

Bedford County 2030 Comprehensive Plan



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June 25, 2007

Updated
March 2015

This Comprehensive Plan is Dedicated to the Late

Bobby G. Pollard

In Recognition of His Many Years of Dedicated Service

To the Citizens of Bedford County



1935 - 2007

Acknowledgements

The Bedford County 2030 Comprehensive Plan was prepared by the Bedford County Planning Commission with the combined efforts of the citizens of Bedford County, Division of Planning staff, and Holly Lesko as consultant. Numerous County departments and agencies reviewed and/or wrote document chapters relevant to their jurisdiction.

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Bedford County 2030 Comprehensive Plan Executive Summary

The purpose of a Comprehensive Plan is to provide a basis for assisting the County in promoting an optimal development pattern over the next 20 years, given existing constraints and opportunities. The Bedford County Planning Commission began the comprehensive planning process by seeking input from many citizens and organizations, and reviewing studies related to development and initiatives for the County. The Comprehensive Plan is a response to the needs, problems, opportunities and constraints affecting Bedford County.

The Comprehensive Plan is comprised of goals, objectives, and strategies that strive to work toward fulfilling citizens' collective vision of what they want the County to look like for future generations. Hours of research, public opinion gathering, and citizen feedback have occurred in an effort to transition the will of the people into practical reality.

The Plan addresses the desire of County officials and leaders to deploy necessary services at reasonable cost to be shared among citizen taxpayers and those private interests that create intensive demands for such services. With periodic review and updating, the Comprehensive Plan may serve as the guiding vision for the community in areas of land use, population density guidelines, infrastructure enhancements, community service centers, and community involvement models.

The Comprehensive Plan consists of an inventory and analysis of past trends and development, as well as an analysis of existing conditions, and a statement of goals and objectives for the future. It should be noted that this document focuses on the unincorporated areas of the County and excludes the Town of Bedford, which has its own Comprehensive Plan.

A variety of documents relate directly to the planning goals outlined in the Comprehensive Plan. The Bedford County Comprehensive Plan incorporates several documents that currently guide the development of the County in areas such as transportation, water and sewer service, and wireless communication.

Citizen involvement in the planning process is a central requirement for a Comprehensive Plan. Citizen involvement assures that the Plan adequately serves the community and all its residents. Diverse opinions assure that the Plan is broad based. Since the County's last Comprehensive Plan was adopted in 1988, the County sought extensive community input through a variety of outreach efforts over a two-year period prior to the adoption of the 2007 Bedford County Comprehensive Plan. Citizen input comes in many forms including surveys, planning academies, focus groups, committees, and public meetings. These input

opportunities yielded valuable information and created context for the development of the guiding goals, objectives, and strategies that are the foundation of this Plan. This is a Plan for the County by the County and the Bedford County Planning Commission presents it with pride and gratitude to the hundreds of people who helped to shape it through thousands of hours of input and review.

Overarching themes and values of this Comprehensive Plan are reflected through the above Determining Factors and through the focus of the goals, objectives and strategies of the Plan. These themes include:

- Protection and enhancement of the natural and cultural assets of the County
- Smart and planned development in areas of the County best suited and supported by appropriate infrastructure to sustain targeted growth and uses
- Protection and support for the agricultural resources and vistas in the County
- Support for adequate and appropriate community services and amenities available to all citizens in an equitable and accessible way
- An appropriate balance between individual property right and the community's goals

The objectives and strategies are the best thinking of the community and the Planning Commission about how these themes can be achieved through public and private action of citizens and government for the County. Some of these action-based items include evaluation and appropriate implementation of proffers,] incentives, and regulatory programs to guide land uses and protect the resources of the County. Additionally, there are specific projects and programs that have been proposed by County staff, regional organizations, and community groups that can have a positive impact on these themes and goals if supported and coordinated with other County activities and programs.

There are undoubtedly objectives and strategies missing from this Plan that could enhance the pursuit of these themes and the overall desires and goals of the citizens of Bedford County. However, these articulated efforts are thoughtful and clear first steps toward the overarching goals and represent many of the needs, desires, and values of citizens in our community. More can always be done, and this document gives opportunity for much of it to begin.

Topical Chapter Goals

The topical chapter goals are listed below. The objectives and strategies can be found in each chapter and are consolidated into a list in the appendix.

