. Under LOS C conditions, a driver is able to maintain the set speed limit, stopping only for stop signs or signals. When proceeding through a stop sign or green light, the driver is able to return to the set speed limit without delay. A driver may occasionally slow down for cars entering the roadway from intersecting streets or driveways, however, the majority of the trip can be completed without impedance.

Due to the combination of rolling and mountainous terrain throughout Bath County, the level of service conditions for mountainous terrain were used for this analysis. The maximum daily traffic numbers also assume that ten percent (10%) of all traffic will occur during the peak travel hours and that, due to terrain, 60 percent of the roadway segments are no passing zones.

Based on the most recent counts supplied by VDOT and the level of service guidelines provided in the 2010 Highway Capacity Manual, the existing roadway network in Bath County provides a generally good level of service for motor vehicle transport (See Figure 7.2 and Map 7.2). There is, however, one roadway segment in the County that is operating at LOS D. This is a 787-foot segment of U.S. Route 220 between the intersections with Route 39 South and Route 39 North, a minor arterial road.

Map 7.2



Airports – Bath County is currently served by Ingalls Field, a commercial airport atop Warm Springs Mountain. Ingalls Field has a main runway and a crosswind runway. The main runway is 5,601 feet in length and is 100 feet wide. It can accommodate all but the largest aircraft including those of the size and weight of a DC-9 and smaller. The crosswind runway is currently a grass runway accommodating gliders and light aircraft. The airport has a full instrument landing approach and has also obtained global positioning approach capability. Although there is no scheduled commercial airline service to the airport, general aviation and charter services are provided. The airport is currently pursuing runway expansion and obstacle removal to meet federal standards, and is soliciting County funds as a 2 percent project match.

Currently, the airport is publicly owned by the Bath County Airport Authority. The airport was previously owned by the Ingalls Field Airport Authority, which was formed in 1978 by the Counties of Bath and Alleghany, the City of Covington, and the Town of Clifton Forge. In late 1994, all members of the Authority except Bath County withdrew; changing ownership over to the Bath County Airport Authority.

Rail – The only operating railroad in Bath County is the Buckingham Branch Railroad track, with CSX retaining overhead trackage rights. The railroad traverses the southeastern portion of the County passing through Millboro. The line lies adjacent to the Millboro Industrial Park and extends westward through Clifton Forge and Covington and into West Virginia. It extends eastward through Staunton and Charlottesville, ending at the Richmond rail terminal. The segment that passes through Bath County is part of the Richmond and Alleghany Division; its operational division goes from Richmond, through Charlottesville, to Clifton Forge.

Although the Buckingham Branch Railroad line carries both freight and passenger traffic, there are no terminals or stations in Bath County. Freight traffic along the line averages between three and five million gross tons per mile of track per year.

Amtrak’s “Cardinal” passenger train operates along the line three times a week as it travels between New York City and Chicago via Philadelphia, Washington, D.C., Cincinnati, and Indianapolis. The passenger station nearest to Bath County is in Clifton Forge, a small town about five miles south of the Bath County line. In 2013, ridership on the “Cardinal” averaged close to 113,103 passengers a year¹ with approximately 2,750 of those passengers ticked to Clifton Forge². The Cardinal is the only route available through this station.

CSX, the previous owner, began to consider discontinuing the Mountain line, which is now the Buckingham Branch Railroad line, in 1989 and decided to either sell or abandon it by 1992. Local communities along the line felt strongly that the line was important to their future economic development. Consequently, the Greater Shenandoah Valley Development

¹ Amtrak, <http://www.amtrak.com/ccurl/730/658/FY13-Record-Ridership-ATK-13-122.pdf>

² Great American Stations, <http://www.greatamericanstations.com/Stations/CLF>

Commission was formed to negotiate purchase of the line. Buckingham Branch has since reevaluated the economic impact of keeping the line running and at this time the line is still in operation.

Bicycle and Pedestrian Facilities – Bath County is graced with beautiful mountains, wooded areas, and an abundance of outdoor recreational facilities. Hiking is available throughout the County and is an important part of the tourist industry for the area. The County has very limited on-street pedestrian facilities (sidewalks), only in the small Hot Springs commercial area, and no dedicated on-road bicycle facilities.

Public Transportation – Presently, Bath County has no public transportation services. Some shuttling services for the elderly and disabled are provided by the Bath County Senior Center in Warm Springs and the Valley Program for Aging Services. Alternative transportation modes are challenging to provide due to the rural nature of the County, with residents living in small communities or isolated rural areas.

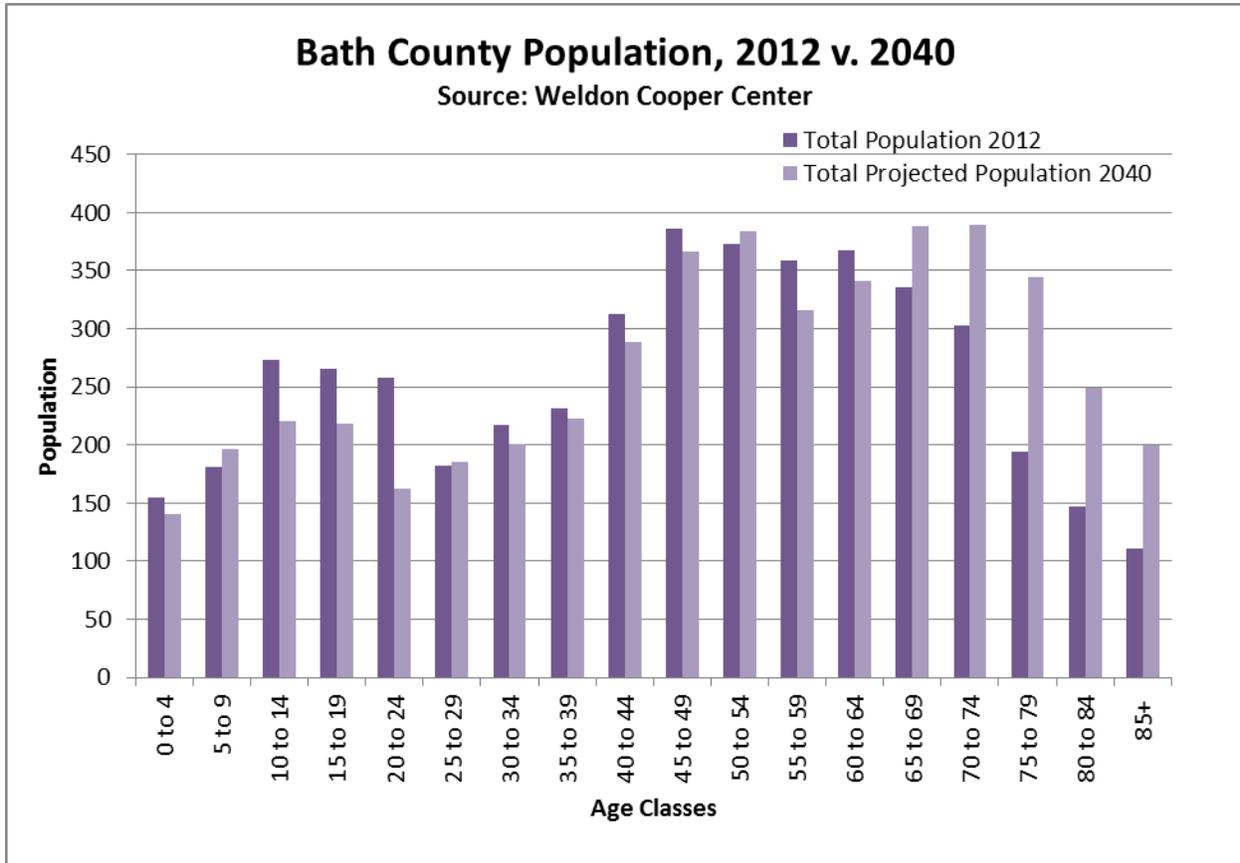
PLANNING ASSUMPTIONS

Demographics

Between 2000 and 2010, the County's population decreased by a little over six percent, compared to the five percent increase seen between 1990 and 2000. According to Weldon Cooper Center data, population decreased one and a half percent between 2010 and 2012, but there is projected future growth for the County. Between 2012 and 2040, the County's population is expected to increase by three and a half percent. This modest population growth is not likely to reduce roadway network capacity in the future.

Weldon Cooper Center projections show the County's population continuing to age, with a significant increase in the number of residents 65 and older (See Figure 7.1). At the time of the 2010 Census, around 1,000 persons were 65 and older, or 22 percent of the total population. In 2040, it is anticipated to increase to around 1,500 persons 65 and older, 32 percent of the total population.

Figure 7.1: Changes in population between 2012 and 2040 illustrate the Baby Boomer population "bulge" continuing to age



Meeting the transportation and mobility needs of this aging population will continue to be a challenge for the County for the next 20-30 years. The elderly, along with persons with disabilities, often need assistance with transportation, access to health care, financial advising, assistance with home maintenance, and other social services. Not only is there a need to help this population live independently for as long as possible, but transit demand should also be addressed. As further detailed in the Needs Assessment section of this chapter, there is no public transportation for the County, although there are limited shuttling and demand response services.

Employment

Over 60 percent of working residents are employed within the County, resulting in about half of the workers having a commute of 30 minutes or less. Approximately 30 percent travel outside the County to their respective workplaces, most of which are in Alleghany County. The remaining workers travel outside of the state to their place of employment.

With the presence of natural hot springs as a tourist attraction, a large number of jobs in the County are concentrated in tourism, most notably with The Omni Homestead Resort in Hot Springs. Other large employment sectors include manufacturing, educational services, health care, social assistance, and utilities. Other large employers within the County are Augusta Lumber, Bluegrass Woods, Bath County Community Hospital, Bath, Alleghany, and Rockbridge Counties Electrical Cooperative (BARC), and Dominion Power. These industry sectors, employers and the number of jobs they provide have not changed significantly since the adoption of the 2007 Comprehensive Plan and the County does not anticipate significant changes in the coming years.

Community Facilities

Schools and Institutions: Bath County Public Schools consists of two elementary schools (grades K-7), one high school (grades 8-12), and one career and technical center, and there are no foreseen school additions for the County. Thus, the elementary schools, located in the eastern and southern portions of the County, will not need to see expansion of roadway networks. Bath County High School and the Mertz Career and Technical Center, housed within the high school, are centrally located in the County. Similar to the elementary schools, no network expansion is needed, but a congestion issue along that segment of U.S. 220 does need to be considered, and is addressed in the Needs Assessment section of this chapter.

Water and Sewer: Bath County is served by three water companies and one wastewater company. The Bath County Public Service Authority, The Homestead Water Company, and Millboro Water Association provide water services, and additionally Bath County Public Service Authority provides wastewater services. There are a small number of proposed changes to the current system in the central and eastern parts of the County, as detailed and mapped in the Public Utilities chapter. These proposed changes provide extensions to the existing infrastructure for both sewer and waterlines. Current systems are encountering several challenges, namely age and contamination. The proposed extensions of the current systems are not to serve new development in the County, but are needed to take current residents off septic systems and put them on the public system.

Land Use

The County does not anticipate changes to its current land uses and does not plan to make changes to the zoning map as a result of the 2014 Comprehensive Plan update.

Within the general land use categories, developments occurring in the County fall into one of the following categories: Industrial Development, Commercial Development, Residential Development, and Mixed Use. The County continues to have a strong preference for development that complements its natural setting.

This continuation of existing low-intensity land uses will not require the addition of new vehicular capacity or traffic control in the roadway network.

Summary

With little to no changes anticipated in population, employment, schools, municipal infrastructure, land use or zoning, the County does not anticipate a need to expand the roadway network. Mobility, especially for the elderly and disabled, and roadway safety continue to be a challenge and will be addressed in the Needs Assessment section of this chapter.

NEEDS ASSESSMENT

Current and Projected Performance and Conditions

To ensure that the existing transportation network is operating in an acceptable manner, the County monitors annual traffic volumes. Traffic counts combined with the roadway functional classification, provide the County with information necessary to determine existing levels of service, make informed decisions about needed roadway improvements, and identify potential service delivery problems before they occur. This is particularly useful when historical counts are available allowing for the projection of future traffic volumes based on past trends. Monitoring traffic count data also allows for the realistic assessment of the impact of proposed development on the existing transportation network.

Traffic counts alone do little to provide a clear picture of operational conditions of the transportation network. Level of service data can provide a fuller picture of current and future ground conditions. As discussed in the Inventory section of this chapter, there is a general good level of service for motor vehicle support in the County. In the future, level of service throughout the County shows the range of positive change, no change, or negative change (See Figure 7.2 and Map 7.3). There is still a majority of segments maintaining a LOS A or B, with the

addition of some LOS C. U.S. 220, VA 39 to VA 39 North, the one segment operating at LOS D, is projected to stay at that condition.

In addition to monitoring traffic volumes and level of service for capacity measurements, the County and VDOT are working to address existing and potential safety deficiencies. Certain intersections within the County have geometric deficiencies, including poor sight lines and absence of turn lanes, and need to be studied and improved in the future. The County identified several intersections in need of safety improvements, five of which were prioritized to pursue for inclusion in the SYIP.

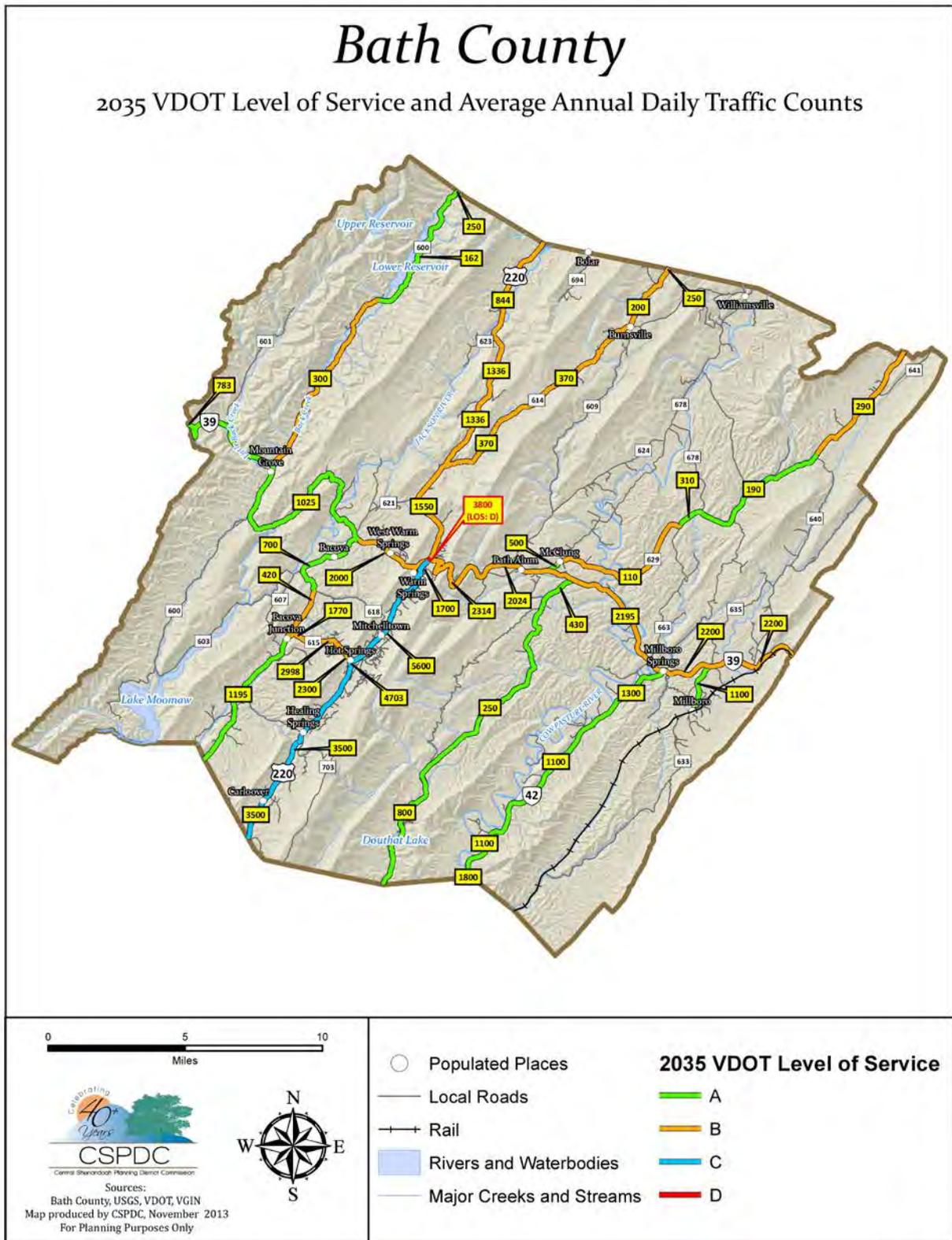
Figure 7.2: Bath County Road Network

Facility Name/Route ID	Segment From	Segment To	Class	2009 AADT	2035 AADT (Projected)	2009 Level of Service	2035 Level of Service (Projected)
SR 39	West Virginia SL	RTE 601	Minor Arterial	294	783	A	A
SR 39	RTE 601	RTE 600 East	Minor Arterial	294	783	A	A
SR 39	RTE 600 East	RTE 621	Minor Arterial	388	1025	A	A
SR 39	RTE 621	RTE 687	Minor Arterial	388	1025	A	A
SR 39	RTE 687	RTE 220 West	Minor Arterial	1153	2000	A	B
SR 39	RTE 220 East	RTE 630 West	Minor Arterial	1349	2314	A	B
Mt. Valley Rd. (SR 39)	RTE 630 West	RTE 629 West	Minor Arterial	1448	2024	B	B
Mt. Valley Rd. (SR 39)	RTE 629 West	RTE 678	Minor Arterial	1448	2024	B	B
Mt. Valley Rd. (SR 39)	RTE 678	RTE 635	Minor Arterial	1545	2195	A	B
SR 39	RTE 635	RTE 640	Minor Arterial	1545	2200	A	B
SR 39	RTE 640	Rockbridge CL	Minor Arterial	1545	2200	B	B
SR 42	Alleghany CL	RTE 664	Minor Arterial	649	1100	A	A
SR 42	RTE 664	RTE 655	Minor Arterial	649	1100	A	A
SR 42	RTE 655	RTE 602 South	Minor Arterial	713	1300	A	A
SR 42	RTE 602 South	RTE 39	Minor Arterial	713	1300	A	A
US 220	Alleghany CL	RTE 647	Minor Arterial	2253	3500	B	C

Facility Name/Route ID	Segment From	Segment To	Class	2009 AADT	2035 AADT (Projected)	2009 Level of Service	2035 Level of Service (Projected)
US 220	RTE 647	RTE 608	Minor Arterial	2253	3500	B	C
US 220	RTE 608	RTE 658	Minor Arterial	2253	3500	B	C
US 220	RTE 658	RTE 615	Minor Arterial	3022	4703	B	C
US 220	RTE 615	RTE 39	Minor Arterial	3022	5600	B	C
US 220	RTE 39	RTE 39 North	Minor Arterial	2188	3800	D	D
US 220	RTE 39 North	RTE 614	Minor Arterial	923	1550	B	B
Stuart Hwy. (US 220)	RTE 614	RTE 622	Minor Arterial	562	1336	B	B
Stuart Hwy. (US 220)	RTE 622	RTE 623	Minor Arterial	562	1336	B	B
Stuart Hwy. (US 220)	RTE 623	Highland CL	Minor Arterial	525	844	B	B
Big Back Creek Rd. (600)	RTE 39 North	RTE 705	Minor Collector	98	300	B	B
Big Back Creek Rd. (600)	RTE 705	Highland CL	Minor Collector	98	162	B	A
Dry Run Rd. (609)	RTE 614	Highland CL	Minor Collector	62	200	B	B
Muddy Run Rd. (614)	RTE 220	2.5 Mi North RTE 220	Minor Collector	168	370	B	B
Muddy Run Rd. (614)	2.5 Mi North RTE 220	RTE 609	Minor Collector	168	370	B	B
615	RTE 687	RTE 644 West	Major Collector	1011	1770	B	B
615	RTE 644 West	0.19 Mi west RTE220	Major Collector	1142	2998	B	B
615	0.19 Mi West	RTE 220	Major Collector	1448	2300	A	B
Courthouse Hill Rd. (619)	RTE 645	0.10 Mi East RTE 645	Major Collector	1151	1700	A	B
Courthouse Hill Rd. (619)	0.10 Mi East RTE 645	RTE 220 West	Major Collector	1151	1700	A	B
Douthat Rd. (629)	Alleghany CL	Douthat State Park	Major Collector	653	800	A	A
Douthat Rd. (629)	Douthat State Park	RTE 683	Major Collector	93	250	A	A

Facility Name/Route ID	Segment From	Segment To	Class	2009 AADT	2035 AADT (Projected)	2009 Level of Service	2035 Level of Service (Projected)
Douthat Rd. (629)	RTE 683	RTE 39 South	Major Collector	185	430	B	A
629	RTE 39 North	RTE 625	Major Collector	318	500	A	A
629	RTE 625	RTE 678 South	Major Collector	68	110	A	B
629	RTE 678 North	RTE 640	Major Collector	121	190	B	A
629	RTE 640	Augusta CL	Major Collector	208	290	A	B
T.C. Walker Rd. (635)	RTE 633	RTE 39	Major Collector	831	1100	A	A
Old Mill Rd. (645)	RTE 619	RTE 692	Major Collector	929	1500	A	B
678	RTE 629 South	RTE 692 North	Major Collector	219	310	A	A
687	Alleghany CL	RTE 615	Major Collector	818	1195	B	A
Jackson River Tpke. (687)	RTE 615	RTE 618	Major Collector	311	420	B	B
687	RTE 618	RTE 39	Major Collector	556	700	A	A
Old Germantown Rd. (692)	RTE 39 West	RTE 645	Major Collector	700	1000	B	A

Map 7.3



Existing Transportation System and Future Land Use Policies

As previously detailed in the Planning Assumptions section of this chapter, modest population growth and development are expected in the next 30 years. There are no anticipated changes to the County's current land uses or zoning map. With such little change, the existing roadway network should continue to meet future needs.