Community Character, Design and Aesthetics

Preservation of the scenic beauty, pastoral character, and historic resources of the County

Housing

A variety of safe, sanitary and affordable housing for all County residents

Natural Environment

Protection and enhancement of the environmental quality and natural resources of the County

Transportation

Safe and accessible transportation systems that provide for the effective and efficient movement of people and goods

Utilities

Quality public utility systems and services that support the County's planned land use

Economic Development

A healthy, diversified economy that is environmentally sensitive and results in business opportunities and quality jobs

Land Use

An orderly, efficient, and compatible growth and land use pattern that is sensitive to the natural environment

Education

Exceptional educational programs for all citizens in facilities that enhance the learning process

Public Safety and Community Services

Public safety facilities and programs that provide coordinated fire protection, police protection, rescue services, and emergency preparedness, as well as health and human services needs of the residents of the County

Parks and Recreation

A system of parks and recreation facilities and programs that provide for and promote healthful and appropriate leisure desires of residents and attract visitors to the County

Solid Waste

An efficient, safe, sanitary and comprehensive system of solid waste collection, disposal, and recycling facilities and programs

Bedford City/Town Reversion

Chapter One

Introduction

Vision and Purpose

The Bedford County Planning Commission began the comprehensive planning process by seeking input from many citizens and organizations, and reviewing studies related to development and initiatives for the County. This document is based on a review of the vision and perspective of all these sources of knowledge and collaboration. The Comprehensive Plan is a response to the needs, problems, opportunities and constraints affecting Bedford County. The nature of the response has been shaped and directed by the community's goals to guide future growth for the benefit of all segments of community life.

The Vision

A better community, built one generation at a time.

The purpose of the vision is to enhance the inherited natural, rural environment for the benefit and enjoyment of present and future generations of residents, consistent with providing appropriate housing, employment, shopping, recreation, and public services for residents. This intent will be realized through the active coordination of our People, our Planning, our Purchases, our Programs, our Policies, and our Practices in implementing the Goals and Objectives of this Comprehensive Plan.

The Purpose

The purpose of a Comprehensive Plan is to provide a basis for assisting the County in promoting an optimal development pattern over the next 20 years, given existing constraints and opportunities. Recommendations are aimed at preventing haphazard and incompatible land use development through the implementation of locally-supported public policy. Additionally, the Plan can help assist the County in developing strategies for better communication with citizens, businesses and organizations functioning with the locality and with regional entities that affect County development. The Comprehensive Plan serves as a framework for the long-range allocation of resources to meet identified needs. The Plan is general in nature and considers the physical, social and economic factors that interact in the County and is the foundation on which governing and recommending bodies assess development and preservation opportunities in their community.

This document is also a statement of goals and objectives designed to stimulate public interest and responsibility. It is based on citizen attitudes and desires for the nature of future growth and can enhance the citizens' knowledge of the developmental plans of the County. A locality's Plan must reflect the foresight of its leaders and the will of the citizens. And, as such, the success or failure of Bedford County's Comprehensive Plan depends primarily upon the commitment of County leaders and citizens. With periodic review and updating, the Comprehensive Plan serves as the guiding vision for the community in areas of land use, population density guidelines, infrastructure enhancements, community service centers, and community involvement models.

The authority under which this plan has been prepared is contained in Chapter 15.2-2223, 2224 of the Code of Virginia. It should be noted that this Plan is not a law or ordinance. Rather, it is a recommendation by the Bedford County Planning Commission to the Board of Supervisors. Adoption by the Bedford County Board of Supervisors establishes this Plan as the official guide for development of the County in the areas of economic development, housing, quality of life and land use. The implementation of this plan is accomplished by other means, such as the Subdivision Ordinance, Zoning Ordinance, and the Capital Improvements Program.

Developing and Organizing the Plan

A Comprehensive Plan is the most basic tool available to a local government that provides a means by which a community can assess these forces of change and thereby identify future needs and allocate its resources accordingly. The Plan, as its name implies, is comprehensive in nature and intended to represent the long-range goals and visions for future growth and development throughout the area. The purpose of this document is to provide a set of guidelines for the future growth and development of Bedford County.

The Comprehensive Plan consists of an inventory and analysis of past trends and development, as well as an analysis of existing conditions, and a statement of goals and objectives for the future. It should be noted that this document focuses on the unincorporated areas of the County and excludes the Town of Bedford, which has its own Comprehensive Plan.

Legal Basis for the Plan

Comprehensive Plans have been mandatory in Virginia for all jurisdictions since 1980. The Code of Virginia contains enabling legislation for counties, cities, and towns, and this enabling legislation is broad. Virginia legislation requires local planning commissions to “prepare and recommend a Comprehensive Plan for the physical development of the territory within its jurisdiction and every governing body shall adopt a Comprehensive Plan for the territory under its jurisdictions” (Section 15.2-2223).

The basic purpose of the Plan is established in the Code of Virginia, Section 15.2-2223, which states: “The Comprehensive Plan shall be made with the purpose of guiding and accomplishing a coordinated, adjusted and harmonious development of the territory which will, in accordance with present and probable future needs and resources, best promote the health, safety, morals, order, convenience, prosperity and general welfare of the inhabitants.”

The State Code of Virginia mandates that the planning commission review the Comprehensive Plan every five years to determine if any amendments are needed (Section 15.2-2230). Once the Comprehensive Plan is adopted by the governing body, it has the following legal status: “Whenever a local planning commission recommends a local Comprehensive Plan or part thereof for the locality and such plan has been approved by the governing body, it shall control the general or approximate location, character and extent of each feature shown on the plan” (Section 15.2-2232).

Relationship to Other Planning Efforts

A variety of documents relate directly to the planning goals outlined in the Comprehensive Plan. The Bedford County Comprehensive Plan incorporates several documents that currently guide the development of the County in areas such as transportation, water and sewer service, and wireless communication. The policies set forth in these documents are an integral component of the revised Comprehensive Plan and thereby reinforce the goals and objectives presented herein.

The Bedford County Zoning Ordinance (1998) and Subdivision Ordinance (2000) provide the legal basis through which to implement the Comprehensive Plan. The Zoning Ordinance has undergone several revisions since its adoption in order to implement policy changes and correct inconsistencies in the document as they arise. Currently, the Ordinance is under periodic review by the Planning Commission and Board of Supervisors. Subsequent revisions to the Ordinance may relate the existing regulations to new policies and objectives adopted in the Comprehensive Plan.

The regulations outlined in the Bedford County Subdivision Ordinance are concerned with the platting of lots, the layout of streets, the location of public spaces, and the location of public facilities. In addition, the Ordinance outlines procedures for the review and approval of plats, the acceptance of improvements and the procedures for waivers and appeals to the Ordinance.

In addition to the ordinances, there exist a variety of documents that relate directly to the planning goals outlined in the Comprehensive Plan. The Water and Sewer Master Plan by the Bedford Regional Water Authority (2008) provides the public with a list of the existing water and sewer systems. The Water and Sewer Master Plan was amended in 2013 in order to “capture the essence of prior studies and account for planning conditions that have changed in the County and its water and sewer infrastructure.” The amendment incorporates the Water and Sewer Master Plan (2008) with the City/Town of Bedford’s Master Plan for Water and Sewer System Improvements (2000, amended 2002) as part of the consolidation of the former Bedford County Public Service Authority and Bedford Water and Wastewater Operations Team. Both master plans will be “used by the Authority for orderly Planning and budgeting of future water and wastewater system improvements.”

The County Parks and Recreation Department developed a comprehensive inventory of facilities and programs through input from citizens about the recreational needs for the County. Components of the 2010 “Parks and Recreation Comprehensive Master Plan” are incorporated into this plan.

In October 2010, Region 2000 developed a Bicycle Plan that “encourages and facilitates the utilization of bicycles as a healthy and viable transportation mode to access community resources. This plan provides an overview of different bicycle accommodation types, strategies that can be used to accommodate bicycle facilities, snapshots of the current conditions and opportunities for cyclist, and an inventory of community resources and assets.

The goal and implementation strategy of the plan is to “assist in creating an alternative transportation network that encourages and supports bicycling as a safe and viable transportation option.”

The Region 2000 Greenways, Blueways, and Trails Plan was approved in November 2012. The plan was created to guide the development of a system of linked trails, river and park connections within the Region 2000 area. The system of link connections will enhance the “natural and cultural areas, expands the alternative transportation network, and increases access to recreation, exercise, and healthy lifestyle options.”

The Commonwealth Transportation Board’s Six-Year Improvement Program outlines funding anticipated for public transit and highway construction. Public hearings related to the plan’s development are held on an annual basis to solicit input from members of the General Assembly, public officials, and the general public. The program outlines new projects planned for the County and therefore plays a key role in determining land use and development patterns. The Comprehensive Planning process examined the projects listed in this report and the regional transportation planning efforts in evaluating the transportation needs and future planning for the County.

Bedford County contracted with Atlantic Technology Consultants (ATC) to develop the Strategic Plan for Commercial Wireless Telecommunications Facilities that was adopted in August 2002. ATC used a combination of field research and laboratory analysis to assess the appropriateness of new tower sites and co-locations on existing structures throughout the County. This Telecommunications Plan was used to develop Zoning Ordinance language designed to guide cellular tower development to the areas within the County that currently lack service using the least obtrusive technology. The plan was updated in 2012 (adopted in January 2013) in order to address new wireless technology and the rapid deployment of wireless broadband services. The two major changes to the plan included the addition of 11 pre-determined tall tower areas for portions of the County un-served at the present time and the strategic placement of smaller towers for the deployment of wireless broadband. As a result of the plan update, the Zoning Ordinance was amended for wireless communication facilities.