Deficiencies and Future Improvements

Public Transit

Bath County is predominantly rural, with residents living in small communities as well as isolated rural areas. The rural nature of the County increases the difficulty of providing adequate transportation alternatives for all residents. A major issue is the provision of transportation-disadvantaged services. A resident who is transportation-disadvantaged is one who, due to physical or economic limitations, is unable to provide his/her own transportation.

There is no public transportation in Bath County, yet elderly, disabled, or economically disadvantaged residents must have some mode of transport to medical facilities, jobs, shopping, and other locations. A shuttle bus service between the homes of elderly residents and the Senior Center in West Warm Springs is currently in operation. In addition, the Valley Program for Aging Services (VPAS) is also available to provide demand response service to various medical facilities in the region.

System Maintenance

Although Bath County has a well-maintained primary roadway network, secondary roadways are often in poor condition and can present safety hazards. The County continues to work with VDOT to improve the condition and safety of secondary roads through the Rural Rustic and Pave-In-Place programs. The 2011 Rural Long Range Transportation Plan (RLRTP) identified deficient secondary roadways. These projects are listed in Appendix A.

Safety/Intersections

The County has identified several intersections in need of further study and safety improvements. These projects were included in the 2011 Rural Long Range Transportation Plan (RLRTP) and then selected as high priorities by County staff in 2013.

- *Bath County High School Entrance and Exit.* The intersection of U.S. 220 at VA 682 (Charger Lane) currently faces safety and congestion challenges. As the only entrance and exit to the County's high school, the intersection sees increased traffic in the morning and afternoon. In addition to regular school traffic, the County also needs to address traffic during big events at the high school, like football games, graduations, etc. Overflow parking subjects cars to park along the sides of the highway. This adds safety concerns for through traffic, as well as pedestrians getting to their cars. There is also an

absence of safe pedestrian crossings around the intersection. Across the street from the high school there is a convenience/gas station, presenting a four-way intersection with two consistent traffic generators. The RL RTP recommends a safety study to evaluate issues and identify improvements.

- *Intersection of VA 39 (Mountain Valley Road) at VA 690 (Windy Cove Road):* VA 690 intersects VA 39 and VA 687 (Indian Draft Road); VA 687 also intersects with VA 39. VA 39 has a posted speed limit of 55 mph and the lack of turn lanes can hinder consistent traffic flow. This intersection also has limited sight distance on VA 678 traffic to westbound VA 39 traffic due to vertical alignment, as well as an unnecessary access point at VA 690. Crashes that have been recorded around this intersection have been categorized as “Fixed Object, Off Road.” Improvements recommended to mitigate risks include installing turn lanes on VA 39 and, if feasible, flattening the westbound approach and eliminating the VA 690 access point.
- *Intersection of U.S. 220 (Sam Snead Highway) at VA 614 (Muddy Run Road):* Both directions of U.S. 220 have the challenge of limited sight distance due to a horizontal curve and vegetation. VA 614 also experiences limited sight distance to traffic on U.S. 220 due to horizontal alignment. As with VA 39, U.S. 220 has a 55 mph posted speed limit throughout the County and the lack of turn lanes presents challenges to through traffic. Crash incidents localized around this intersection have been categorized as “Fixed Object, Off Road.” Recommendations to mitigate safety challenges include removing vegetation along the west side of U.S. 220, installing turn lanes along U.S. 220, and reconstructing and realigning U.S. 220 and reconstructing the VA 614 approach as a 90 degree angle.
- *Ingalls overlook on VA 39:* Turning back onto VA 39 from the overlook site proves to be challenging due to limited sight distance. Approaching the overlook from the east, there are two sharp horizontal curves, as well as the overlook pull-off being on a horizontal curve. There were crash incidents leading up to the overlook pull-off and following the pull-off, with a majority being classified as “Fixed Object, Off Road.” Recommended projects to improve the area include adding advance signal warning signs and cutting the mountain back that is adjacent to the curve to improve line-of-sight.
- *Intersection of U.S. 220 at VA 615 (included in the VDOT FY15 Six Year Improvement program, see Figure 7.3):* Poor drainage around the intersection poses the problem of flooding. In addition to flooding issues, the intersection also lacks adequate pedestrian infrastructure. Both of these challenges increase safety risks for both pedestrians and vehicular traffic around the intersection. Project construction to address drainage issues is scheduled for 2015.

Non-Motorized Facilities

As mentioned in the Inventory section of this chapter, Bath County has very limited on-street pedestrian facilities, although the Hot Springs commercial area does have sidewalks. The County also lacks on-road bike facilities such as bike lanes or widened paved shoulders. Providing these facilities as part of on-going roadway maintenance or upgrades would benefit both residents and visitors, even attracting cycle tourists to experience Bath's scenic beauty.

Other Needs

In addition, limited access to interstate highways, commercial airports, and passenger rail service increase transportation costs for Bath County and discourage businesses from locating in the area. This becomes not only a transportation issue, but an economic development issue as well.

Summary

The County's current roadway network functions well, and should continue to do so in the future due to low population growth and the lack of changes in land use. There is no anticipated need for significant expansion of the network. Improving safety and increasing mobility should move to the forefront of County transportation initiatives, as detailed in this chapter. Multi-modal deficiencies should be addressed as well. In addition to improving safety for all users, multi-modal facilities could benefit the County economy by attracting in more tourists to the area.

RECOMMENDATIONS

Priority Projects

These projects were identified in the 2011 RL RTP, and subsequently evaluated and ranked as the top priorities for the County (See Map 7.4). They have also been submitted to VDOT for consideration of inclusion in the SYIP. Cost estimates are in 2014 planning level cost estimate dollars.

1. Intersection of VA 39 (Mountain Valley Road) at VA 690 (Windy Cove Road)

Deficiencies/Challenges:

- VA 39 lacks turn lanes to access VA 678
- Sight distance limited on VA 678 traffic to westbound VA 39 traffic due to vertical curve alignment; unnecessary access point at VA 690

Recommendations:

- Install turn lanes on VA 39
- Flatten VA 39 westbound approach and eliminate the VA 690 access point

Cost Estimate: \$2,700,000

- Includes the addition of a left and right turn lane on VA 39 to access VA 678, the necessary through lane transition to accommodate the left turn lane, flattening of the VA 39 westbound approach to improve line of sight, and the closing of the VA 690 access to VA 39

2. Intersection of U.S. 220 (Sam Snead Highway) at VA 614 (Muddy Run Road)

Deficiencies/Challenges:

- Sight distance limited in both directions of U.S. 220 due to horizontal curve and vegetation
- Sight distance for VA 614 traffic is limited to traffic on U.S. 220 due to horizontal alignment
- U.S. 220 lacks turn lanes

Recommendations:

- Remove vegetation along the west side of U.S. 220
- Install turn lanes along U.S. 220
- Reconstruct and realign U.S. 220 and reconstruct the VA 614 approach as a 90 degree angle

Cost Estimate: \$3,000,000

- Includes the addition of a left and right turn lane on U.S. 220 to access VA 614, the realignment of U.S. 220 to improve line of sight and provide the necessary through lane transition to accommodate the left turn lane, the realignment of VA 614 to create a 90 degree intersection with U.S. 220 to improve line of sight

3. Ingalls overlook on VA 39, east of U.S. 220

Deficiencies/Challenges:

- Location has poor sight distance for traffic entering/exiting overlook site

Recommendations:

- Add advance signal warning signs
- Cut mountain back that is adjacent to the curve to improve horizontal line of sight

Cost Estimate: \$1,800,000

- Includes the installation of advance signal warning signs on VA 39 to serve the entrance/exit of the overlook and excavation along the south side of VA 39 to improve line of sight

4. U.S. 220 at VA 615 (included in the VDOT FY15 Six Year Improvement Program, see Figure 7.3)

Deficiencies/Challenges:

- Location has poor drainage, which leads to flooding
- Location lacks adequate pedestrian infrastructure

Recommendations:

- Project to address drainage issues scheduled for construction in 2015

Project Cost:

- \$1,200,000

5. Bath County High School Entrance and Exit

Deficiencies/Challenges:

- Four-way intersection with two consistent traffic generators, and added congestion during school arrival and dismissal
- Overflow parking for large events along highway

Recommendations:

- Completion of a safety study to evaluate issues and identify improvements for the intersection. Includes the field observation of intersection performance during an event period, coordination to develop potential improvement alternatives and study approach / methodology, and implementation of study to result in improvement recommendations.

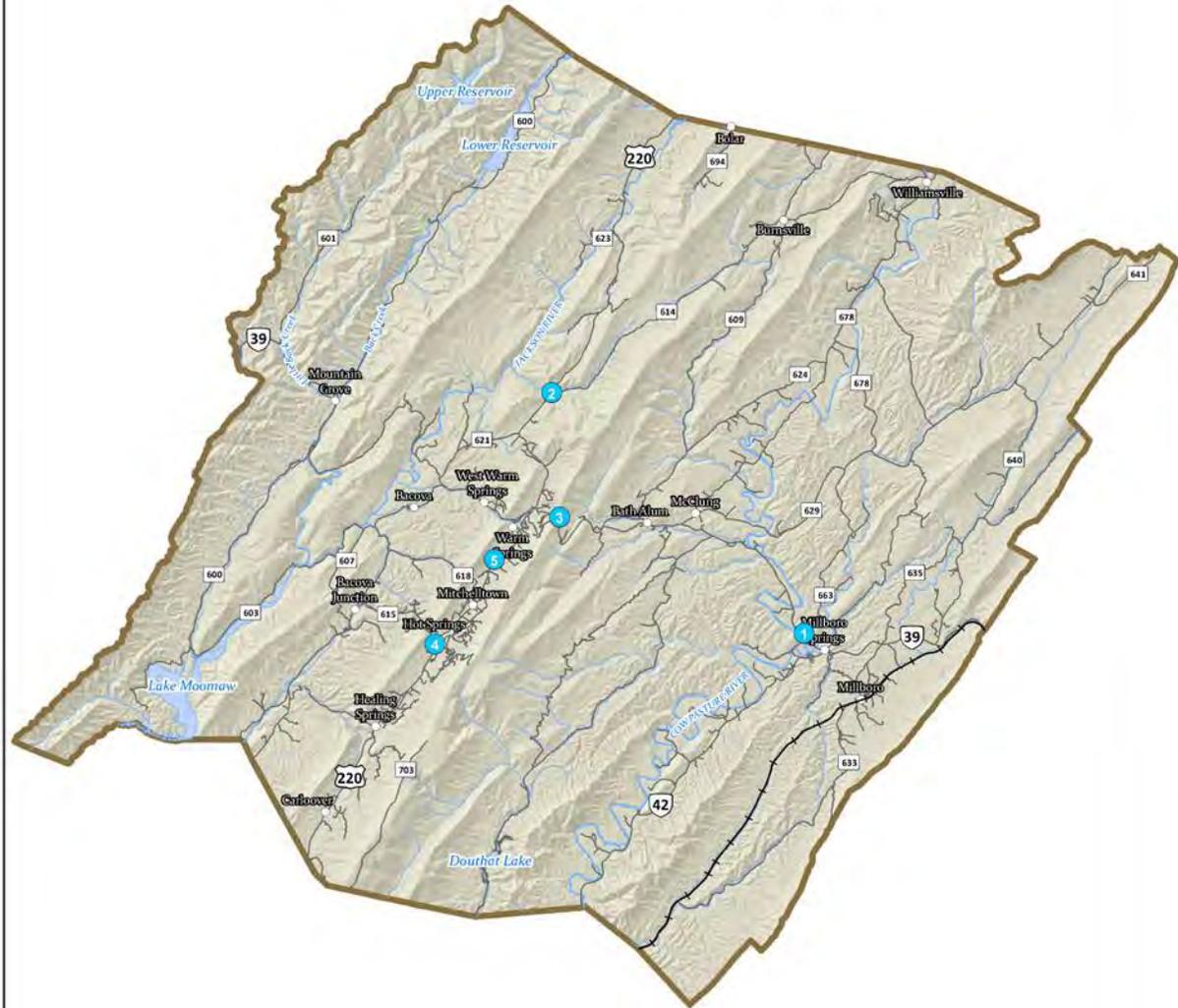
Cost Estimate:

- \$10,000 - \$50,000

Map 7.4

Bath County

Priority Transportation Projects



<p>Miles</p>	<ul style="list-style-type: none"> Populated Places US and State Roads Local Roads Rail Rivers and Waterbodies Major Creeks and Streams 	<ul style="list-style-type: none"> Priority Transportation Project ID
<p>Sources: Bath County, USGS, VDOT, VGIN Map produced by CSPDC, November 2013 For Planning Purposes Only</p>		

Additionally, the VDOT FY 2015 Six Year Improvement Program includes projects to replace the bridge over Cowardin Run (Str#6136) and Route 687 (Jackson River Turnpike) bridge over Cascades Creek; see FY 2015 SYIP table below.

Figure 7.3: VDOT FY 2015-2020 Six Year Improvement Program Projects in Bath County

UPC	Description	Route	District	Road System	Jurisdiction	Estimate	Previous	FY15	FY16-20	Balance
						(Values in Thousands of Dollars)				
81642	DRAINAGE IMPROVEMENTS DOWNTOWN HOT SPRINGS	615	Staunton	Secondary	Bath County	\$1,200	\$1,089	\$0	\$0	\$111
88819	BRIDGE REPLACEMENT OVER COWARDIN RUN (STR# 6136)	687	Staunton	Secondary	Bath County	\$1,407	\$1,407	\$0	\$0	\$0
97113	BRIDGE REPL RTE 687 JACKSON RIVER TPK OVER CASCADESCK	687	Staunton	Secondary	Bath County	\$1,650	\$640	\$65	\$945	\$0

Please see Appendix A for the list of Bath County transportation projects listed in the 2011 Rural Long Range Transportation Plan.

TRANSPORTATION GOALS

1. Encourage development of a safe, effective, and efficient roads, as well as bike and pedestrian trails that will shape and serve the future of Bath County.
2. Encourage greater utilization of existing and future transportation infrastructure to meet the social, economic, recreational, and environmental needs of Bath County.
3. Develop transportation plans and programs that respond to the needs of the elderly, disabled, and economically disadvantaged residents of Bath County.
4. Provide public information and encourage citizen involvement in the development of all transportation plans and programs for Bath County.
5. Increase public safety and improvements on all County roads.
6. New development should encourage creativity, a mix of uses, and connectivity through a variety of transportation means including roads, bicycle routes, and pedestrian trails.
7. Avoid the installation of traffic lights by constructing traffic circles to ensure that traffic in Bath County continues to flow smoothly and uninterrupted.

OBJECTIVES

- a. Maintain the existing primary and secondary road system at its current level or better, working with VDOT to ensure regularly scheduled maintenance and upgrades to meet existing and future traffic demand.
- b. All roads should be built to an appropriate scale and participation in the VDOT Rustic Roads program should be encouraged.
- c. Support VDOT policies and programs, which ensure the provision of adequate transportation infrastructure operating at acceptable levels of service, and provide for the maintenance and improved safety of all public roads.
- d. Complete an evaluation of Bath County's existing transportation system including a needs assessment to address transportation of the elderly, disabled, and economically disadvantaged.

- e. Encourage development that does not add more traffic to existing roads by implementing mixed-use zoning where appropriate and/or increased connectivity between compatible land uses.
- f. Institute a policy to ensure that developers, and not taxpayers, pay for the costs and impacts of development within the County.
- g. Support the marketing, maintenance, and development of existing air facilities and services to those facilities and encourage the development of additional air transportation services to meet demand.
- h. Support the maintenance and development of existing rail facilities and encourage the development of additional freight and passenger rail services to meet demand.
- i. Work with the IDA to promote or attract industries that need spur access to industrial park.
- j. Consider designating Route 39 as a tourism corridor.
- k. Excessive vehicle speed and traffic should be controlled on County roads.
- l. Provide appropriate levels of enforcement and seek public input regarding trouble spots.
- m. A traffic calming program can be initiated seeking safer roads, vehicle speeds, and creative design.
- n. Add turnouts/truck lanes retrofitting existing roads with steep grades.
- o. Use roundabouts instead of stoplights where possible on both new development and existing roads.
- p. Add bicycle lanes to certain roads to incorporate recommendations of the CSPDC Bike Plan and leave other roads at existing widths, thus allowing for a variety of road types.
- q. Parking areas should be built in appropriate locations/scale and blend in to the built environment and aesthetics.
- r. Work to ensure that Route 220 receives a “Scenic Byway” designation.



PUBLIC UTILITIES

CHAPTER 8

Public Utilities

The availability, quality, and cost of public utilities (electrical power, water supply, and wastewater disposal) can be used by local governments to guide where development will likely occur. Generally, development should be located in areas where these services can be provided for the least cost. The Comprehensive Plan should serve as a guide for decision making and establish policy guidelines for when, where, and how to provide public utilities.

WATER SYSTEM

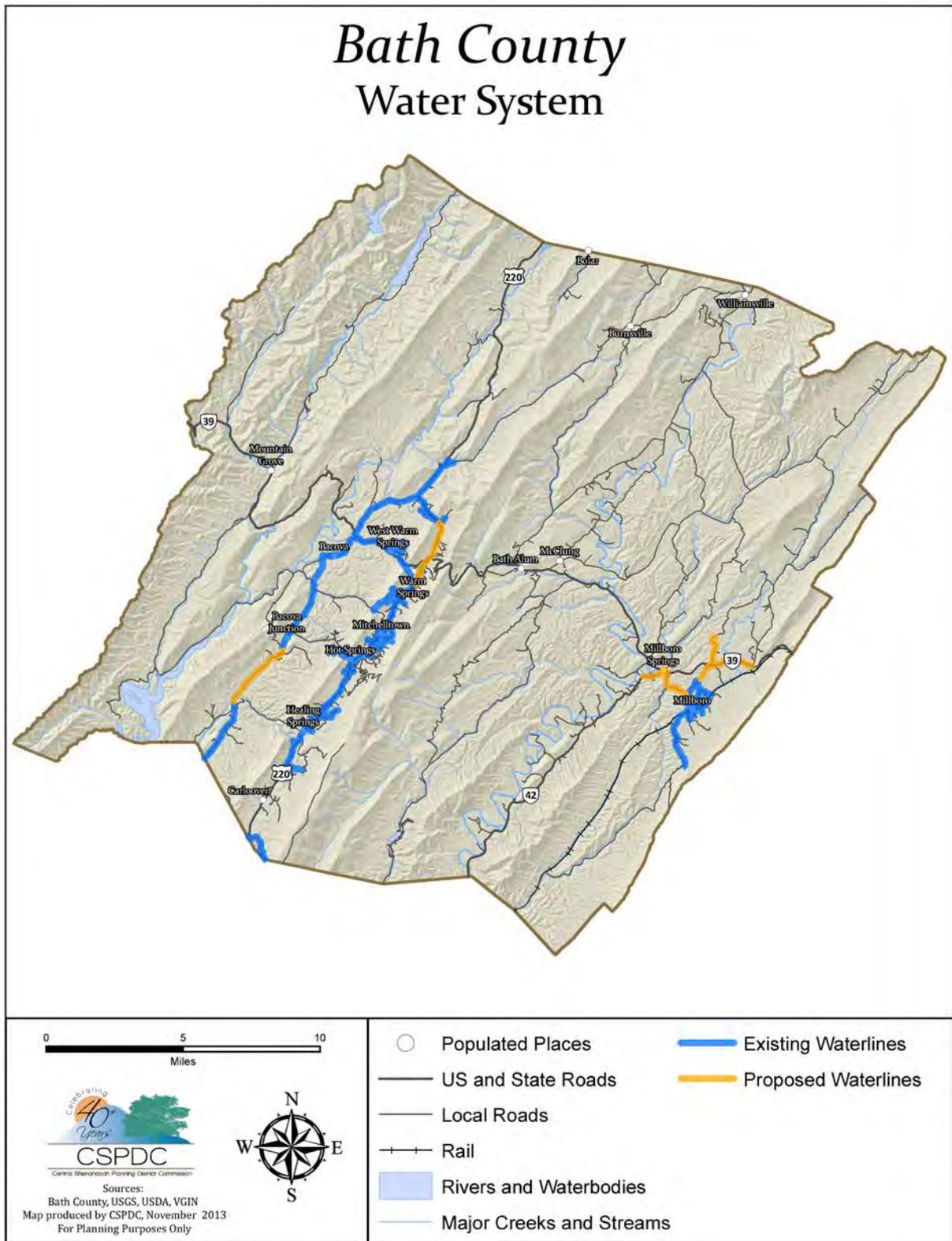
Water Availability

Public water in Bath County is available from the Bath County Service Authority (BCSA) in the areas of Warm Springs, West Warm Springs, Mitchelltown, Bacova, Ashwood, Cedar Creek, Routier Hill, Carlover, Clifton Forge Mountain, Millboro, and Chimney Run. Water distributed to customers in Millboro is obtained through bulk water purchase agreement with the Millboro Water Association. Bath County Service Authority purchases bulk water from Virginia Hot Springs Water Company and serves residents of Hot Springs, Thomastown, Crowdertown, Bacova Junction, and Switchback. Individual wells and/or springs serve other areas and residents of the County (See Maps 8.1 and 8.2).

Water System

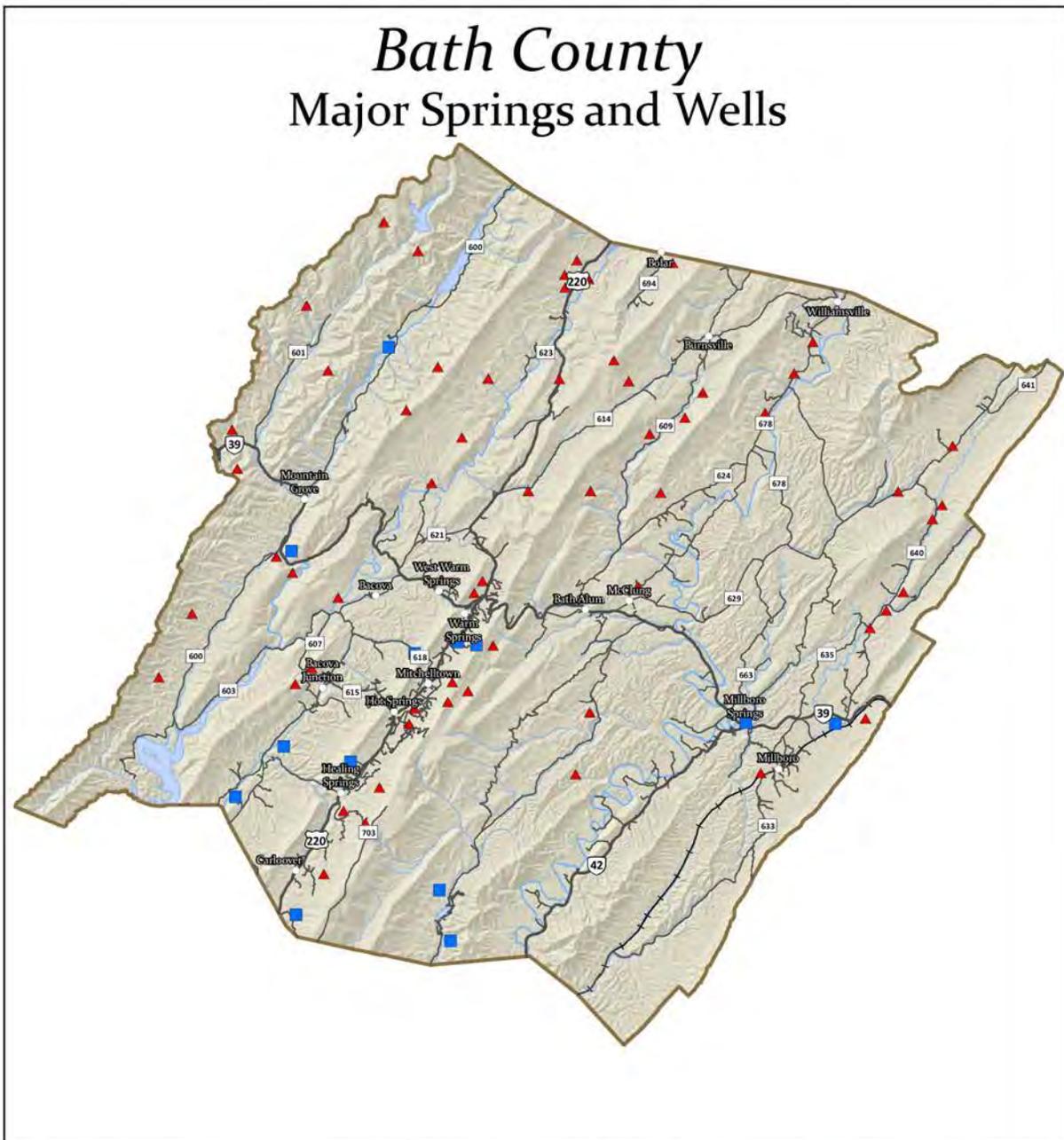
The Bath County Service Authority has an ongoing infrastructure program to improve and expand as economically feasible: service, distribution lines and sources. Wells are located above the High School, Clifton Forge Mountain, above the Old Dairy, Ashwood, and Cedar Creek. Bath County Service Authority has twelve pumping stations that pump water to twelve storage tanks located throughout the service areas. Total storage capacity is approximately 1,300,000 gallons with waterline connections to two suppliers that have a combined storage of approximately 1,900,000 gallons. The daily water consumption from residential water meters is approximately 70,000 gallons per day. Bath County Service Authority provides 233 fire hydrants for the service areas. The Bath County Service Authority has a staff of nine employees and a team of professionals and vendors who provide administrative, logistical and maintenance support for the water/wastewater systems. The estimated value of the water system is approximately nine million dollars (\$9,000,000) and growing.

Map 8.1



Map 8.2

Bath County Major Springs and Wells



	<ul style="list-style-type: none"> Populated Places US and State Roads Local Roads Rail Rivers and Waterbodies Major Creeks and Streams 	<ul style="list-style-type: none"> Spring Wells
<p>Sources: Bath County, USGS, USDA, VGIN Map produced by CSPDC, November 2013 For Planning Purposes Only</p>		

Water Rates and Fees

The monthly base water rate is \$21.00 per residential connection from 0 – 4,200 gallons of water. A one hundred dollar system connection fee, plus material and labor costs are assessed for each new connection. New units are charged a system development fee up to \$2,300. The system development fee was established in 2006 to assist in paying for growth, meeting capital needs, and for recovering equity previously invested in the system. There are circumstances where this fee may be reduced depending on individual circumstances (refer to Bath County Service Authority Rules and Regulations). The majority of Virginia counties charge fees of this nature in order to benefit their existing customers by passing the cost of development to future customers and developers. A system availability fee may be charged to developers who reserve a connection for lots pending a building permit. Rates and fees are not expected to increase significantly over the next four years. In the event an increase is necessary public input will be solicited and considered (same process for wastewater increases).

Challenges

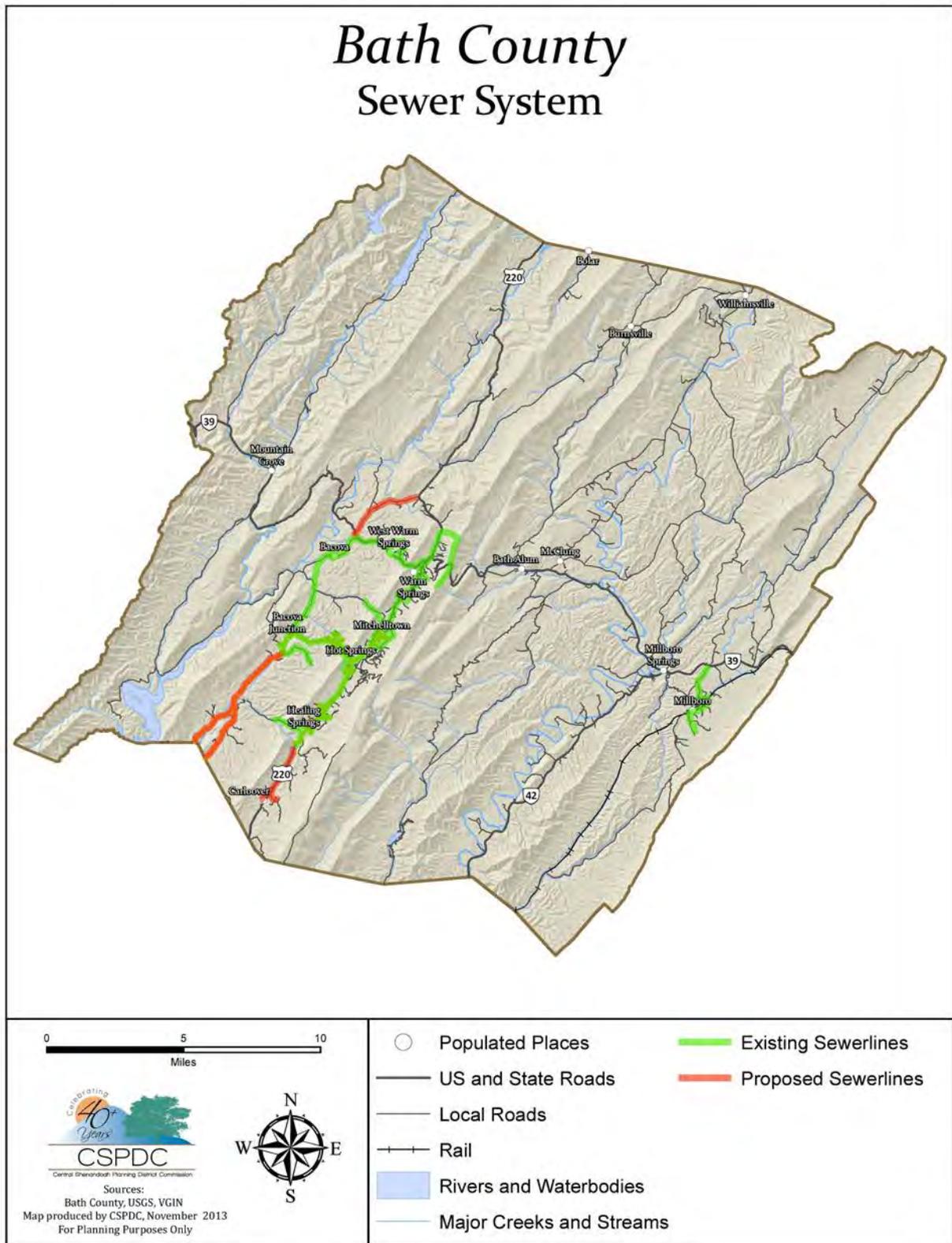
Locating quality water sources for new and existing areas is an ongoing effort. Three test wells have been drilled as a water source for the residents of Millboro Springs who have been obtaining their water from private wells that contain sulfur and iron deposits. The wells were drilled to a depth beyond 600 feet and quality water was not found. Challenges to the system (growth, contamination, regulation, and scarcity) are expected to increase in the future; therefore, it becomes important to seek additional sources and protect the existing sources from contamination.

WASTEWATER TREATMENT

Wastewater Treatment Availability

Public wastewater treatment service is available through Bath County Service Authority to residents of Millboro, Bacova, Bacova Junction, Mitchelltown, Hot Springs, Ashwood, Thomastown, Crowdertown, Homestead Preserve, West Warm Springs, and Cedar Creek Trailer Park. The Warm Springs Sanitation Commission provides service to Warm Springs (See Map 8.3).

Map 8.3



Wastewater System

The Bath County Service Authority owns and operates miles of distribution/collections lines, eleven sewer pump stations and three wastewater treatment plants located in Hot Springs, Millboro, and Cedar Creek. The 450,000 gallon per day Hot Springs/Regional wastewater treatment plant (HSRWTP) was constructed in 1985 and currently processes approximately 350,000 gallons of wastewater daily. This plant treats wastewater by oxidation, aeration and disinfection by chlorine providing secondary treatment and meets Virginia Department of Environmental Quality (DEQ) and Virginia Health Department standards. The 1989 Millboro plant can process 50,000 gallons a day by a more modern design technology that uses ultraviolet instead of chlorine to treat the discharge. Presently the Millboro STP averages 12,500 gallons per day. In 2006, the Bath County Service Authority assumed ownership of a new 15,000 gallon per day plant that was provided for the Cedar Creek Trailer Park by Bath County through a HUD grant.

The Bath County Service Authority owns and maintain approximately 300,000 feet of wastewater collection lines. Currently, the Bath County Service Authority has pump stations in Bacova, Campbell Hollow (2), Bacova Junction, West Warm Springs (3), Ashwood, Mitchelltown and Switchback. The Hot Springs Wastewater Treatment Plant is located downstream from most of the service area; however, its location is not optimal.

Rates and Fees

The monthly residential rate for wastewater service is \$24.00. The connection fee is \$100.00 plus labor and material. New units will be charged a system development fee up to \$2,800.00 similar to the charge for water. A system availability fee may also be charged to developers. The estimated value of the wastewater systems is \$10,300,000.

Challenges

The majority of the miles of wastewater collection and distribution/collection lines are in serviceable condition. However, lines in and around Hot Springs and Ashwood are old and may have to be replaced. The increased demand for wastewater treatment capacity will cause the Bath County Service Authority to upgrade the existing plant or build a new plant. Because of size limitations and engineering problems it may not be economically feasible to upgrade the existing plant at its present location. If a new plant is required, location, size, design, technology, Department of Environmental Quality (DEQ) and Health Regulations are important considerations. Wastewater treatment plants over 650,000 gallons per day that discharge into the Chesapeake Bay estuary and watershed must meet strict requirements. Removing I&I (inflow and infiltration) water from the collection lines is an ongoing project for the Authority.

Initiatives to protect the Chesapeake Bay and the environment, development, and demands to treat wastewater by regional treatment plants or by separate Bath County Service Authority plants are expected to increase. For instance:

- In the event the Warm Springs Treatment Plant cannot sustain or meet Department of Environmental Quality standards, it may become necessary to provide wastewater service for Warm Springs.
- Other villages and future developments may require wastewater treatment service or oversight.
- The Bath County Service Authority may have to increase the mandatory 300 feet connection distance to cause developers to use the Hot Springs Wastewater Treatment Plant instead of septic systems or on site treatment facilities that may cause future environmental problems, which will have to be corrected by the taxpayers.

ADDITIONAL SERVICE PROVIDERS

Warm Springs Sanitation Commission (WSSC)

WSSC was formed in June of 1956 for the purpose of providing a sewerage system for the people of Warm Springs. It currently has 134 customers, and looks to add another 75 through service to the Homestead Preserve homeowners. It has a seven member Board, with representatives appointed by the head of the Virginia Department of Health and serving four year terms. They boast of their infrequent rate increases and are currently expanding their treatment facility with the help of the Homestead Preserve.

BARC

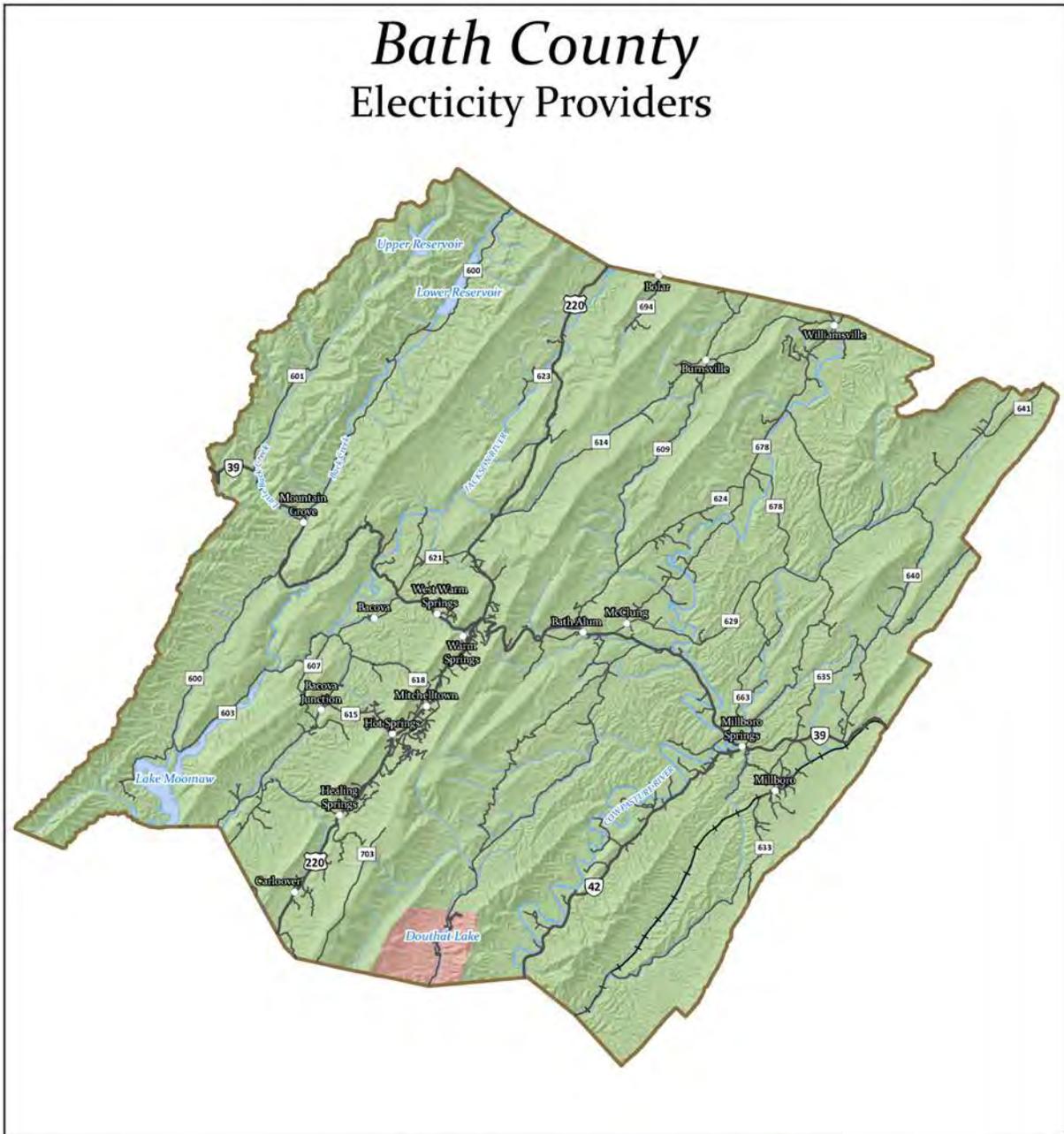
Incorporated in 1938, BARC Electric Cooperative has grown from 1,008 meters served to over 12,000 today. Its service area originally provided power for Bath, Alleghany and Rockbridge Counties (hence the name) but has since grown to include Augusta and Highland Counties as well (See Map 8.4).