A Capital Improvements Program (CIP) is another important tool through which to implement the Comprehensive Plan. The CIP is a form of short-term planning that outlines proposed expenditures for the construction, maintenance, and rehabilitation of County facilities. The Program also details specific project proposals and cost estimates and is a means through which to implement the strategies and objectives presented in the Comprehensive Plan. As budget constraints allow, the CIP is reviewed each year to see if projects can be funded.

The adoption of the Bedford County Comprehensive Plan will likely necessitate a formal review of related documents to ensure that policy conflicts do not exist. In addition, new studies and plans will be generated from the Comprehensive Plan that may focus on specific areas or features within the County in order to provide more detailed analyses.

Other specialty plans have been developed over the last few years. These significant plans relate to special areas or issues. These plans are incorporated into the Comprehensive Plan by reference as follows:

- ▶ Strategic Plan for Commercial Wireless Telecommunications Facilities (January 2013)
- ▶ Route 24 Corridor Study (June 2006)
- ▶ Route 122 Corridor Study (May 2003)
- ▶ Route 460 (Wal-Mart area) Corridor Study (October 2002)
- ▶ Route 501 Corridor Study (October 2002)
- ▶ Route 221 Corridor Study (October 2002)
- ▶ Route 460 (Urban Area) Corridor Study (October 2003)
- ▶ Route 460 (East) Corridor Study (April 2004)
- ▶ Route 460 (West) Corridor Study (June 2005)
- ▶ Smith Mountain Lake Area Corridors Study (March 2010)
- ▶ Central Virginia Long-Range Transportation Plan Year 2035 (October 2010, update to begin in January 2014)
- ▶ Region 2000 Rural Long-Range Transportation Plan Year 2035 (August 2011)
- ▶ Region 2000 Bicycle Plan (October 2010)
- ▶ Region 2000 Greenways, Blueways, and Trails Plan 2012 Connection Vision (November 2012)
- ▶ Roanoke Valley Area Metropolitan Planning Organization Long-range Transportation Plan 2035 (June 2011)

By definition, a Comprehensive Plan is an advisory document that details the long-range recommendations for the general development of a locality. The Plan is intended to serve as a guide for future land use planning decisions and aid localities in their assessment of proposed developments.

Citizen Involvement

Comprehensive Plans may be implemented through the various land use tools available to localities: an official map, a capital improvements program, a zoning ordinance and district map, a subdivision ordinance, and a mineral resources map, or some combination of any or all of the above (Section 15.2-2224). The Code also required surveys and studies be conducted in preparing the 2007 Plan and that the Plan include methods of implementation and a current map of the area covered by the Plan (Section 15.2-2224). Specific procedural requirements are contained in the Code to ensure at least a minimum level of public notice, so that citizens have an opportunity to provide their ideas and comments on the Plan (Section 15.2-2225).

Citizen involvement in the planning process is a central requirement for a Comprehensive Plan. Citizen involvement assures that the Plan adequately serves the community and all its residents. Diverse opinions assure that the Plan is broad based. Working from the 1988 Comprehensive Plan, the County sought extensive community input through a variety of outreach efforts over a two-year period prior to the adoption of the 2007 Bedford County Comprehensive Plan. Citizen input came in many forms including surveys, planning academies, focus groups, and public meetings. Building on the 2007 Plan and recognizing the current effort is to be an update of that Plan, the citizens' input portion for the 2014 update engaged a Planning Commission-appointed Citizens Advisory Committee. A summary of several notable sources of public input opportunities is provided below.

Citizen Surveys

Bedford County contracted with the University of Virginia's Center for Survey Research (CSR) to conduct a 15-minute telephone survey to a sampling of County residents in September 2002. The survey was presented to assess resident views on quality of life, comprehensive planning goals, and existing county services. A total of 1,463 surveys were completed (200 from each of the seven election districts). The survey was validated to having a margin of error not greater than +/- .026. The results of the survey are reflected further in this document.

Planning Academies

In January 2003, the County started conducting citizen-planning academies to provide citizens information about planning and zoning laws, processes and issues. As part of the academy, participants dealt with issues such as identifying existing and future planning issues and identifying community strengths and weaknesses. The academies provided a classroom review of future land use scenarios. These exercises provide the County with valuable input and views on planning and zoning issues. Four planning academies (January-February 2003, April-June 2003, January-March 2004 and September-November 2004) were held with 95 participants.