BARC is a non-profit, tax-paying organization vitally interested in the residential, industrial and commercial development of its service area. Power for BARC members is generated at the Clover Power Station in Halifax County, Virginia.

BARC employs over 45 full-time people and is governed by a seven member Board of Directors with daily operations being overseen by the managerial staff, headed by a General Manager/CEO.

Map 8.4

Bath County Electricity Providers



	<ul style="list-style-type: none"> Populated Places US and State Roads Local Roads Rail Major Creeks and Streams Rivers and Waterbodies 	<p>Provider</p> <ul style="list-style-type: none"> BARC VEPCO
<p>Sources: Bath County, USGS, NRCS, VGIN Map produced by CSPDC, November 2013 For Planning Purposes Only</p>		

TDS Telecom

TDS Telecom brings locally-based telecommunications services to 900 rural and suburban communities across the United States. Founded in 1969, TDS is a growing part of the Telephone and Data System, Inc. TDS provides the following services to its customers:

- Local Telephone Service
- Long Distance Service, Calling Cards, Toll-Free Service
- Voice Mail
- Centrex
- ISDN-PRI
- Digital Transport Services
- Direct Inward Dial/Direct Outward Dial Services
- Business Telephone Systems/Key & PBX including VoIP Systems
- Maintenance Plans
- High Speed Data Transport/DS1/DS3 10/100 Mbps to 1 Gig Ethernet
- Business Data Solutions
- Internet Access/Dial-Up/DSL Services/Symmetrical Internet up to 45 Meg Up and Down Speeds
- Web Hosting
- Managed Data Services/Co-Location Services/Managed Network Services/ Virtual Private Networks
- Private Networks, and
- Managed Application Services.

MGW

MGW Communications, through its subsidiaries, Telephone and Networks are providing high speed internet to all of their wire line exchanges. MGW Networks is also providing high speed in other areas like the Millboro community, and are bringing two more wireless sights up for more coverage. MGW is constantly upgrading equipment to provide the best service to its customers. They have just installed in the McClung exchange gigE bandwidth equipment. In the Mt. Grove exchange, they are exploring the possibility of adding additional equipment to enhance broadband capabilities.

Wireless Telecommunications

Bath County is served by several major wireless telecommunications providers, with Verizon currently having the most continuous coverage. As technologies evolve, more people move into the County, and more traffic is placed on our road network in the future, there will be an

increased demand for wireless communications services such as phones, pagers, video, and the internet.

In order to accommodate such an increasing appetite for these amenities, the County will have to become more technologically savvy. It will also need to institute incentives and regulations to strike a balance between modernization and preservation. The County should adopt a comprehensive Telecommunications Ordinance that regulates placement, height, screening and other aspects of proposed structures. It should work with various providers to ensure that high standards are developed and met.

Efforts should also be supported to encourage telecommuting through the use of computer technology in the County which is becoming more popular nationwide. Telecommuting jobs can help to reduce the amount of travel time on County roads, decreasing both air pollution and fuel consumption.

Renewable Energy Facilities

The Virginia Department of Mines, Minerals, and Energy commissioned James Madison University to create the Virginia Renewable Scoring System for Siting (VRS³). The goal of the project is to create a technical resource with which any parcel of land across Virginia can be evaluated and a numerical score derived that describes its suitability for renewable energy development. This score will reflect a range of attributes including energy resource, economic viability, and environmental sensitivities. The VRS³ will consider wind and solar resources, proximity to electric power transmission systems, potential impacts to natural and historic resources and to economically disadvantaged or minority communities, and compatibility with the local land use plan.

The stated vision for the VRS³ is to provide a tool to inform counties, regions, and communities to assist them in evaluating their lands in a quantitative fashion as they consider potential wind and solar power projects. While Bath County intends to examine and consider all sites labeled as suitable for renewable energy development by the VRS³, it is also important for our County to set our own guidelines for how Bath County's renewable energy resources should or could be developed.

Those seeking to harness the County's renewable energy resources in order to contribute to the shifting paradigm of sustainable energy production should first meet certain requirements to ensure that the size and scale of their projects are compatible with Bath County's community vision as expressed by other aspects of this Comprehensive Plan. For instance, a primary goal of this Plan is to protect the scenic viewsheds and rural character that make this County and region so unique and treasured. Therefore, a viewshed assessment appropriate to the level of the project (small-scale, community wind, or utility-scale) should be an integral part of any review process for renewable energy facilities.

There is much debate regarding the effects of large-scale renewable energy facilities on a community's quality of life including both positive and negative effects on economic development, tourism, and environmental resources. At all levels, there are on-going disputes over federal tax credits, land leases, tax revenue generation, job creation, bird and bat impacts, endangered species habitats, and other issues too numerous to include here. Bath County recognizes that there are logical and powerful arguments on both sides of all of the various issues. Those who are both in favor of and against the development of large-scale renewable energy facilities are very passionate and committed in their beliefs. As a result, public discourse over the issues surrounding renewable energy development should be encouraged so that all issues can be examined openly.

Our intent at this time is not to take a final position, but to assure that we consider all the factors and protect that which is most dear when we are asked to evaluate proposals for potential large-scale renewable energy projects. The focus here will be on wind development given that it is the most identifiable renewable energy resource in the County.

Many communities across the country have successfully addressed the volatile issues surrounding large-scale wind facilities in particular, while others have seen virtually irreparable damage done as the fabric of their communities has been split over these issues. As one of some twenty counties across Virginia that have been identified as Priority 1 locations for the potential of developable wind resources, Bath County recognizes that it cannot avoid a discussion of the issues associated with large-scale development. The County seeks to proactively plan for a fair, reasoned, and logical approach to decision-making with regard to proposals that may come forward for the installation of large-scale wind facilities.

Numerous considerations must be addressed during the land use planning, review, and permitting processes for wind energy facilities. Overlays of extra local controls and conditions may be required for land areas designated by the County as having the potential for future wind energy development. Specific requirements and/or limitations should be applied based upon the level and scale of development (small-scale, community wind, or utility-scale). In addition to the height of structures permitted, examples of other conditions and operational issues where local controls may be required include, but are not limited to:

Conditions

- Construction Noise / Dust / Access Road Cuts / Land Clearing / Work Schedule
- Erosion & Sediment Control / Stormwater
- Structural Style / Color / Advertising
- Auxiliary Buildings / Transmission Lines / Access Roads / Parking Areas / Repair Areas – Boneyards / Blade Storage

Operations

- Any Necessary Noise Controls - once operational
- Any interference with TV Reception
- Any Shadows, Flicker, Strobe
- Lighting – Color / Blinking / Number
- Ice Throws
- Lightning Strikes
- Broken Blades
- Safety Zones / Setbacks
- Spillage Areas
- Repair / Maintenance and Operation Schedules
- Technology Upgrades

Where possible, the application and review procedure should establish, in advance, minimum levels of acceptable conditions and operational requirements, including obligations and procedures for decommissioning and removal of unused and/or abandoned structures or facilities associated with the project. Where the establishment of minimum condition or requirement levels is not possible, guidance should be provided by general standards, also approved in advance by the County.

Some issues are harder to get a handle on, but may still need to be addressed in the review process nonetheless. They include, but are not limited to:

- Potential Impacts on the Local Economy – including local property and sales tax revenues, the number of construction jobs created locally, the number and pay scale of operational jobs created locally, and the potential for indirect economic activity in the local community
- Potential Impacts on Property Values
- Potential Impacts on Tourism / Other Businesses
- Potential Impacts on Historic and Architectural Resources
- Potential Impacts on Visual Resources / Viewsheds

There are additional issues that are important to the County, but there may not be enough expertise or resources available to adequately address them at the local level. Nor are they necessarily under local control or land use authority. Therefore, such issues are more appropriately addressed by the state and federal agencies assigned to oversee them. They include, but are not limited to:

- Potential for Adverse Impacts on Wildlife, Avian, and Bat Species
- Potential for and the Actual Amount of Emissions Reduction

With all of the specific project concerns that need to be addressed at the local level, there are some issues that while significant to the broader national debate are not appropriate for consideration in the local land use review process. They include, but are not limited to:

- Consistency of Wind Generation
- Big Business / Foreign Business Involvement
- Federal Tax Credits

General Planning Policies

While scenic resources are a key element of Bath County's economy and quality of life, it is important that the County not dismiss the possibilities offered by wind development over the primary concern of viewshed. The County has not yet received an application for wind facility of any level. Thus, there is an opportunity to examine the various aspects surrounding the siting of such facilities in a civil and reasoned manner. Specific policies relating to the location and placement of wind facilities should be established before applications are received so that everyone involved will understand the playing field and what is expected of them.

For instance, individual systems, or small wind energy development, could be left to the discretion of landowners or administrative decision-makers, as long as specific conditions established in the zoning ordinance are met and other aspects of the Land Use Regulations are not violated. Mid-scale "community" wind projects that provide power directly to a village or subdivision could be subject to analysis, but not evaluated as rigorously as the large, industrial-scale facilities.

There are many benefits to be gleaned both from the technologies associated with creating systems that may help to wean the nation off of fossil fuel dependence, and to the discussion of issues inherently associated with such a shift. It is important that Bath County's policy thoroughly addresses citizen concerns while allowing for the possibility of innovative local solutions to global problems.

Recommendations

1. Bath County should identify and establish "wind development" overlay zones indicating the levels of wind development that may be permitted or conditionally permitted for each area of the county (small-scale, community scale, or industrial-scale development). Any areas where all levels of wind development will be prohibited should also be identified.

Note – Upon its completion, the County should review the results of the Virginia Renewable Scoring System for Siting (VRS3) to identify potential locations, if any, where large-scale development zones may be conditionally considered.

2. Language should be added by ordinance amendment or policy specifically spelling out siting and permitting criteria for all levels of wind development within each of the wind development zones. There should be a clearly established permitting process for each level of development, as well as clear points for public input and comment. In order for siting decisions to be made in a timely manner, the ordinance amendment or policy should list specific advance information and prior approvals required from the applicant before an application will be considered, expectations for other information or approvals that will be required during the consideration process, and any anticipated post-approval requirements. The roles and responsibilities of appropriate federal, state, and local entities should be specified and sequenced to prevent undue delays in the permitting process.

3. Wind energy technology is a complex field. The County staff and officials may not possess the expertise or have the time and resources available to adequately address many of the specific concerns and issues surrounding large-scale wind development. In order to ensure sound decision-making by the County and to keep the process focused on the facts of the case rather than speculation, the County should:
 - a. Require the applicant to obtain all required federal and state permits and approvals in advance of submission of the application to the County. This may assist the County in evaluating key issues raised by the application and help to expedite the local decision-making process because many of the most contentious issues will have at least been nominally addressed prior to the County's receipt of the application.

 - b. Retain a technical consultant with expertise in large-scale wind facility siting to negotiate County interests with developers and to advise the County in the review and consideration process.

4. Written legal agreements should be obtained binding all parties involved to the conditions for construction, operation, and removal of the large-scale facilities throughout the term of any special use permit issued and throughout subsequent permit renewals. Fully adequate bonding levels should be required so that the facilities can be properly removed without cost to the land owner or the County should removal be necessary due to unmet conditions or abandonment by the owner or operator of the facilities.

Note - Research indicates that in large-scale wind energy projects, the initial applicant is rarely the final owner of the project. The project may change hands several times between the initial application, construction, and operation. The owner of the project at the various stages is rarely the land owner. This situation can present issues for both the County and the land owner. Conditional Use Permits (CUPs) and conditions associated with the permits travel with the land, not the project owner or operator. Therefore, the County must hold the land owner responsible if the conditions of the permit are not met.

PUBLIC UTILITY GOALS

1. Continue to evaluate future operations and maintenance needs for the County's water and sewerage system.
2. Continue to interconnect water/sewer distribution and collection lines.
3. Consider which areas of the County would benefit most from the development of a public water or sewerage system.
4. Provide public water and sewer, power, and telecommunications options for existing businesses and residential areas of highest densities and build additional capacity for future planned growth.
5. Discourage construction of industrial scale wind towers on ridgelines in Bath County, thereby preserving public viewsheds.

OBJECTIVES

- a. Seek innovative financing options to ensure that appropriate improvements be made to the County's water and sewerage systems as needs arise.
- b. Institute a policy to ensure that developers, and not taxpayers, pay for the costs and impacts of development within the County.
- c. Strive to provide where feasible public water and sewer to high-density areas that are affected most by health, supply, and potability problems.
- d. Consider the use of alternative sewer systems to handle household needs in areas with little development, and create standards that include oversight from the Virginia Department of Health and/or the Bath County Service Authority.
- e. Investigate options for providing citizen access to a septic tank pump truck in order to improve conditions of older septic systems.
- f. Prioritize areas in need of public water and/or sewer based on public safety (the potential for aquifer contamination), excessive slope, and the potential for growth

- g. Encourage partnerships among existing utility providers that will support appropriate economic development endeavors.
- h. Develop or obtain other water sources and facilities, such as an area treatment plant for the Jackson and Cowpasture River basins.
- i. Protect quality of existing sources through revisions of the Land Use Regulations.
- j. Protect wellheads by regulating development and zoning within the critical radius of one thousand feet.
- k. Expand the existing wastewater treatment plant or construct a new one with increased capacity, as needed.
- l. Consider adding a buffering requirement for new utility facilities that will provide screening between various uses.



EDUCATION

CHAPTER 9

Education

Of all government expenditures, education is by far the most important and, as in most localities, the largest single item in the County budget. The quality of schooling our children receive shapes their lives as individuals and is also a major determinant in attracting new residents to the County and retaining current ones.

School Facilities

Bath County is home to two elementary schools, Millboro Elementary and Valley Elementary. Millboro Elementary, located in the village of Millboro between Goshen and Warm Springs, enrolled 105 students in the 2012-2013 school year (See Figure 9.1). Since construction of the school was completed in 1989, it is considered a modern facility, wired for technology (voice, video, and data resources).

Valley Elementary was built in the 1960s and underwent extensive renovations and received a large addition which was completed in 2001. The \$3.5 million project included a new wing for four classrooms, a technology lab, and a science lab. It also benefited from the relocation of an upgraded media learning center and new wiring for online resources. Valley Elementary, located just south of Hot Springs, enrolled 271 students in the 2012-2013 school year.

Bath County High School, which houses grades 8-12, had an enrollment of 271 students in the 2012-2013 school year. The original school, built in 1954, has had several additions and underwent an \$8.7 million renovation in 2006 that included new windows, HVAC, new roof, and ADA/accessibility upgrades.

Educational Programs

The Bath County School Board directs a public education program for approximately 647 students. Course offerings have been designed to serve the needs and interests of individual students, as well as meet overall educational goals as defined by the School Board long-range plan, the Virginia Standards of Quality, Standards of Accreditation, and applicable Federal standards. As of the 2012-2013 school year, all County schools remain fully accredited based on the Federal and Virginia assessments, including Standards of Learning, and No Child Left Behind. County schools provide a full spectrum of services for typically developing students as well as those with special needs. Mainstream and special education teachers work closely with school psychologists and child study teams to ensure successful placement and progress for all children. In addition, counseling services are available to all students so as to support educational, sociological, psychological, and career needs.

Bath County schools also provide creative outlets for students. Enrichment programs such as special drama activities and music programs are offered to all students. Programs for gifted students include extension activities, as well as participation in “Destination Imagination” and “Future Problem Solving” competitions. At the high school level, advanced students meeting the entrance qualification are eligible to participate in the Jackson River Governor’s School for Math, Science, and Technology. This half-day program is based at Dabney S. Lancaster Community College in Clifton Forge, and students travel to that program daily, returning to Bath County High School for the remainder of the instructional day. Bath County students participate in the Field Biology Regional Governor’s School at Dabney S. Lancaster Community College in Clifton Forge, and the Massanutten Regional Governor’s School in Harrisonburg every summer. Two students from the County are selected to attend each school. The gifted program also funds special requests for students to attend activities such as space camp and enrichment camp. In addition, advanced placement courses and dual enrollment opportunities are available for all academically advanced students.

The Distance Learning program at BCHS is used extensively for dual enrollment classes. This compressed-video based lab, opened in 2001, is also used for professional staff development and is available for community/local business use. Vocational training is available at the Mertz Career and Technical Education Center located at Bath County High School for students planning to enter the labor force immediately after graduation. Career and Technical Education courses are offered in auto mechanics, vocational agriculture, business management, life management skills, family management, food occupations, hospitality and tourism, CADD (computer-aided drawing and design), technology, small engine repair, and building trades. A dual enrollment program in welding at Dabney S. Lancaster Community College is available for seniors. The above courses correlate well with curriculum requirements at the local Dabney S. Lancaster Community College.

School Enrollment and Ranking

In the 2012-2013 school year, total enrollment in Bath County’s public school system was 647 students (Figure 9.1).

All three schools continue to meet full Virginia Standards of Learning accreditation, and continue to exceed No Child Left Behind – Adequate Yearly Progress standards, for full accreditation.

Education Spending

In order to provide local students with quality schooling, Bath County has been forced to allot a disproportionately high ratio of local monies (versus State funding) to education. In recent years, excessive local allocation has been necessary to counteract effects of the formula used by the State in determining funding assistance. The formula, called the composite index, consists of variables representing each locality’s adjusted gross income, retail sales, property values, average daily membership (number of students), and population. Because of the County’s relatively high proportion of local revenues, as compared to its relatively small population size and average daily membership, Bath’s composite index is very high, resulting in very low State funding.

Figure 9.1

Bath County, Virginia Student Enrollment, 2012-2013 School Year			
Grade	Bath County High	Millboro Elementary	Valley Elementary
Grade PK			31
Grade KG		16	30
Grade 01		12	23
Grade 02		15	27
Grade 03		12	29
Grade 04		8	34
Grade 05		15	28
Grade 06		10	34
Grade 07		17	35
Grade 08	59		
Grade 09	55		
Grade 10	53		
Grade 11	51		
Grade 12	53		
Total	271	105	271
Virginia Department of Education, 2012-2013			

Higher Education

The number of high school seniors with plans for post-secondary education at the time of graduation is positive. Although there is no institution of higher learning in Bath County, there are several colleges and universities relatively nearby. These include liberal arts schools such as Eastern Mennonite University and Bridgewater College, located in the Harrisonburg area, and Mary Baldwin College in Staunton. Dabney S. Lancaster Community College which offers both day and night classes, is located in Clifton Forge. Blue Ridge Community College is in Weyers Cave. Washington and Lee University and Virginia Military Institute are located in Lexington, and James Madison University, is nearby in Harrisonburg. In addition, the University of Virginia in Charlottesville and Virginia Tech in Blacksburg are each approximately two hours away. Also within the two hour driving range are Roanoke College and Hollins College, in the Roanoke area, as well as Davis and Elkins College in Elkins, West Virginia.