Community Meetings

From the period of March 2004 to June 2006, the County hosted a series of community meetings. During this same period, the County Planning Staff met with eight civic organizations about the development of and goals creation for the Comprehensive Plan. It is through this medium that many of the community goals and objectives were identified.

Focus Groups

The County Staff organized a series of focus group meetings to gather additional information. For the 2007 Plan, a total of four focus groups were held to focus on local issues related to Agriculture, Environment & Preservation, Economic Development, and Housing. An element of the focus groups included the identification of Strengths, Weaknesses, Opportunities, and Threats analysis. This process identified issues for consideration in the planning process for the Comprehensive Plan. Approximately 35 people attended the focus group meetings.

Public Workshops

In June 2006, the County began the final steps in concluding the Draft Comprehensive Plan. This process involved a series of meetings held in each of the seven voter districts to share information developed in preparing the Plan. The Public Workshops were an opportunity to provide an overview of the draft plan. In addition, citizens had the opportunity to meet and discuss planning issues one-on-one with Planning Commissioners and Staff.

Citizens Advisory Committee (2013-2014)

In 2013, the Board of Supervisors requested that the Comprehensive Plan be updated. Since this was an update and not a re-write of the entire Plan, the Planning Commission chose to appoint a Citizens Advisory Committee to act as a “citizen sounding board” to provide information to the Planning Commission on what information they perceive is missing from each chapter or what areas within the chapter need to be strengthened or focused on. The Committee consisted of 14 citizens with two appointed by each Planning Commissioner.

These input opportunities yielded valuable information and created context for the development of the guiding goals, objectives, and strategies that are the foundation of this Plan. Several community documents and organizational strategic planning efforts were also reviewed and incorporated where appropriate throughout the Plan. Undoubtedly, some areas of importance were overlooked, and there will be developments in the future that were not predicted. These oversights and future developments, however, are not due to lack of effort to seek information or involve citizen and organizational wisdom in the process. This is a Plan for the County by the County and the Bedford County Planning Commission presents it with pride and gratitude to the many people who helped to shape it.

Determining Factors

The following Determining Factors were developed as a summary of the input from citizens and review of County and regional documents. The most pertinent factors related to the various topical areas of the Plan are listed in the corresponding chapter. In many cases, particular Determining Factors are repeated from chapter to chapter. Rather than being redundant, this is a validation of the pervasive threads of community values, concerns, and ideas that impact land use and community development in Bedford County. These factors come directly from citizens and organizations of the County and truly guided the development of the Comprehensive Plan from beginning to end.

- Citizens of the County are strongly committed to maintaining agricultural areas and protecting the natural environment within and around the County.
- The County supports community center development in appropriate locations that provide housing, jobs, and community services to area residents.
- Watershed resources are crucial and protection of land areas that impact the quality of water in the County must be strongly considered in all development or redevelopment opportunities.
- The protection of quality groundwater in the County is a high priority for residents.

- Agricultural opportunities, scenic vistas and rural landscapes are an important asset to the County and merit special protection and preservation investment strategies.
- Protecting the natural environment through the regulation of development in mountaintops, foothills and steep slopes is a high priority of County residents.
- Areas that currently have developed lands and can support further development are primary targets for growth in housing, commercial, and industrial uses in the County.
- Preserving natural flora and fauna in the County is strongly supported by residents.
- The provision of high quality educational opportunities for children and adults must be maintained and improved through appropriate investments in infrastructure and instruction.
- Parks and other recreational areas are desired to be easily accessible to residents across the County.
- County residents desire high quality safety, emergency and human services and expect priority investment in necessary infrastructure to ensure future availability of services throughout the County.
- Attractive and well-designed housing development is an important value of the Bedford community.
- A large number of residents of the County out-commute to work, creating a bedroom community affect in some parts of the County.
- Coordination with the Town of Bedford and surrounding Counties is important to guiding appropriate development along these political boundaries that can be addressed through design standards, land use protections, and urban development areas.
- Affordable housing that meets the federal guidelines of housing expenditures is an important criteria for new housing development in the County.
- Smith Mountain Lake is an important resource of the County and development impacts on this resource must be strongly considered.
- A strong, viable, active and successful County economic development program—including workforce development--supported by regional programs is essential to a future healthy economy.
- Development occurring in a planned district should be evaluated on the full cost impacts of each project along with projected revenues and resident benefits of the planned development.
- All policies and programs of the County should be designed to be fiscally sustainable. Seek an appropriate balance between individual property rights and the community's goals.

Adoption Process for the Plan

Following the completion of the Draft Comprehensive Plan, the Planning Commission and the Board of Supervisors will hold a public hearing to allow citizens the opportunity to provide comment on the document. The Comprehensive Plan is recommended for adoption by the Planning Commission and must be officially adopted by the Board of Supervisors. Once the Plan is adopted by the Governing Body, it becomes an Official Plan for the County.

Upon adoption of the Comprehensive Plan, all amendments to it shall be recommended, approved, and adopted in accordance with the requirements set forth in the Code of Virginia

(Sec. 15.2-2229). The Board of Supervisors may direct the Planning Commission to prepare an amendment to the plan and submit it to public hearing within sixty days after formal written request by the Board (Sec. 15.2-2229). The purpose of this process is to allow for amendments that must be made to the Plan prior to the completion of the required review at the end of five years. By allowing for the gradual update of the Plan, all of the major components will have been replaced or substantially revised to meet changed or future needs.

Organization of this Plan

The 2007 Bedford County Comprehensive Plan as amended in 2013 and 2014 is organized into 14 chapters. Eleven chapters focus on the topical area of each goal statement in the plan. These chapters are preceded by introductory and demographic informational chapters and are followed by an implementation strategy and goals and objectives integration chapter.

Chapter Two

History and Demographics

In order to look forward and plan for future development and community enhancement, it is critical to assess historic trends and cultural influences that affect how a community has grown and developed to date. Bedford County has a rich history in westward expansion and more recently its growth patterns and statistics have greatly influenced the use of resources and delivery of services to citizens of the County. This chapter attempts to provide a brief history of the development of the County and provide general demographic change information that impacts the opportunities and challenges to land use and preservation.

Bedford County's Historic Origins and Development

Bedford County was formed in 1754 and named for the Fourth Duke of Bedford, a British Government official. In 1839, the Town of Liberty (now the Town of Bedford) was established. Originally an agricultural economy, Bedford's industrial development began in 1880, and since that time industrial growth has been consistent and often fostered by the involvement of local citizens.

Located in the foothills of the Blue Ridge Mountains, Bedford County attracted a variety of immigrants seeking opportunities in this new land of plenty. The newcomers to the county encountered a diverse landscape that contributed significantly to the geography of settlement. Bedford County lies on the east side of the Blue Ridge Mountains, and the rugged north and northwestern portions of the county, with elevations of 4,000 feet, restricted settlement. In contrast, the south and western sections of the county presented rolling terrain that lent itself well to settlement and farming. Farming was especially prevalent in areas watered by Goose Creek, Big and Little Otter Rivers and many smaller tributaries. Grasses, small grains, various fruits and vegetables were the mainstays of farms throughout this area.

During the middle 1800's transportation greatly improved, opening doors to eastern markets for commercial agriculture. While building better roads helped with communication, the building of canals and railroads played major roles in regional travel and trade to the western and mountainous portions of Virginia. Local farmers had barely begun to feel the wave of commerce from the canals when the rail industry was introduced in Bedford County. With the introduction of rail came a whole new way of life. With new and better forms of transportation, farmers began raising crops for market. The average farm size at the eve of the Civil War was relatively small (roughly 200 acres) however, a number of commercial farmers held lands in excess of 500 acres.

The railroad continued to expand their presence in the county after the Civil War. Norfolk and Western Railroad acquired the smaller Virginia and Tennessee Railroad. In 1890, rail transportation was extended across the northeastern border along the James River. These railroads linked Bedford County to the national network of rail lines. Being located in the middle of two rail hubs, Roanoke and Lynchburg, Bedford attracted a variety of

manufacturing factories and warehouses to meet the needs of local farmers. For example, Northern Bedford County was home to the Lynchburg Pulp and Paper Company established in 1898 on the James River in Big Island.

The World War I and II eras brought a lot of change to Bedford County. Crop prices began to fall in the 1920s and fell more dramatically during the Great Depression. During this time, a number of farms devoted to grains and tobacco turned to livestock and poultry production. By 1945, dairying had surpassed tobacco farming and with the coming of the tractor, small farms were on the decline. This trend resulted in the movement from “field-to-factory” as experienced elsewhere across the country. As the twentieth century progressed, iron milling and other resource extraction played a pivotal role in the local economy. Minerals such as silica, phosphorus, and manganese were prevalent in the County and led to mining operations in various portions of the County.

The motorcar and truck era afforded unprecedented mobility and great demand for better roads and bridges. Both state and federal funding for road improvements launched the Good Roads Movement in Virginia. This movement allowed the building of roads connecting county seats and linking all major cities. While most of the roadway construction of this time was geared to improving roads, one exception was the Blue Ridge Parkway. In 1936, the Federal Government authorized the construction of this scenic roadway in large part to promote tourism and bring recreational traffic to the area.