EDUCATION GOALS

1. Ensure that every student enrolled receives a quality education appropriate to the student's aptitudes and aspirations.
2. Continue to nurture and prepare students for post-graduation endeavors and success.
3. Produce graduates who become citizens with strong academic, technical, physical, and social skills and who possess an appreciation for the arts.
4. Build partnerships between the school system and local businesses, organizations, and agencies to expand regional career-tech programs thereby maximizing opportunities for learning and collaborative experiences.
5. Enable our schools to remain an integral part of our unique community and a source of public pride.

OBJECTIVES

- a. Continue to develop a strong core curriculum aligned with Standards of Learning, State and Federal mandates, and local needs.
- b. Promote technology to enhance and sustain the teaching process and school administration.
- c. Promote a safe and respectful environment that is conducive to teaching and to learning.
- d. Continue to upgrade existing facilities at Bath County High School, Valley Elementary School, and Millboro Elementary School to provide for long-term viability and avoid crisis points.
- e. Foster an apprenticeship program between the school system and local businesses and agencies in order to prepare high school students for trade certifications and job placement.
- f. Facilitate mentoring and educational opportunities for students through local resources in and outside the County.
- g. In conjunction with several surrounding counties, support distance learning for students and adults via satellites courses linked with community colleges and universities in the region.

- h. Enhance communication between and among students, parents, personnel (school level to superintendent), School Board, Board of Supervisors, and community and support volunteer programs in our schools.
- i. Utilize computer labs at the public schools to offer classes in computer technology to aid adult education in the community.
- j. Value and compensate our educational professionals with regionally competitive salaries, incentives, professional development opportunities, and proper training.
- k. Strengthen and support anti-drug/anti-tobacco programs and policy enforcement in order to promote a drug-free environment in our schools.
- l. Sustain a comprehensive curriculum that embraces a challenging environment for academic, athletics, arts, music, and vocational programs.
- m. Promote the re-establishment of an education foundation to support educational needs and opportunities that will include support from interested citizens and businesses in the community.
- n. Institute a policy to ensure that developers, and not taxpayers, pay for the costs and impacts of development within the County.



COMMUNITY FACILITIES & SERVICES

CHAPTER 10

Community Facilities & Services

COMMUNITY FACILITIES

Parks & Recreation

The Bath County Department of Parks and Recreation is committed to making the County a better place to live, work, and play. Such commitment is evident in the wide variety of recreational activities, classes, and sports available to residents that are based on the needs of the community.

The Department offers a wide range of programs for adults and children, which range from organized sports to pool facilities in Ashwood at Valley Elementary School, and at the Old Millboro School. A skateboard park has also been added to the Valley Elementary grounds. The Parks and Recreation Department focuses on education, safety, physical activity, and community involvement.

The County has two primary park facilities: Ashwood Park and Old Millboro School offering County residents various forms of active recreation including swimming, softball, soccer, and playgrounds among others. These facilities are in addition to the vast federally-protected and state-protected parklands within the County used for outdoor recreation. The County will continue to pursue a myriad of programs for residents and visitors as needs evolve and opportunities present themselves.

Library Facilities

The Bath County Public Library is a branch of the Rockbridge Regional Library System with access to the resources of the entire regional system via interlibrary loans and from public or college libraries all over the United States. In addition to books, patrons enjoy the availability of magazines and collections of CDs and DVDs, and free high speed Internet access and Office computing such as Microsoft Word and PowerPoint. The library system currently has 197,451 books, CDs, DVDs, audio books, ebooks and databases with 26,282 people possessing library cards. During the 2012 to 2013 year, 229,067 library materials were loaned to patrons. The Goshen Public Library serves Bath citizens as well; in fact, a Bath resident's free card is good in all 5 of the regional system's libraries. Three trustees appointed by the Board of Supervisors serve on the library's governing Board of Trustees.

The library offers bookmobile service through a deposit station in Williamsville and a stop at Millboro School and the Millboro General Store. A van makes additional Bath County runs, serving seniors, children, and the homebound. Other services include a summer reading club for school-aged children and programs of literary and general interest to the public. The

Thomas Craven Meeting Room is a popular meeting place. The library's catalog is available 24/7 on the library's web site: www.rrlib.net/bath/default.htm. The library is located across from the Bath County Courthouse in Warm Springs and is open six days per week.

Animal Shelter

The Bath County Animal Shelter is located near the County's transfer station (waste handling site). A new shelter, completed in 2013, was constructed to meet state standards. The shelter has 2 full-time staff members, and 1 part-time kennel attendant.

Solid Waste & Recycling

Solid waste in Bath County is picked up from dumpsters by Jack's Trash and Republic Services and directly hauled to Peter's Mountain Landfill in Covington, Virginia. Recycling efforts are conducted through the use of green boxes which go to Jackson River Recycling. Glass has not gained its market for resale and is not being collected yet, but cardboard, plastics, and aluminum are accepted.

The State of Virginia has mandated that all rural localities need to recycle 15 percent of their solid municipal waste, as opposed to the 25 percent requirement for more urban environments. Bath County met this requirement for 2013, but there is still room for much improvement. Facilities for construction waste or community composting would greatly reduce the amount of trash that goes into the landfill and are options that could be investigated further.

Mountain Crest Retirement Home

Mountain Crest consists of 28 apartments in seven buildings, with each building having three one-bedroom apartments for a total of 21 one-bedroom units and one two-bedroom apartment for a total of seven two-bedroom units. All of the units are low to moderate income, with rents affordable to those with incomes between 40 and 60 percent of the area median.

PUBLIC SAFETY

The Bath County Local Emergency Planning task force is made up of citizens from within the community that assist the Bath County Local Emergency Planning Committee (LEPC). The LEPC is appointed by the Bath County Board of Supervisors and serves the citizens of Bath County with an all-hazards approach to Disaster Planning.

The Sheriff's Office provides law enforcement protection for Bath County 24 hours per day, 365 days per year. Nineteen full-time officers provide services ranging from dispatching of 911 calls, patrolling county highways, investigations, transporting of prisoners, community education, traffic control and funeral escorts. In conjunction with these efforts, Virginia State Police provide vehicle accident investigations, etc.

There are five (5) Volunteer Fire Departments in the County – Burnsville, Bath-Highland, Williamsville, Hot Springs, Mountain Grove, and Millboro. Additionally, there are three volunteer rescue squads – Hot Springs, Burnsville, and Millboro (See Map 10.1). These essential services rely on the goodwill and time of volunteers from the community.

Bath Community Ambulance Services, operated by Bath Community Hospital, provides mutual aid services to these volunteer squads. The VEPCO ambulance service assists with calls in the Mountain Grove area when available.

Bath County, a designated Medically Underserved Area (MUA), has as its asset a small rural hospital, Bath Community Hospital (BCH). BCH is a not-for-profit, Critical Access Hospital (CAH) with a licensed capacity of 25 beds for acute or skilled care. Services include twenty-four hour emergency services, home health and hospice care, community outreach programs such as Health Connection, rehabilitation services, as well as a select group of diagnostic services and specialty clinics. There are four family practice physician offices located in the Ingalls building adjacent to BCH. Two family nurse practitioners enhance these offices. A clinic in Millboro is available one evening a week, with services provided by a family nurse practitioner. A Wellness Center is located in Mitchelltown, operated by Bath Community Hospital, and staffed by exercise technicians and physical therapists.

HEALTH & HUMAN SERVICES

Rockbridge Area Community Services Board provides a wide range of mental health and mental retardation services with clinic hours three days a week at their office in Bacova. A group home, The Wellman House, and day support program is located in Millboro.

The Springs Nursing Center provides skilled and long-term care in the 60-bed facility. The recent addition of an Alzheimer's unit expands services to this population.

The Bath County Health Department strives to meet the medical health issues and the environmental health issues of the community. The mission of the Bath County Social Services Department is to promote self-reliance and protection for residents through community-based services.

Valley Program for Aging Services provides five meals a week through an arrangement with Bath Community Hospital and assistance from Meals-on-Wheels volunteer organization as well as homemaker/aide services.

The Senior Center, located in Warm Springs, is the meeting place of Bath County senior citizens.

The Allegheny Free Clinic uses Bath Community Hospital as a location to screen new enrollees and to update information on current patients.

Safe Homes of Allegheny provides emergency services and a wide range of educational services to Bath County.

COMMUNITY FACILITIES & SERVICES GOALS

1. Continue to assure that the citizens of Bath County will have access to quality health care and social services.
2. Strive to ensure the health, safety, and welfare of all citizens and property in the County through all fire, rescue, and law enforcement entities.
3. Promote athletic, cultural, and recreational activities to all age groups.
4. Expand and strengthen community-based services and the distribution of public information throughout all areas of the County.
5. Provide financial and other incentives for first responders.

OBJECTIVES

- a. Seek to provide Volunteer Fire and Rescue Services to cover the entire County and strive to reduce the emergency response times.
- b. Provide funding for new life-saving equipment (i.e. – AED’s) to first responders.
- c. Continue to upgrade our current emergency communications system (an enhanced E911 system) to include reverse E911 system (as a “Phase II” implementation) through construction of Bath County Emergency Services complex.
- d. Institute a policy to ensure that developers, and not taxpayers, pay for the costs and impacts of development within the County.
- e. Implement opportunities for a program that maximizes recycling opportunities from business and residential construction waste and provide educational opportunities about these programs to the public.
- f. Explore partnerships with the National Forest Service and the Department of Game and Inland Fisheries that enhance more public lands for recreational use.
- g. Analyze the need for additional retirement home facilities in the community.

- h. Strive to renovate and utilize vacant buildings for community use or provide for adequate demolition and disposal of these vacant structures.
- i. Consider making financial incentives available for those willing to offer private social services (i.e. – day care, elder care...etc.).
- j. Strengthen the funding and maintenance of the library services and facilities to meet the needs of the growing and diverse population.
- k. Actively provide direction and incentives for the provision of information services for wireless communications, broadband services and other new technologies by adopting a comprehensive telecommunications ordinance.
- l. Require fire hydrants/dry hydrants in new subdivisions to provide additional water resources for our firefighters.
- m. Expand technical and job related training through a partnership with Dabney S. Lancaster Community College and other public and private vocational and job training programs in Bath County. Enhance technical and vocational education facilities and programs that will encourage volunteerism and career interest in health related fields.
- n. Support and enhance the Bath County Local Emergency Planning Committee, and continue to work with the Central Shenandoah Planning District Commission to establish an inter-jurisdictional task force.
- o. Enhance efforts that provide: linkages between public and nonprofit agencies between jurisdictions, grant-writing resources for public/non-profit partners, and generation of accurate public information.
- p. Annually review the Bath County Hazard Mitigation Plan.
- q. Support the formation of Memorandums of Understanding between local, regional, and state jurisdictions, and establish a clear management structure for forming plans, policy, procedure, and protocols that strive to achieve consensus among fire, EMS, law enforcement, and other health and safety related groups, and grant the ability to cross jurisdictional boundaries.



LAND USE

CHAPTER 11 Land Use

EXISTING LAND USE

Existing land uses in Bath County are primarily forestry and agriculture. Nearly 51 percent is national forest and another 5 percent is state natural area and forest. Such federal lands are reserved for conservation and recreational purposes. Approximately 14 percent is used for agricultural purposes. Much of the County's remaining land is undeveloped, privately-owned forest. A relatively small portion of land in Bath County is actually developed.

The current land use in Bath County is the result of gradual development over time. Existing land uses play an important role in determining future land use trends. All parcels of land in Bath County are classified into one of the following general categories:

- Residential
- Business
- Industrial
- Agricultural
- Conservation
- Tax Exempt (Government, Religious, Charitable, or Educational)

Warm Springs District

The Warm Springs District sits in the northwestern-most portion of the County. Within the district are the villages of Warm Springs (the County seat), Bacova, and Mountain Grove. The District has seen limited development with the recent exception of the Homestead Preserve. A large percentage of this district consists of wildlife management areas. Lake Moomaw is found in the southern portion of the Warm Springs District.

Williamsville District

The Williamsville District covers many of the sparsely-populated areas of the County and has the greatest land area of any of the Districts. It covers most of the northeastern part of the County and extends south towards Douthat State Park on Route 629. Most of the land along Route 629 is agricultural with some residential growth mixed in near Williamsville on Route 609.

Cedar Creek District

On the other hand, the Cedar Creek District is the smallest magisterial district in land area. Located in the County's southwestern quadrant, Cedar Creek encompasses such villages as Mitchelltown, Bacova Junction, and a portion of Hot Springs.

Valley Springs District

One of the smaller magisterial districts, Valley Springs District, contains the villages of Ashwood, Carlover, and Healing Springs along the Route 220 corridor. A portion of Hot Springs is also part of the Valley Springs District.

Millboro District

The Millboro District is home to both Millboro and Millboro Springs. The primary concentration of land zoned M-1 (Industrial) in the County was found here in the Millboro District in the Millboro Industrial Park. A portion of the park was rezoned to B-2. The County should consider returning it to its original designation in order to attract suitable industry for economic development purposes.

LAND USE PLAN

Land use planning entails the designation of local areas for various activities, such as business, industry, housing, conservation, and recreation. These land uses are based on the suitability of those parcels for specific activities and on the community needs. Suitability is usually determined by the characteristics of the land and of the environment, available infrastructure, and existing adjacent uses. It is the responsibility of the community as a whole – not just the elected officials – to decide which areas of the County should be conserved and which areas should be developed.

Since development can either enhance or detract from a community, land use policies must reflect local cultural, natural, and historic attributes. They must also provide for the fair and equitable treatment of all landowners.

The following land use plan is based on the cumulative analysis of each of the preceding sections. It is a combination of present land use patterns, landowner's initiative, and the County's goals and objectives for future land use. The Plan strives to establish a guide or blueprint for possible future development that will result in cohesive and logical growth. It is also designed to be flexible enough to accommodate changing conditions.

Bath County's Future Land Use Plan should be based on community principles. The County has long been recognized as a major resort center and tourism destination in the Allegheny Mountains with beautiful open land and unique recreational outlets. Our historic buildings, neighborhoods, landscapes, and sites are essential to Bath County's special identity and enhance the lives of both our citizens and our countless visitors. The most desirable developments would be those that complement the County's natural setting. Random and scattered growth should be discouraged in favor of a more compact and sustainable pattern promoting connectivity between places where people live, work, and play.

TYPES OF DEVELOPMENT

Industrial Development

The County is genuinely concerned about stabilizing and expanding its employment base, and acknowledges that locating certain industries here in Bath may indeed be beneficial to the people of Bath County. Because of the County's desire to preserve the rural character that makes it so popular with tourists and residents alike, it is recommended that potential industrial development sites be placed on relatively small pads in the vicinity of one another. Such siting lends itself well to campus or "park-like" settings and encourages the centralized location of new industry within the County.

It is doubtful that industries requiring extensive air or water discharges could be accommodated in Bath County. Because of the delicacy of local ground and surface water, potential industries handling or storing hazardous materials should be stringently evaluated and discouraged in many locations due to karst and watershed issues. In addition, proper buffers between new industries, utilities, and existing residential and agricultural uses are recommended to preserve scenic vistas.

Commercial Development

While the majority of our citizens' retail needs can be met by patronizing Bath's current commercial sector, many citizens would very much like to see an expanded retail base. It is important to residents, however, that increased commercial opportunities do not bring with them excessive signage, large expanses of open parking, little or no landscaping, poor pedestrian access, or building design that is inconsistent with the flavor of the County.

Guidelines for future commercial growth will encourage concentrated development in existing business districts (and within "village" areas) and gradual growth at the edges of such areas. The County should consider ordinances that better address the positioning and buffering of parking areas, and encourage tasteful, coordinated building design and signage. Commercial mixed-use areas should be encouraged in those areas where a healthy balance between

neighborhood vitality and neighborhood cohesion exist within the County's villages. Architectural guidelines for commercial development should be created which would provide guidance as to facade, landscape, lighting, signage, etc.

Residential Development

Key factors for sustainability in many of Bath County's existing neighborhoods, particularly in the communities of Warm Springs and Hot Springs, include the continuity of style and scale among homes, effective use of landscape plantings and established trees, as well as obvious pride of homeownership.

Bath County's Zoning and Subdivision Ordinances must ensure that future residential development is sensitive not only to the quality of life for our current residents, but for future residents as well. In addition, it is necessary that they preserve the character and productivity of Bath County's rural/cultural landscape.

Additional development should be carefully planned to correspond with the current and future placement of utilities and infrastructure. In order to prevent "leapfrogging," a term used to describe haphazard development, the County should guide the placement of new growth areas so that they are expansions or extensions of existing subdivisions.

Densities of new residential developments will be determined by many factors including: the Future Land Use Plan, zoning, presence of utilities and roads, environmental factors, such as steep slopes, proximity to floodplain, presence of karst topography, soil suitability, and public input/involvement.

Mixed Use

Bath County, with its small town feel and limited development sites could allow and encourage mixed uses in its growth areas. Mixed use zoning will allow for a combination of two (2) or more uses within the same structure, building, or land parcel. One of the biggest benefits of mixed use zoning is that it allows for great connectivity and shortens the distances among the areas where people live, work, and play.

Other key advantages for mixed-use development include: 1) giving citizens more options for developing their property, 2) enabling a greater variety of housing options (such as second-floor apartments), 3) allowing residents greater proximity to commercial conveniences, and 4) encouraging the density that makes utility provision feasible. A mixture of uses also can fit well with the County's tradition of development being small scale, unique, and site specific.

LAND USE CHALLENGES

Steep terrain and the high proportion of public ownership leave relatively little of the land area in Bath County feasible to develop. Thus it is in the county's interest to ensure that suitable sites are developed as efficiently and carefully as possible, in ways that serve the long-term needs of county citizens (See Maps 11.1, 11.2, 11.3).

The greatest risk, with potentially troublesome economic repercussions, would be to allow development that degrades the environment and reduces the county's attractiveness for tourism and recreation. A more subtle risk would be using land so inefficiently that the provision of utilities becomes infeasible or too expensive and long-term growth is stunted.

Another facet of Bath's current land use is second-home development in recreational settings. This contrasts with the continuing need for residential options that local citizens can afford. Increasing land prices and property tax values will make it increasingly difficult to balance these interests.