The post World War II era documented continued improvements in transportation, which gave way to school consolidation, greater access to markets, and an increase in residential and commercial developments. In recent years, rolling agricultural land has given way to residential and shopping center developments. The southern portions of the County (Smith Mountain Lake area) as well as the northeast corner (Forest) have seen rapid increases in both residential and commercial developments. As the price of rural land increases, more and more farmland is under development pressure. Compounding this development pressure is the increase in cost of farm equipment and products, continuous price erosion of farm products and subsidies, and a general shift away from the traditional farm to the raising of cattle.

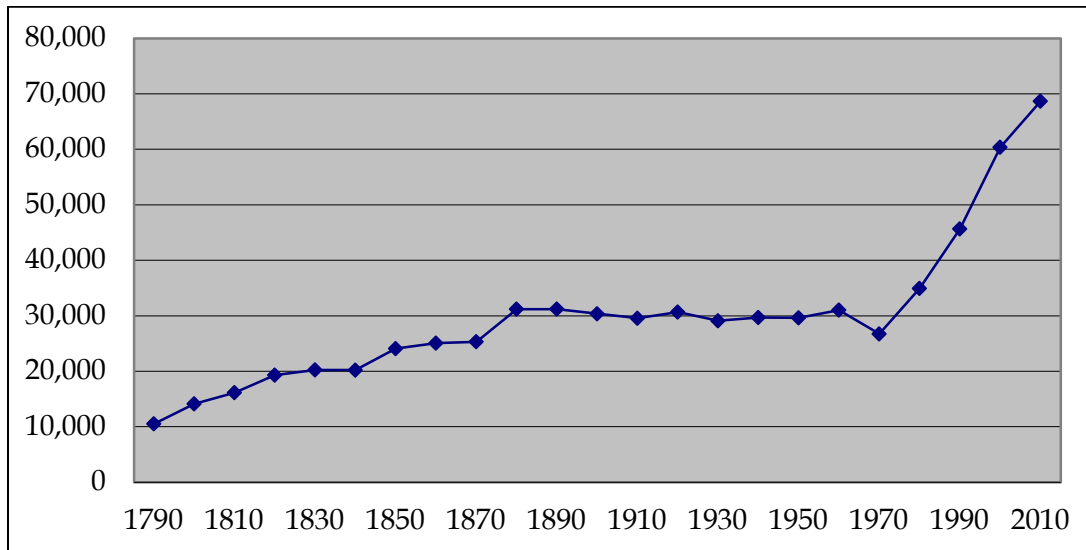
Bedford County Demographics

The demographic characteristics of Bedford County play a significant role in determining the need for new and expanding public services, facilities, and amenities. Such statistics often serve to guide the location and intensity of new businesses and housing developments, as well as schools, utility lines, and other necessary services. The 10-year census provides the most comprehensive source of demographic data and allows for detailed analysis of population components, while also providing information with which to analyze past and future trends.

Population Trends

As shown in Figure 2.1, an analysis of historical population trends in Bedford County reveals relatively steady growth throughout the nineteenth-century with a total population of approximately 30,000 persons at the turn of the century. The County's population growth rate remained fairly stable through the first half of the twentieth-century, but major growth occurred during the latter half of the century. In actual numbers, the population grew from approximately 26,728 persons in 1970 to 68,676 persons in 2010. The national trends and local factors that contributed to this dramatic increase are discussed below.

Figure 2.1
Historic Population Counts (1790 – 2010)



Source: U.S. Census

Nationally, the migration from urban areas to the suburbs began at the close of World War II. This trend was fueled by major highway construction throughout the 1960s as a result of the passage of the National Defense Highway Act of 1956. Decentralization can be contributed not only to the availability of the automobile, but to rising incomes, improvements in communication and the baby boom of the late 1940s through mid-1960s which led many young families to the suburbs. All of these factors led Americans to seek residence outside of urban areas as the nation's infrastructure and personal means permitted a greater separation between home and work.

Bedford County's location between two urban areas, Lynchburg and Roanoke, had a substantial impact on population growth during the late twentieth-century. The availability of open, developable land brought many individuals to the area, mostly from other localities in Virginia, but also from other states. Bedford County offered a suburban setting close to the area's major employment centers with the added attraction of scenic amenities that are unparalleled in the region.