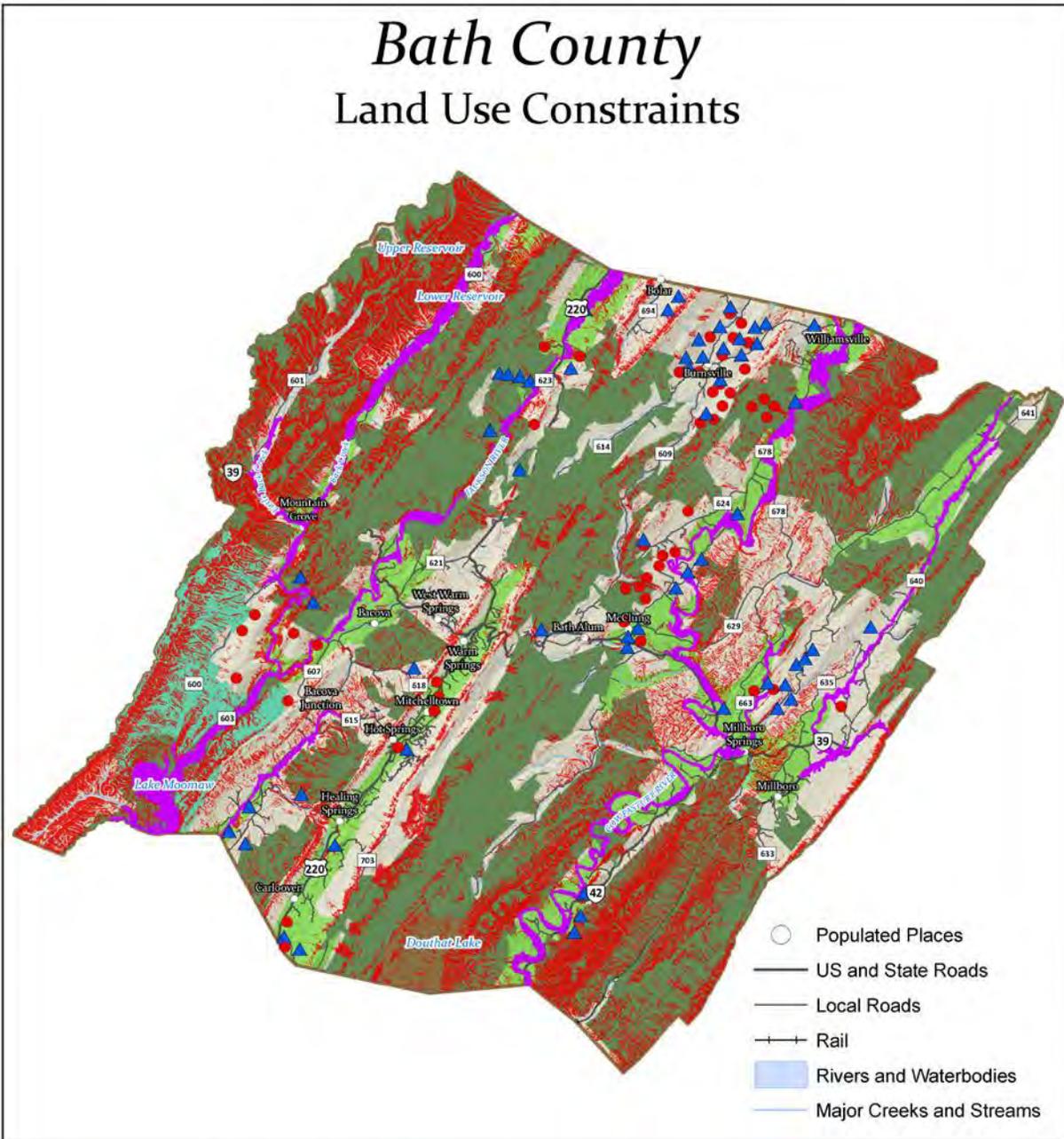
Agriculture and forestry management are the County's traditional land uses. As the County starts to experience more growth, there may be less understanding of these mainstays of the rural economy. These important uses will need to be protected and supported. Immediate land use challenges facing Bath County include the following:

- To be ready for additional development (that may not have the same high quality of resources and standards)
- To balance varied needs of citizens, especially as more part-time residents are added to the community
- To protect the County's significant natural and historic resources
- To support the county's traditional rural lifestyle, including productive farming and forestry
- To develop 'smart growth' strategies to make the best use of developable land, while protecting resources and providing residential options for all citizens
- To address issues of affordable housing and employment as they relate to land use
- To promote connectivity among the places where people live, work, and play

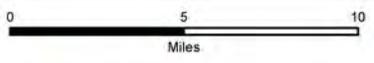
Map 11.1

Bath County

Land Use Constraints



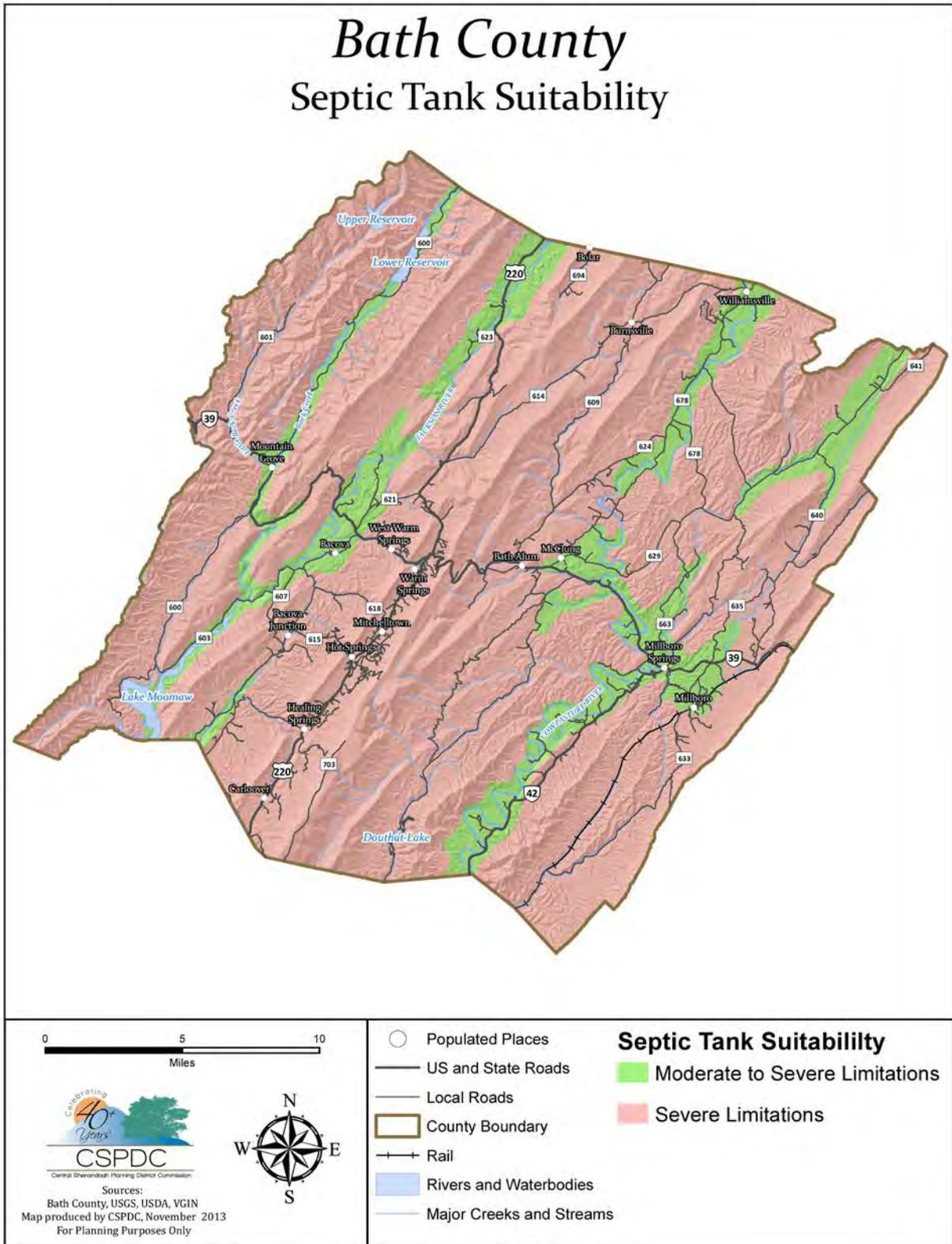
- Populated Places
- US and State Roads
- Local Roads
- + + Rail
- Rivers and Waterbodies
- Major Creeks and Streams



Sources:
 Bath County, USGS, USDA, FEMA, VGIN
 Map produced by CSPDC, November 2013
 For Planning Purposes Only

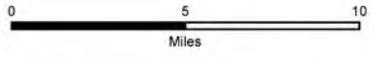
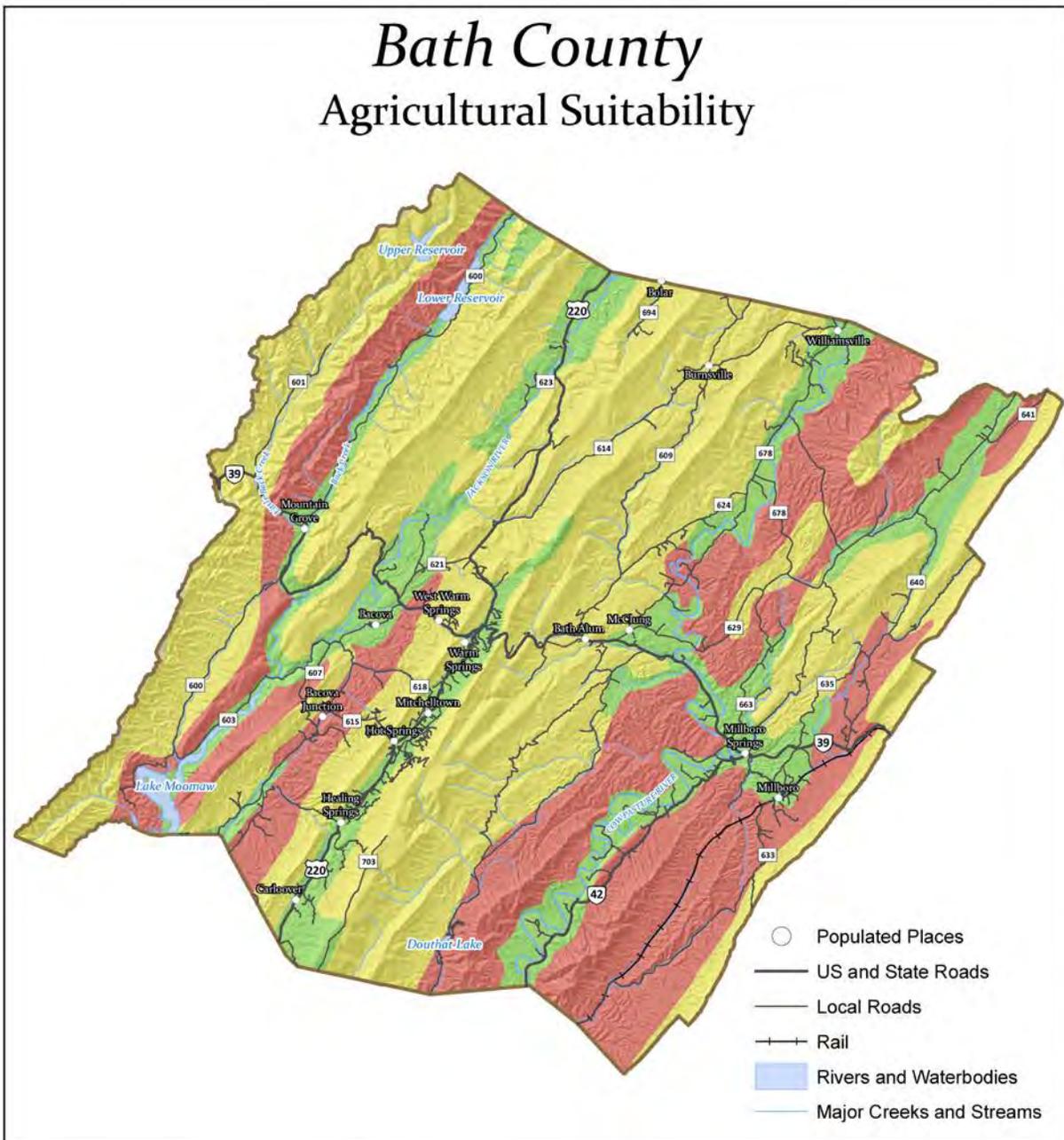
- 100 Year Floodplain
- Best Agricultural Suitability
- Douthat State Park
- U.S. Forest Service Land
- Wildlife Management
- Slope Greater than 25%
- Less-Intensive Constraints
- ▲ Cave
- Sinkhole

Map 11.2



Map 11.3

Bath County Agricultural Suitability



Sources:
 Bath County, USGS, USDA, VGIN
 Map produced by CSPDC, November 2013
 For Planning Purposes Only

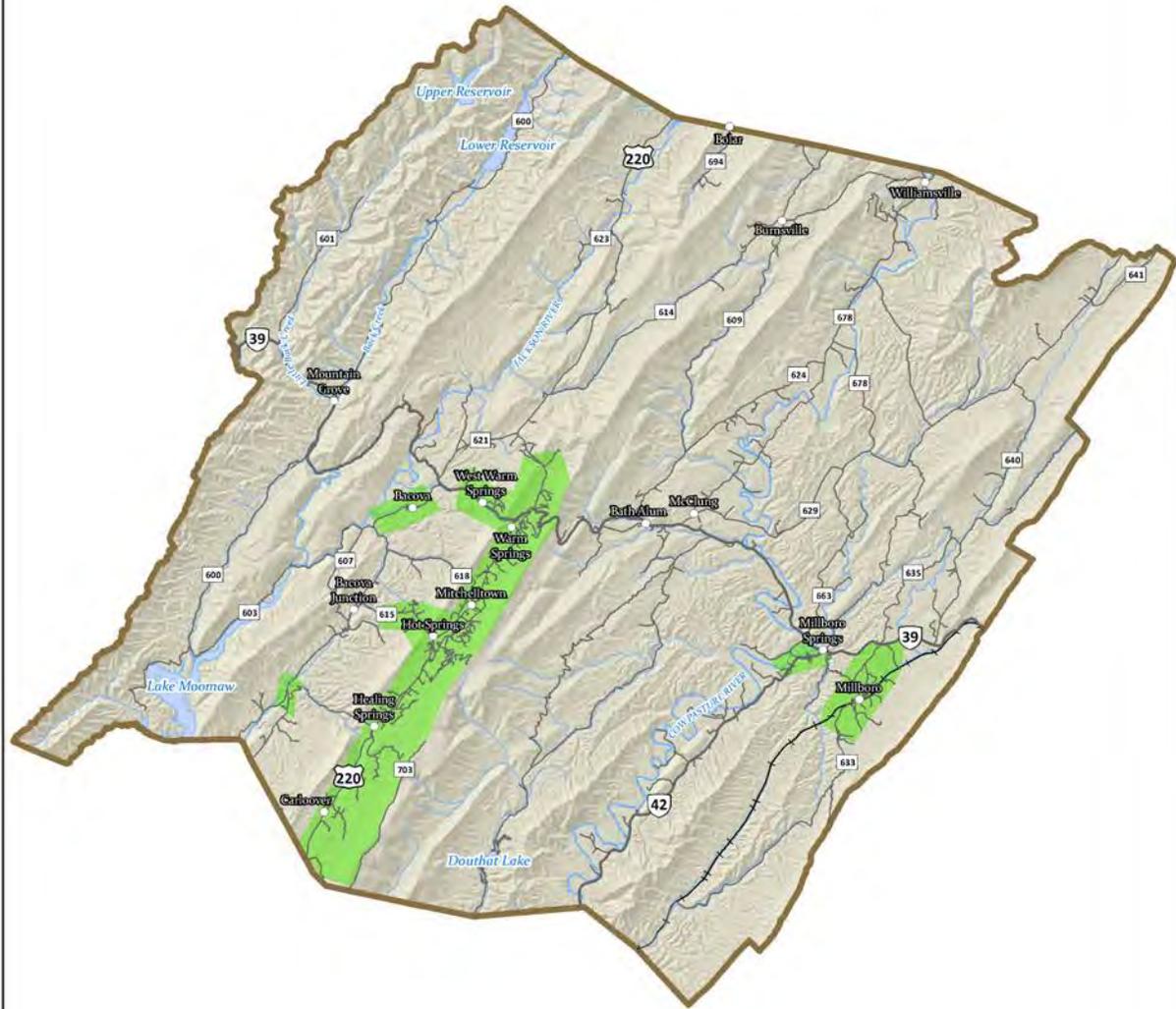
- Best and most productive soils for croplands and grasslands
- Fair to good productivity as croplands and grasslands
- Considerable limitations for use as cropland or grassland

Bath County's Growth Areas (See Map 11.4)

1. The Route 220 Corridor is the most heavily traveled highway in Bath County. Tourists travel this route to view scenic attractions such as the Warm Springs Pools, the historic Bath County Courthouse, and enjoy staying at the world-famous Homestead resort. With the communities of Warm Springs, Mitchelltown, Hot Springs, Ashwood, Healing Springs, and Carlover situated along Rt. 220, growth is occurring. This corridor has long been home to many Bath County residents and businesses. It will continue to thrive for years to come.
2. The Route 39 Corridor, west of Warm Springs, including the community of West Warm Springs is both growth area and a tourism corridor. The area follows Route 39 almost to the intersection of Route 687 (Jackson River Turnpike). This portion of Route 39 is frequently traveled by tourists, as it serves as a route to Lake Moomaw and the Back Creek Recreation area near Mountain Grove. The County has utilized grant funding to successfully revitalize low-income housing and install public water and sewer to homes in the West Warm Springs community.
3. The community of Bacova is located primarily along Route 687. The area is primarily zoned Residential with the exception of the former Guild building and the refurbished Bacova Gallery located in the old church. Residents of Bacova benefited from improved sewer services provided by the Bath County Service Authority.
4. Further down Route 687, south of the former Lower Cascades Golf Course and north of Cedar Creek Mobile Home Park, lies the smallest growth area in the County. The property between the two above mentioned points has few topographical constraints which allows for proper wastewater system installation and excellent home sites. A new wastewater treatment plant was completed in 2007 for the trailer park and may be expanded to support future home sites.
5. Heading eastward on Route 39 are the Millboro Springs and Millboro growth areas. These areas, situated along Routes 39 and 42, as well as Routes 633, 635, and a portion of 678, could serve more local needs for housing and employment. Millboro is home to the Bath County Industrial Park.
6. The County may also consider allowing the creation of Village Nodes or Rural Centers in areas such as Mountain Grove, Burnsville, Williamsville, and other communities to curb sprawl and promote connectivity and rural amenities.

Map 11.4

Bath County Potential Growth Areas



	<ul style="list-style-type: none"> Populated Places US and State Roads Local Roads Rail Major Creeks and Streams Rivers and Waterbodies 	<ul style="list-style-type: none"> Potential Growth Areas
<p>Sources: Bath County, USGS, VGIN Map produced by CSPDC, November 2013 For Planning Purposes Only</p>		

RURAL PRESERVATION TOOLS

Rural Land Protection Goals

Clear goals are an obvious but often overlooked foundation to an effective plan. Expressly stated goals are more likely to lead to action. They also can help the locality integrate its various and sometimes competing goals into a comprehensive vision.

There are many different aspects of “rural protection”. Some examples include protecting natural resources, preserving rural character, preserving scenic quality, and maintaining viable agricultural and forestry sectors. Each focus requires a different approach. However, they all have in common the fact that appropriate land use is the most effective way. Keeping a landscape rural, therefore, rests in large part on traditional uses staying viable for landowners.

Rural Land Protection Programs

With a clear goal, specific programs or initiatives can be targeted to address agricultural issues and farmland protection. Some counties have appointed an Agricultural Task Force to research local challenges and develop recommendations. This can lead to such steps as evaluating tax policy, reviewing zoning regulations, or establishing a purchase of development rights program.

Defined Growth Areas

Simply put, a successful rural protection program depends on accommodating population growth in a way that avoids sprawl. The principle of “growing in, not out” means protecting the integrity of the rural areas, while building communities that offer a high quality of life.

Defined growth areas are a way that counties can get serious about reducing sprawl. The County aligns both its development regulations and its capital improvements program toward guiding new development into these defined growth areas. The most basic principle is to limit new infrastructure to growth area boundaries. This removes the density potential of parcels outside of the growth areas and increases demand for the land that the locality is prepared to serve with utilities.

Containing the geographic scope of infrastructure does much to contain costs. Unless a government makes the political and financial investment in its growth areas, it will be unlikely to draw development away from a sprawling pattern.

The County can and should specify that water and sewer connections be limited to designated areas (growth areas and/or service districts which often coincide). It even can prevent connections to utility lines that cross properties outside the district.

The County could also add stipulations regarding annexation requirements (affordable housing, open space, etc.) for areas that want to be considered for growth and provision of services.

Potential detriments to Growth Areas involve artificial escalation of property values in targeted areas while prices fall elsewhere. Therefore, boundaries must be determined through public involvement and foresight, not arbitrary decision-making.

Keys to Successful Growth Areas:

- Water and sewer limited to designated boundaries
- Zoned for density
- Priority for infrastructure funding
- Detailed plan for growth (i.e., streetscapes, parks, roads)
- Zoning land to achieve neighborhood amenities rather than just more density
- Setting and maintaining those limits for new development

Oil and Gas Exploration, Drilling and Development Policies

Advances in non-conventional oil and gas drilling, known as hydrofracturing, has heightened interest in energy production from hydrocarbon formations in Virginia, including the Marcellus shale present in Bath County. While energy development can bring jobs and economic development to the County, the industrial nature of oil and gas hydrofracturing also can bring unintended consequences that create conflicts with other important County goals and plans. These include: compatibility with traditional rural economic sectors, such as agriculture, forestry, recreation and tourism; increased costs in providing community services to address impacts to roads, emergency services, criminal justice, public health and affordable housing that could potentially result from oil and gas extraction; protection of air and water quality; and conservation of natural resources.

County land use policies for oil and gas exploration are intended to augment Federal and State operational regulations governing energy development. The County seeks to provide guidelines for minimizing potential land use conflicts, provide adequate bonding and to ensure that uses of an industrial nature for energy production are sited where transportation and utility infrastructure are sufficient and available to support such uses and where adjacent land uses are compatible.

Green Infrastructure and Rural Preserve

The same goal of accommodating population while protecting rural assets also can be approached from the opposite angle. A ‘green infrastructure’ approach looks first at identifying important natural resources and protecting the integrity of these areas from development. In contrast to the ‘hard’ boundary of a growth area, this could result in fingers of greenways integrated with parks and other open space within fully developed areas.

In rural areas, sites such as riparian corridors, surface water recharge areas, farming enclaves, and so on might be targeted for protection. This would provide a reserve of farmland and forest for future needs. In some cases, there could even be a rural preserve.

The advantage of this approach is that it is strategic, as it focuses on protecting those areas that have the most environmental value. The benefits are widespread, since citizens even in more densely populated sections can enjoy access to open space, and the community can better address issues like stormwater management, flooding, and water quality. This approach also can incorporate watersheds, ridgelines, and other natural boundaries into site planning.

Land Use Taxation

Land use taxation, lowering the tax burden on land kept in rural uses, is the most basic incentive a locality can offer landowners to keep their land undeveloped. Bath County adopted Land Use Taxation as a means to mitigate the impact of rising land values and rising assessments in the rural areas of the County. The state allows localities to tax landowners based on how the land is used, rather than on its market value. Counties can designate any or all of four categories for the program: agricultural, forestal, horticultural, or open space lands. The Commissioner of Revenue sets a use value rate for each category, based on the land's productive earning power. The County also can set differing standards for eligibility.

Whenever land is pulled out of the land use taxation program and developed, a ‘roll-back’ tax is collected. Some localities designate this revenue for farmland protection or related programs.

Zoning and Subdivision Regulations

Local land use regulations are the primary determinant of the pattern of development. Zoning regulations specify what uses are allowed where, while subdivision regulations control how parcels can be subdivided. Zoning, however, is not a reliable protection tool. It is only temporary, since individual parcels can be rezoned to a different category and the regulations of a district can be changed. Zoning therefore tends to reflect rather than shape development pressure.

Any zoning district can be evaluated along the following major considerations: 1) density level (how many dwelling units per acre), 2) permitted uses, 3) protection of environmental features (such as prohibition of development in floodplains), 4) timing of subdivisions, and 5) design of subdivisions. Development on the ground will reflect the answers to these basic questions. Below are some of the zoning measures that are typically used to try to control residential development in rural areas:

Large-Lot Zoning – Large-lot zoning sets a high minimum lot size that results in large house sites served by individual well and septic. Minimum lot sizes can range from 5 to 10 to 20 acres or more. Some localities even exempt from subdivision regulations ‘large-lot divisions,’ those in which all resulting parcels meet an even higher size threshold. This serves as an incentive to create artificially large residential lots.

While originally touted as an effective tool for preserving land, in practice, large-lot zoning has several drawbacks. It leads to more sprawl by spreading the same population over a far greater area, increasing the cost of housing and would limit the County’s future options for utilities. It does not protect farmland, since it brings residents into agricultural areas, drives up the cost of land, and adds to potential conflicts over nuisances and roads. In particular, large-lot exemptions, if widely used, result in the development of significant land area for only a few households.

Maximum Lot Size – The opposite of a minimum lot size, a maximum lot size provision limits the size of lots in order to reduce consumption of prime farmland. As with clustering, the overall density is still based on total parcel size.

Agricultural Zoning – Too often perceived as a catch-all district for undeveloped (‘vacant’) areas, general agriculture districts typically allow varying degrees of residential development by right, as well as other uses by permit. As development pressure builds, piecemeal residential subdivision can compromise rural land uses and character. Facing this dilemma, counties often react either by drastically tightening the regulations in agricultural districts or by going in the other direction and rezoning some areas out of agriculture.

Exclusive Agricultural Zoning – A locality can use different tiers of agricultural zoning. In exclusive agricultural districts, the only uses allowed are those involving or compatible with farming or forestry. The allowed density is typically lower as well. In some cases, standards are set to accommodate intensive agricultural operations such as poultry houses.

‘Agricultural Compatible’ Uses – As farmers face increased financial uncertainty and pressures, they may need expanded options of how they can use their property in order to stay on the land. Some counties are responding by seeking ways to broaden the nonresidential uses allowed. These efforts typically set criteria that address compatibility issues rather than trying to designate specific uses.

Sliding Scale Zoning – Rather than applying the same density standard everywhere, sliding scale zoning allows smaller parcels to be subdivided at a greater density than larger parcels. The intent is to allow most owners to divide at least once, but to reduce the overall potential development density of larger parcels. This strategy may discourage wholesale subdivision of large tracts, because of the diminishing returns as tract size increases.

Time-Release Subdivisions – A locality can limit how often a landowner can divide a parcel. The intent is to allow farmers a periodic flow of income from selling off pieces of their main asset, yet remove the incentive for land speculation. Developers will not be as interested in the land if they cannot quickly recoup their land purchase and development costs. This technique is employed in Augusta, Rockingham, and Shenandoah counties, the three largely agricultural-dominated counties in the region.

Agricultural/Forestal Districts

An Agricultural and Forestal District (AFD) is a voluntary agreement between farmers and the local government to maintain land in farming for a set term. When a district is established, landowners agree not to convert their farm or forest land to development for a period of between 4 and 10 years. In return, the locality offers automatic land use taxation rates, protection from nuisance suits, and consideration of the district in local land-use planning. The Commonwealth also agrees not to take actions or make infrastructure investments that will place increased pressure on landowners to convert land. It is possible to stipulate that no hook ups are allowed on utility lines passing through districts.

AFDs are stronger than zoning regulations. Landowners gain strength in numbers with their neighbors, making it known to all that this land, at least for the near term, is reserved for farming and forestry management. It is, however, still only a temporary measure. As the development pressure increases, district participation tends to drop. Basic criteria for AFDs are as follows: 1) they are initiated by landowners voluntarily; 2) a district must have a core of at least 200 acres in one or more contiguous parcels, 3) parcels can be included in the district if their closest boundary is within one mile of the core, or if they are adjacent to a parcel that is in the district, and 4) part or all of a parcel can be enrolled.

The use of AFD districts has grown recently. Of the 45 AFDs in the 11-county Shenandoah Valley region in 2002, 38 had been formed since 1990. Increasingly, both farmers and localities realize the need to react to development pressure. However, as growth pressures have intensified, particularly in the Northern Valley, there has been an interesting trend. As the terms expire, significant amounts of acreage have been withdrawn from long-standing AFDs.

A potential drawback of AFDs is the diminishment of the tax base, making less money available to provide services and infrastructure upgrades. Because so much of Bath's land could potentially qualify for these tax breaks, establishing districts could mean a significant loss of

revenue. Figures would have to be carefully analyzed to see if this would be a wise decision financially for County coffers.

Conservation Easements

A conservation easement is a voluntary agreement in which a landowner permanently limits the uses of the land while maintaining all other rights of ownership (See Map 11.5). The restrictions are binding on all future landowners.

Most conservation easements restrict uses that would destroy natural, scenic, or historic values while allowing traditional uses such as farming and forestry. Typically, conservation easements limit the number of parcels and the number of dwellings. Other common provisions are buffers to protect streams or views. Each easement is tailored to the site and to the owner's wishes. The terms are negotiated between the landowner and the easement holder who agrees to uphold the terms of the easement.

There are many types of conservation easements. Agricultural or open space easements protect farm or forest land, typically by entire parcel. Riparian easements cover just the areas adjacent to streams and have provisions relating to protecting water quality and wildlife habitat. Scenic easements contain provisions aimed at protecting the view from or of a certain location (such as the Skyline Drive). They may specify building envelopes. Historic easements are written to protect specified historic features.

Most easements are donated (and can have significant tax benefits). To qualify for a federal charitable deduction, an easement must be permanent and must be held by a qualified entity. The Virginia Outdoors Foundation holds most easements in the state. Local land trusts, such as Valley Conservation Council, are another option. In addition, easements can offer a range of state tax relief and estate planning benefits. Easements also can be purchased (as described below under Purchase of Development Rights). Another option is a combination of donation and purchase.

Map 11.5

Bath County Conservation & Easements



	<ul style="list-style-type: none"> Populated Places US and State Roads Local Roads Rail Major Creeks and Streams Rivers and Waterbodies 	<ul style="list-style-type: none"> VOF Open-Space Easements <p>Conservation Lands</p> <ul style="list-style-type: none"> Federal State Private

Purchase of Development Rights (PDR)

A purchase of development rights (PDR) program enables a locality to purchase conservation easements. The protection is the same as with a donated conservation easement and the easement is still voluntary. In fact, an easement can be a combination of purchase and donation.

PDR programs offer key advantages to both the landowner and the community. The landowner gets to keep the land, and he also receives financial compensation for it. For some landowners, purchase can make a conservation easement a viable economic option. For communities, a PDR program can give the community a tool for guiding growth, reducing long-term infrastructure costs, and protecting particular sites. Studies estimate that localities can achieve significant long-term cost savings through buying conservation easements in the present and avoiding significant service costs later. About half a dozen localities in Virginia have established a PDR program.

Local PDR programs typically accept applications from interested landowners once or twice a year. They develop a set of standards and criteria for ranking the proposed parcels. After that, they negotiate and make purchases based on how much funding the program has. Some programs have a set price per development right. Others use appraisals as a basis for setting a price.

A local PDR program can be funded through a variety of mechanisms. These include a line item in the local budget, general revenue, roll-back taxes, a specific local tax, grants, and dedication of a particular windfall. Some of the most effective programs in the nation structure a PDR financing package that includes borrowing money at an advantageous interest rate and making payments to farmers on an installment plan.

Drawbacks of this program can include the need to identify environmentally sensitive areas and establishing a graduated priority, the disparity between those who wish to be included in the sending area rather than the receiving area, potential over commitment to infrastructure improvements, and monitoring trading to prevent duplicity.

Clustering

In open space design development (often referred to as “clustering”) the density, or number of lots, is based on the entire parcel, but the lots are sited on just a portion of the parcel. The remainder is set aside as ‘open space.’ For example, a 100-acre parcel at a base density of 1 dwelling unit per 5 acres and a minimum lot size of 1½ acres would result in 30 developed acres (putting 20 residences on 1½ acre lots) and leaving an undeveloped residual of 70 acres. The residual acreage can be available for continued farming or other rural use or it can be incorporated into the development as common open space.

Localities can set different standards for different purposes. For example, in agricultural zones, the emphasis might be on maintaining a sizeable contiguous area to enable continued farming or forestry. For example, some counties require that anywhere between 70-85% of the parcel be reserved in this way. Other ordinances may specify that environmental features be protected. Also, provisions might address the suitability of the reserved open space to ensure that it is usable and appealing for common open space. All of these strategies recognize that the open space and key vistas on-site should be ‘designed’ in their own right, to serve specific purposes, rather than merely be the ‘leftover’ portion after house sites are chosen.

One variation for open space design involves instituting minimum open space requirements. Some communities have varying minimum open space requirements for various zoning districts, including multi-family and commercial. In Bath County, the most appropriate application of cluster development standards would be for village nodes, or other more established communities that would benefit from housing and amenities while maintaining rural character and open space.

The benefits of clustering include the opportunity to protect natural areas, scenic views, and other assets during development as well as somewhat reduced land consumption.

When designating areas for potential cluster developments, it is important to avoid siting issues, such as creating dense, impervious surfaces that may impact water quality, and assuring that topography is stable enough to support the weight of such projects.

Regulating Open Space Design

- Is the open space design optional or required? Optional programs may need to offer incentives, such as density bonuses or streamlined review process, to encourage its use.
- In what areas is it offered? Some ordinances set different open space requirements for different zoning districts.
- What percentage of open space is required? Different amounts may be required in different districts. Some counties have minimum open space requirements for residential, commercial, multifamily, and rural.
- How many units can be clustered? Too many units can overwhelm a site and raise groundwater concerns.
- What are the standards for the open space? In agricultural areas, staying below the ridge line for protection of steep slopes and scenic views can be important. In residential areas, standards can ensure that open space is usable for active or passive recreation.

Historic Preservation

Preserving historic resources is vital to maintaining the extensive cultural heritage in the County. The three main steps to historic preservation are 1) identification, 2) recognition, and 3) protection. Identification means inventorying the historic resources in a community and understanding their importance. Designations provide recognition for particularly significant sites but do not protect them. Protection comes only through local preservation ordinances or through a property owner placing a historic easement.

Historic Preservation Tools

- Have complete and thorough surveys of architectural and archaeological resources
- Link survey data to the planning process (i.e. mapping properties or districts that are on or eligible for the National Register)
- Consider nominating historic districts
- Designate and protect publicly owned historic properties
- Consider enacting a local historic preservation ordinance
- Promote the use of historic preservation easements
- Consider developing a design guideline for new construction and renovation of buildings
- Explore designation as a Certified Local Government

Historic Surveys – Not all properties that would qualify for a historic listing have been identified or nominated. In fact, the assessment of historic resources is far from complete in most counties throughout the Valley region. Many counties have some level of survey, but in some cases they may not be as thorough or complete as would be necessary. The Virginia Department of Historic Resources (VDHR) ranks how well each locality has assessed its architectural and archaeological resources.

Historic Designations – The National Register of Historic Places and the Virginia Landmarks Register recognize properties of significant historic importance and integrity. The National Register is the official list of structures, sites, objects, and districts that embody the “historical and cultural foundations of the nation.” The state uses the same nominating process and criteria for its counterpart, the Virginia Landmarks Register. These designations convey information, confer honor, and heighten awareness, but they do not restrict property owners from utilizing their property in any particular way.

Designation raises understanding of the historical significance of a particular site, enhancing the likelihood that it will be maintained and protected. Designation also can potentially qualify owners for technical assistance and both federal and state tax incentives to restore listed properties.

Districts can be listed on the National Register. National Register historic districts are collections of buildings or sites. These can range from downtown commercial areas, older neighborhoods, or even agricultural complexes. Historic districts also can follow a theme, such as military or education. Listing as a National Historic Landmark is an even higher level of distinction, given only to properties of historical significance to the nation.

Historic Preservation Ordinances – Localities can adopt regulations to protect the integrity of their historic areas. Most historic district ordinances seek to ensure that any changes (new construction, additions, and substantial repairs) are compatible with historic character. Typically, this is done through an overlay district, with proposals evaluated by an Architectural Review Board (ARB).

Historic Easements – Historic easements offer protection that the characteristics that give a property its historical integrity will not be destroyed. The Virginia Board of Historic Resources holds or enforces these easements. As with conservation easements, the underlying ownership does not change. Easements are commonly owned by non-profit groups.

Design Guidelines – A guidebook outlines the expectations for building design and construction, including restoration. The guidebook would be available to property owners and developers to help ensure that their proposals maintain community character with respect to the County's history and natural beauty. A guidebook typically addresses design elements such as site layout, building design and materials, lighting, and signage.

Certified Local Governments – Localities that qualify as Certified Local Governments (CLG's) are eligible for grants and training from the state. The grants can be used to survey architectural and archaeological resources, prepare nominations to the National Register of Historic Places, create preservation planning documents and programs, create public education programs, and rehabilitate publicly owned buildings listed on the National Register. One of the prerequisites is having a local historic district ordinance.

Such an ordinance is the only development restriction placed on properties within the district, and may be crafted to be relatively lenient or strict. Bath County should look at adopting regulations that allow the government and citizens to take advantage of tax credits and other incentives to protect historic resources, but also ensure that property rights are not unduly restricted or that bureaucratic layers don't become too overwhelming.

Protecting Scenic Resources

Preserving scenic views and vistas is particularly important for Bath County, because its pleasing scenery is one of its most distinguishing features. The Alleghany Mountains are a national attraction and derive their popularity from spectacular views. Tourism and nature-based leisure draw on the beauty of the region and have significant economic impact. Furthermore, our residents value the beauty of their natural surroundings on a daily basis.

Keys to Preserving Scenic Views

- Maintain farmland and forestland
- Control signage
- Develop corridor plans and overlay districts
- Minimize the visibility of wireless communication towers and other tall structures
- Use scenic designations (like Virginia Byways and Virginia Scenic Rivers)
- Site rural buildings to their context
- Use viewshed easements around particularly important sites
- Limit ridgeline development
- Use open space development designs
- Set standards for outdoor lighting

Scenic Road Designation – The Scenic Highways and Virginia Byways Act authorizes the Commonwealth Transportation Board to recognize specific roads for their outstanding features. A Scenic Highway is defined as a road that is built within a protected corridor. “Virginia Byways” are existing roads with significant aesthetic and cultural values, leading to or lying within an area of historical, natural, or recreational significance.

Designation does not bring any state regulation and does not prevent future road improvements. Any land-use controls are decided upon and applied at the local level. Virginia Byway status encourages local governments to adopt land use measures to protect these resources for the enjoyment of future generations.

To qualify for Virginia Byway status, a road must substantially meet these criteria: 1) The route provides important scenic values and experiences; 2) There is a diversity of experiences, as in the transformation from one landscape to another; 3) The route links together or provides access to significant scenic, scientific, historic, or recreational points; 4) The route provides opportunity to leave high-speed routes for variety and leisure in motoring; 5) Landscape controls or monitoring along the route is feasible; and 6) The route affords opportunities for the provision of features which will enhance the motorist’s enjoyment of the byway.

Many Virginia Byways pass through multiple localities. Some counties or citizen groups make concerted efforts to designate qualified scenic roads. In this way, byway designations can build on tourism or historical themes and can be coordinated with other county programs.

Other Designations – Localities also can develop designations that suit their particular resources. For example, Alleghany County is developing the Jackson River Scenic Trail. The Board of Supervisors voted to ban all motorized vehicular traffic from this future hiking and biking trail. The county established a committee to address development of the trail and a sister committee to concentrate on use of the Jackson River itself.

Virginia Scenic Rivers Program – The Virginia Scenic Rivers Program identifies, recognizes, and provides a level of protection to rivers or streams whose scenic beauty, historic importance, recreational significance, and natural characteristics make them important resources.

Scenic Rivers must meet a rigorous assessment based on 11 criteria. Typically, a local government requests an evaluation. If a segment is deemed eligible, a local legislator must sponsor designation by the General Assembly. Specifically, Back Creek, Jackson River and Cowpasture River can be pursued as all have been identified as potentially eligible for designation.

As with Scenic Roads, we must take care to ensure that a fair balance is struck between property rights and resource protection.

Ridgeline Protection – The mountainous topography of the region means that a panoramic view can be destroyed even by small amounts of development above the ridgeline. Both Albemarle and Clarke Counties have attempted to address this aspect of development. Within the region, Botetourt County is also looking at how to protect scenic views. Bath must ensure that development on ridge tops is compatible with the environmental features of the land and does not diminish natural and scenic values.

Cell Towers and Other Structures – Modern wireless communications require telecommunications facilities. However, their height makes these structures highly visible. In order to provide full service coverage, companies need to disperse these facilities throughout the rural areas of the County. The FAA requires that structures greater than 200 feet in height must be lighted, prompting many localities to require that all new structures be no taller than 199 feet. Localities may regulate dozens of factors and issues related to the construction of wireless communication towers in terms of safety and siting. Many include additional standards to mitigate the visual impact of the towers.

Just as no one twenty years ago could have predicted the proliferation of cell towers, there will be additional challenges to rural landscapes in the future, as shown by the recent large-scale wind tower proposal in Highland County. Ordinances that rely only on listing allowable and prohibited uses may be more vulnerable to such unanticipated developments. Providing a statement of intent for each zoning district within the County's updated land use regulations, including protecting visual quality, is useful in such cases.

Prevention of Light Pollution – Outdoor lighting can turn into light pollution when light spills onto adjoining properties or upward into the night sky. The potential effect is that it becomes a nuisance to the neighbors and, cumulatively, a diminution of the darkness in the community. Seeing the stars in the night sky can be significantly damaged by excessive or ill-considered lighting.

One solution is to shield outdoor lighting and direct it downward so that it illuminates only the intended areas. The International Dark Sky Association (IDSA) has a wealth of resources, including fact sheets, a model lighting ordinance, and specific information on appropriate light fixtures and where to find them. Many localities in the state and throughout the nation regulate outdoor lighting to help ensure that all residents can enjoy the night skies.

LAND USE GOALS

1. New growth should complement the County's natural, historical, and cultural setting.
2. Encourage the location of any new development to correspond with existing or planned public utilities and create standards for more localized systems when expansion to a designated, appropriate area would be cost prohibitive.
3. Ensure that effective land use planning is kept in balance with the freedom and rights of individual landowners.
4. Encourage "Village Type" growth models for business and residential areas.

OBJECTIVES

- a. Locate potential industrial development sites on relatively small pads in the vicinity of one another, so as to centralize development in "industrial parks."
- b. Stringently evaluate the effect of proposed industrial locations upon local air quality, as well as ground and surface waters.
- c. Consider alternative energy sources (i.e.- wind, solar) at an appropriate scale and location, for use within the local community.
- d. Preserve and protect the water quality, scenic beauty, and natural character of the Cowpasture and Jackson Rivers, as well as Back Creek, by using established Best Management Practices.
- e. Discourage strip development along Routes 220, 39, and 42, as well as other highways.
- f. Avoid developing on steep slopes (greater than 25%) due to potential problems with erosion, sedimentation, and water pollution.
- g. Discourage or carefully regulate development of land areas within the 100-year floodplain of any river or stream.
- h. Encourage commercial development in existing business districts and gradual growth at the peripheries of such areas.

- i. Develop and support the incentives and techniques described herein to preserve Bath County's rural and historic character (conservation easements, land use taxation, historical landmarks designation, Virginia Byway designation, and cluster development).
- j. Consider revising the current Zoning Ordinance to include the following:
 - 1. Strengthen buffering requirements between zoning districts where such would enhance use compatibility.
 - 2. Stipulate that manufactured homes, where permitted in agriculture districts, shall be subject to development standards that are equivalent to those applicable to conventional, site-built single family dwellings within the same or equivalent zoning district.
 - 3. Adopt a set of comprehensive telecommunications, wind, and solar facilities, and mineral and gas extraction siting guidelines.
 - 4. Include model ordinances that will protect water quality, ridgetops, viewsheds, dark skies, and soil quality.
 - 5. Consider changing the current animal husbandry regulations to allow for permitted uses in Agricultural zones with a specified acreage requirement and as a Conditional Use in Residential zones with a more substantial acreage requirement.
 - 6. Introduce a new zoning classification of Mixed Use that could be utilized in downtown Hot Springs and other areas where combining commercial and residential uses would be appropriate, and implement corresponding standards, uses, and other guidelines.
 - 7. Consider adopting regulations regarding the creation and management of historic districts.
- k. Explore designation of Bath County as a Certified Local Government by the Virginia Department of Historic Resources.
- l. Planned community growth areas in Bath County include the following as shown on Map 11.4:
 - 1. Route 220 Corridor (north of Warm Springs south to Carlover)
 - 2. Route 39 West (including Warm Springs)
 - 3. Bacova
 - 4. Cedar Creek (north of trailer park, south of Cascades)
 - 5. Millboro Springs and Millboro

- m. In the remainder of the County, consider allowing low-density occupancy uses upon review.
- n. Discourage “Big Box Type” commercial buildings and place a limit on the total square footage allowed in any one building in certain zones.
- o. Develop a current map of Karst features that could aid landowners and developers in making land use decisions.



APPENDICES

APPENDIX A

Project List

2011 Rural Long Range Transportation Plan

VA 39 (Mountain Valley Rd)/VA 690 (Windy Cove Rd) – Intersection

Mid-term install turn lanes on VA 39; Long-term flatten westbound approach if feasible and eliminate VA 690 access point.

US 220 (Sam Snead Hwy)/VA 614 (Muddy Run Rd) – Intersection

Short-term remove vegetation along west side of US 220; Mid-term install turn lanes on US 220; Long-term reconstruct and realign US 220 and reconstruct VA 614 approach to intersect at 90 degree angle.

Ingalls Overlook on VA 39, east of US 220 ~ 1-2 miles

Short-term add advance signal warning signs; Long-term improve line-of-sight by cutting mountain back adjacent to curve.

Jackson River Tnpk/Cowardin Run

Short-term replace bridge.

US 220 from VA 39 to VA 39 N

Long-term continue to monitor for need of improvements, while taking into consideration the presence of historic properties.

VA 629 (Douthat Rd) from Douthat State Park to VA 39 S (Mount Valley Rd)

Long-term reconstruct road to address geometric deficiencies (10-foot lanes).

VA 629 from VA 39 N (Mount Valley Rd) to VA 625

Long-term reconstruct road to address geometric deficiencies (10-foot lanes).

VA 629 from VA 625 to VA 678 S

Long-term reconstruct road to address geometric deficiencies (10-foot lanes).

VA 629 from VA 678 N to Augusta Co Line

Long-term reconstruct road to address geometric deficiencies (10-foot lanes).

VA 635 (T. C. Walker Rd) from VA 633 to VA 39 (Mount Valley Rd)

Long-term reconstruct road to address geometric deficiencies (10-foot lanes).

VA 615 from VA 687 (Jackson River Tnpk) to VA 644 W

Short-term perform shoulder and ditch maintenance; Long-term reconstruct road to address geometric deficiencies, including full-width lanes and shoulders and improvements to VA 615.

VA 687 (Jackson River Tnpk) from VA 615 to VA 39

Long-term reconstruct road to address geometric deficiencies (10-foot lanes), except for portion through the village of Bacova, which is to be rehabilitated/repaved.

VA 645 (Old Mill Rd) from VA 619 (Courthouse Hill Rd) to VA 692

Long-term rehabilitate roadway as needed.

VA 619 (Courthouse Hill Rd) from 0.10 mile east of VA 645 (Old Mill Rd) to VA 220 W

Long-term rehabilitate roadway as needed.

VA 614 (Muddy Run Rd) from US 220 (Stuart Hwy) to VA 609

Long-term reconstruct road to address geometric deficiencies (10-foot lanes).

VA 609 (Dry Run Rd) from VA 614 (Muddy Run Rd) to Highland Co Line

Long-term reconstruct road to address geometric deficiencies (10-foot lanes).

VA 635 (Ridge Rd) from 3.84 mile north of VA 39 to hard surface portion of VA 635 at the west end of the Mill Creek Bridge

Short-term widen roadway, improve drainage, and hard-treat the surface.

VA 615/VA 644 from VA 644 West to 0.19 mile west of US 220

Short-term perform shoulder and ditch maintenance; Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders).

VA 615 from 0.19 mile west of US 220 to US 220 (in Hot Springs)

Short-term perform shoulder and ditch maintenance.

VA 616 (Pinehurst Heights) from VA 615 to End of Road

Long-term upgrade roadway to standards.

US 220/VA 615

Short-term ongoing study underway to identify needed improvements.

US 220/VA 682

Mid-term perform safety study.

US 220 at Rubino Hill just north of Cascade Golf Course, south of Homestead Road/Valley Farm Road

Mid-term perform safety study.

Rt. 39/Culvert/Little Back Creek (just south of VA 600)

Short-term replace culvert.

Rt. 39 from West Virginia State Line to VA 600 (Big Back Creek Rd)

Mid-term resurface roadway.

Rt. 39/VA 601

Mid-term rehabilitate bridge.

APPENDIX B

Implementation of Smart Growth Principles

In recent years, many communities have recognized the benefits of Smart Growth Principles (i.e. environmentally sensitive land development with the goals of minimizing dependence on auto transportation, reducing air pollution, and making efficient infrastructure investments.)

In 2005, community workshops were held with the assistance of the staff and the CSPDC to solicit input from the public to hear what Smart Growth objectives were the most desirable in Bath County. To summarize that public comment, the responses with highest scores are listed in the tables below. These objectives are recommendations to the community and should be included in any subsequent revisions to the Land Use Regulations. An explanation of each Smart Growth Principle precedes the list of recommended strategies.

Smart Growth Principle #1

Mix Land Uses

Mixed land uses are a critical component of Smart Growth. To elaborate, towns and cities built in the early 20th Century were vibrant communities because their integrated land uses provided residents easy access to work, school, shopping, and recreation areas – often by walking or biking. Improved environmental conditions and changes in business have now reduced much of the need to separate land uses.

Integrated, mixed land uses can not only serve to reinvigorate communities, but can also help to reduce dependency on cars, roads, and parking, and help to reduce pollution of air, rivers, streams, and lakes caused by separation of land uses. Vibrant, traditional “village cores” that provide convenient access to work, schools, shopping, and recreation have proven to be successful in attracting investors. The ten tables below list strategies that could be implemented to achieve each principle (These strategies are listed in *descending* order of the number of votes received at the public forum - highest vote-getter listed first.)

Seek incentives through state funds to encourage residents to live near where they work.
Provide examples of mixed-use development at scales that are appropriate to your community.
Adopt smart growth codes to parallel existing conventional development codes.
Encourage the redevelopment of single uses into mixed-use developments.
Reward communities that create a balance between jobs and housing.
Provide incentives for ground-floor retail and upper-level residential uses in existing and future development.
Locate neighborhood stores in residential areas.
Use innovative zoning tools to encourage mixed-use communities and buildings.

Smart Growth Principle #2
Utilize Compact Building Design

The County can encourage that new developments should leave more open space by using smaller building footprints, reducing minimum lot size, compacting utility lines, and increasing densities in and around areas where you want the public to go.

Use public meetings about development options to educate community members on density and compact building options.
Ensure ready access to open space in compactly developed places.
Incorporate model state-level design standards and codes to encourage compact building design that can be adopted by local communities.
Adopt a cottage housing development zoning district.
Use compact development coupled with onsite best management practices to improve environmental outcomes.
Use traditional neighborhood design.
Encourage developers to reduce off-street surface parking.
Use density bonuses to encourage developers to increase floor-to-area ratio (FAR).
Employ a design review board to ensure that compact buildings reflect desirable design standards.

Smart Growth Principle #3
Create a Range of Housing Opportunities and Choices

Zoning and Subdivision codes can be updated to allow for a broader range of choices in housing type and quantity of units by integrating single and multi-family uses.

Streamline the development review process when units include affordable housing.
Revise zoning and building codes to permit a wider variety of housing types.
Implement a program to identify and dispose of or renovate vacant and abandoned buildings.
Adopt special rehabilitation building codes to regulate the renovation of existing structures.
Enact an inclusionary zoning ordinance for new housing developments.
Adopt property tax exemption programs for mixed-income developments and low-income homeowners.
Plan and zone for affordable and manufactured housing development in rural areas.
Integrate smart growth and housing programs.
Educate realtors, lenders, and home buyers on the use of resource-efficient mortgages and housing design.
Create a regional program to encourage all communities to include a fair share of affordable and moderate-range housing.

Smart Growth Principle #4
Create Walkable Communities

Prior to WWII neighborhood design focused on pedestrians. Sidewalks with destinations were important. After WWII the focus has been on the automobile. Sidewalks are no longer common infrastructure and often are seen as expensive and unused.

To make communities walkable again, we need to create pedestrian-friendly features that promote sidewalk use. Examples include: mix of densities, mix of uses, compact street intersections with crosswalks, neighborhoods scaled to people, narrower streets, traffic-calming, on-street parking, and pathways in parking lots.

Deterrants to pedestrians include: wide streets, few crosswalks, sidewalks to nowhere, long blocks, and limited pedestrian infrastructure such as sidewalks, median strips, and traffic-calming features.

Conventional development design disincentives to pedestrians include: setbacks, large minimum lot requirements, indirect street routes, cul-de-sacs, sidewalks to nowhere, long blocks, and lack of front porches.

Business development disincentives to pedestrians include: large parking lots with no walking paths or crossings. Placing parking behind buildings or instituting maximum (rather than minimum) parking and setback requirements are potential solutions to these challenges.

Use trees and other green infrastructure to provide shelter, beauty, heat reduction, and separation from automobile traffic.
Beautify and maintain existing and future walkways.
Provide Americans with disabilities easy access to sidewalks, streets, parks, and other public and private services.
Connect walkways, parking lots, greenways, and developments.
Use visual cues and design elements to indicate pedestrian rights of way and minimize conflicts.
Adopt design standards for sidewalks.
Require traffic-calming techniques where traffic speed through residential neighborhoods is excessive.
Provide grants or other financial assistance to local communities to retrofit existing streets and sidewalks to promote more walkable communities.
Require building design that makes commercial areas more walkable.
Identify economic opportunities that stimulate pedestrian activity.
Concentrate critical services near homes, jobs, and transit.
Develop a pedestrian master plan.
Situate parking to enhance the pedestrian environment and facilitate access between destinations.
Make places walkable for aging populations in response to new demographics and special needs.

Smart Growth Principle #5
Foster Distinctive Communities with a Strong Sense of Place

The County should look beyond the basic needs for commercial and housing development. Create communities that are distinctive, unique and have a strong sense of civic pride and cohesiveness. Create defined neighborhoods. We need to encourage construction and preservation of buildings and housing that provide unique contributions to the look and feel of the community while creating distinctive and unique community assets.

Create a state tax credit to encourage adaptive reuse of historic or architecturally significant buildings.
Plant trees throughout communities, and preserve existing trees during new construction.
Create active and secure open spaces.
Create opportunities for community interaction.
Enact clear design guidelines so that streets, buildings, and public spaces work together to create a sense of place.
Preserve scenic vistas through the appropriate location of telecommunication towers, and improved control of billboards.
Create community greens in site plans.
Define communities and neighborhoods with visual cues.
Highlight cultural assets through public art and event nights.

Smart Growth Principle #6
Preserve Open Space, Farmland, Scenic Views, and Critical Environmental Areas

The County should promote infrastructure to be added in a coordinated manner and locate new development in the most cost-efficient places – where there are existing roads, sewers, water lines, and other utilities. This, in turn, leads to less growth pressure (and greater preservation) of the more rural areas of the County.

Use land management techniques and acquisition to protect drinking water sources.
Create a network of trails and greenways.
Design and implement an information-gathering and education program.
Provide mechanisms for preserving working lands.
Link land conservation with other smart growth principles.
Adopt a green infrastructure plan.
Employ regional development strategies that better protect and preserve open space in edge areas.
Invest in the rural economy to preserve working lands.
Design and implement zoning tools that preserve open space.
Partner with nongovernmental organizations to acquire and protect land.
Use an array of financing techniques to preserve open space.
Establish priority-setting criteria for open space acquisition.
Support tree preservation through public-private partnerships.
Use TDR's, PDR's and other market mechanisms to conserve private lands.
Expand use of innovative financing tools to facilitate open space acquisition and preservation.

Smart Growth Principle #7
Strengthen and Direct Development towards Existing Communities

Growth should be directed towards communities already served by infrastructure and resources. Barriers to development in existing areas include: zoning, government policies and regulations, costs of renovation and code compliance, and taxpayer subsidies offered by localities to develop fringe and greenfield areas. Sometimes, developers see fringe and greenfield areas as easier because there are typically fewer restrictions and there is less public objection. They can often be inadvertently pushed that way by public policy.

Adopt a “fix-it-first” policy that sets priorities for upgrading existing facilities.
Create economic incentives for businesses and home owners to locate in areas with existing infrastructure.
Facilitate programs to encourage home renovation and rehabilitation in existing neighborhoods.
Locate civic buildings in existing communities rather than in greenfields.
Conduct an “infill checkup” to evaluate and prioritize infill and brownfield sites for redevelopment.
Encourage infill by adopting innovative stormwater regulations and practices.

Smart Growth Principle #8
Provide a Variety of Transportation Choices

Various modes of transportation including pedestrian, bike, and auto should be balanced to offer choice to the public. Parking requirements for infill development in village cores can be reduced, or if other parking is already available, consider shared parking.

In village cores, a network of smaller streets can help to diffuse traffic rather than concentrate it. The street network should be walkable and bikeable to desired destinations. Village streets should be scaled to a neighborhood level through smaller widths, connectivity to adjacent uses, slower speeds, and mixed uses with retail.

Address parking needs and opportunities.
Support and provide incentives for multimodal transportation systems that include supportive land use and development.
Create comprehensive bicycling programs.
Create programs and policies that support car sharing.
Plan and permit road networks of neighborhood scaled streets (generally two or four lanes) with high levels of connectivity and short blocks.

Smart Growth Principle #9

Make Development Decisions Predictable, Fair, and Cost Effective

In order for Smart Growth to be successful, investors, developers, and builders, must be able to make a profit. Government investment in infrastructure can shape the type of development being created. Conventional zoning, which was used to separate uses, has taken communities from being pedestrian-oriented to being car-dependent in order for citizens to conduct day-to-day activities.

Current design, building, and zoning codes can often be deterrents to Smart Growth, or even make it illegal, due to setbacks, parking requirements, height and density restrictions, and other standards. Obtaining variances can be costly and time-consuming. Additional effort and expense caused by regulations and the uncertainty of acceptance often pushes developers and those who finance their projects towards conventional development.

Smart Growth measures, such as alleys to allow for parking in the rear of buildings, sidewalks, bicycle lanes, landscaping, buffers, and parks for open space, can be expensive to implement. They can serve as a deterrent for developers, even though costs can be recouped through density bonuses and having to install less infrastructure. The County should make a concerted effort to support innovative designs, including compact, pedestrian-oriented, and mixed-use developments that promote an ease of connectivity.

Educate elected leaders and public officials about smart growth.
Create design guidelines to streamline construction and enhance project marketability.
Make zoning codes and other land development regulations simple to use and easy to read.
Display zoning regulations and design goals in pictorial fashion to better illustrate development goals.
Encourage demand for smart growth through consumer incentives.
Create a planning strategy to provide for development in rural markets while maintaining rural character.
Implement geographic information system–based planning into the development process.

Smart Growth Principle #10

Encourage Community and Stakeholder Collaboration in Development Decisions

The County should identify and address barriers to full public participation in the development process. Meeting notices should be widely circulated in all public places including the Library, announcements at community forums, websites, radio, and public access channels. Localities should be careful to not overlook key stakeholder groups such as developers, contractors, realtors, bankers, and investors. The County can also go directly to civic, charitable, and religious groups to seek public input and comments.

Another effective tool to gain a greater level of public input would be to create hand-drawn sketches or computer simulations of proposed developments and/or streetscapes. Using this method at public meetings would help to demonstrate what Smart Growth principles would look like if applied in the community. Residents could look at alternative scenarios and even vote on various designs and visions for their community.

Illustrate complex concepts with photographs and imagery.
Use unconventional methods and forums to educate all stakeholders about the development and decision-making processes.
Conduct community visioning exercises to determine how and where the neighborhood will grow.
Bring developers and the development community into the visioning process.
Take local government officials and residents to visit communities with Smart Growth Ordinances to see their effect.
Use color-coded maps to establish a planning and zoning framework for future planning decisions.
Incorporate public opinion and interests often and routinely into the planning process.
Seek technical assistance to develop a public participation process.