The development of Smith Mountain Lake during the 1960s also had an impact on population growth. The area began to see significant second home development during the mid-1970s and has also become a popular spot for retirees. Recreation-oriented businesses and developments can be found in the Smith Mountain Lake area as well; however, the lack of major roads connecting the Lake to residential centers, and until recently the lack of public sewer and water, has limited its potential as a resort community.

The impacts of such a dramatic population increase have been far-reaching. While vacant land is still available, large agricultural tracts continue to be turned over to residential uses. In addition to the loss of viable agricultural land, the growing population has increased demand on utilities, services, and public facilities. Continued growth at this accelerated pace will result in a strain on resources which are quickly approaching maximum capacity. These impacts will be discussed in greater detail in later chapters.

Regional Trends

A broader perspective on Bedford County's growth trends can be achieved by comparing population growth in the County to surrounding localities and the region as a whole. Table 2.1 compares growth from 1990 to 2010 for Bedford County and surrounding localities, the region, and the Commonwealth of Virginia.

**Table 2.1
Population of Bedford County and Surrounding Jurisdictions (1990-2010)**

Jurisdiction	1990	2000	2010	% Change '90-'00	% Change '00-'10	Difference 2000-2010	% of Regional Difference ('00-'10)
Amherst County	28,578	31,894	32,353	11.60	1.44	459	1.01
Appomattox County	12,298	13,705	14,973	11.44	9.25	1,268	2.79
Bedford City (now Town)	6,073	6,299	6,222	3.72	-1.22	-77	-0.17
<i>Bedford County</i>	<i>45,656</i>	<i>60,371</i>	<i>68,676</i>	<i>32.23</i>	<i>13.76</i>	<i>8,305</i>	<i>18.29</i>
Botetourt County	24,992	30,496	33,148	22.02	8.70	2,652	5.84
Campbell County	47,572	51,078	54,842	7.37	7.37	3,764	8.29
Franklin County	39,549	47,286	56,159	19.56	18.76	8,873	19.54
Lynchburg City	66,049	65,269	75,568	-1.18	15.78	10,299	22.68
Pittsylvania County	55,655	61,745	63,506	10.94	2.85	1,761	3.88
Roanoke County	79,332	85,778	92,376	8.13	7.69	6,598	14.53
Rockbridge County	18,350	20,808	22,307	13.40	7.20	1,499	3.30
REGIONAL TOTAL	424,104	474,729	520,130	11.94	9.56	45,401	-
VIRGINIA	6,189,317	7,078,515	8,001,024	14.37	13.03	922,509	-

Source: 2000 and 2010 U.S. Census

Bedford County has experienced an annual growth rate of approximately 3.2 percent from 1980 to 2010, and a decennial growth rate of approximately 32 percent during the period of 1990 to 2000 before falling to approximately 14 percent from 2000 to 2010. Bedford County

had the highest growth percentage in the surrounding area from 1990 to 2000 and remained in the top three in the surrounding area from 2000 to 2010 despite the 2008 economic crisis, behind Franklin County and the City of Lynchburg, respectively. As a whole, the region has experienced growth between 9 and 12 percent, while the state has sustained 13 percent to 14.4 percent growth over the twenty-year period from 1990 to 2010. When compared to these regional and state measures, Bedford County has experienced higher than average growth.

From 1990 to 2000, Bedford County had grown by approximately 14,700 persons, again the highest of the surrounding localities during that time period. During the past decade, due to the 2008 economic crisis, Bedford County’s growth decreased (approximately 8,300 persons) falling behind the surrounding localities of Franklin County and the City of Lynchburg. The County absorbed 18.29 percent of the total regional growth from 2000 to 2010.

Density and Distribution

Table 2.2 shows the population growth from 1990 to 2010 in each of the County’s five magisterial districts and the population growth in the Forest Census Designated Place (CDP). While growth is occurring faster in some areas of the County, all areas are experiencing significant growth.

**Table 2.2
Population Density and Distribution (1990 – 2010)**

Magisterial District	1990	2000	2010	% Change '90 - '00	% Change '00 - '10	% Change '90 - '10
Blue Ridge	12,230	14,407	14,811	17.8	2.8	21.1
Center	7,024	8,632	9,486	22.9	9.9	35.1
Jefferson	11,960	18,664	23,839	56.1	27.7	99.3
Lakes	8,382	11,711	13,424	39.7	14.6	60.2
Peaks	6,060	6,957	7,116	14.8	2.3	17.4
COUNTY TOTAL	45,656	60,371	68,676	32.2	13.8	50.4
Forest CDP	5,624	8,006	9,106	42.4	13.7	61.9
Land Area (square miles)	754	754	754	-	-	-
Population Density (per square mile)	60.6	80.1	91.1	32.2	13.7	50.3

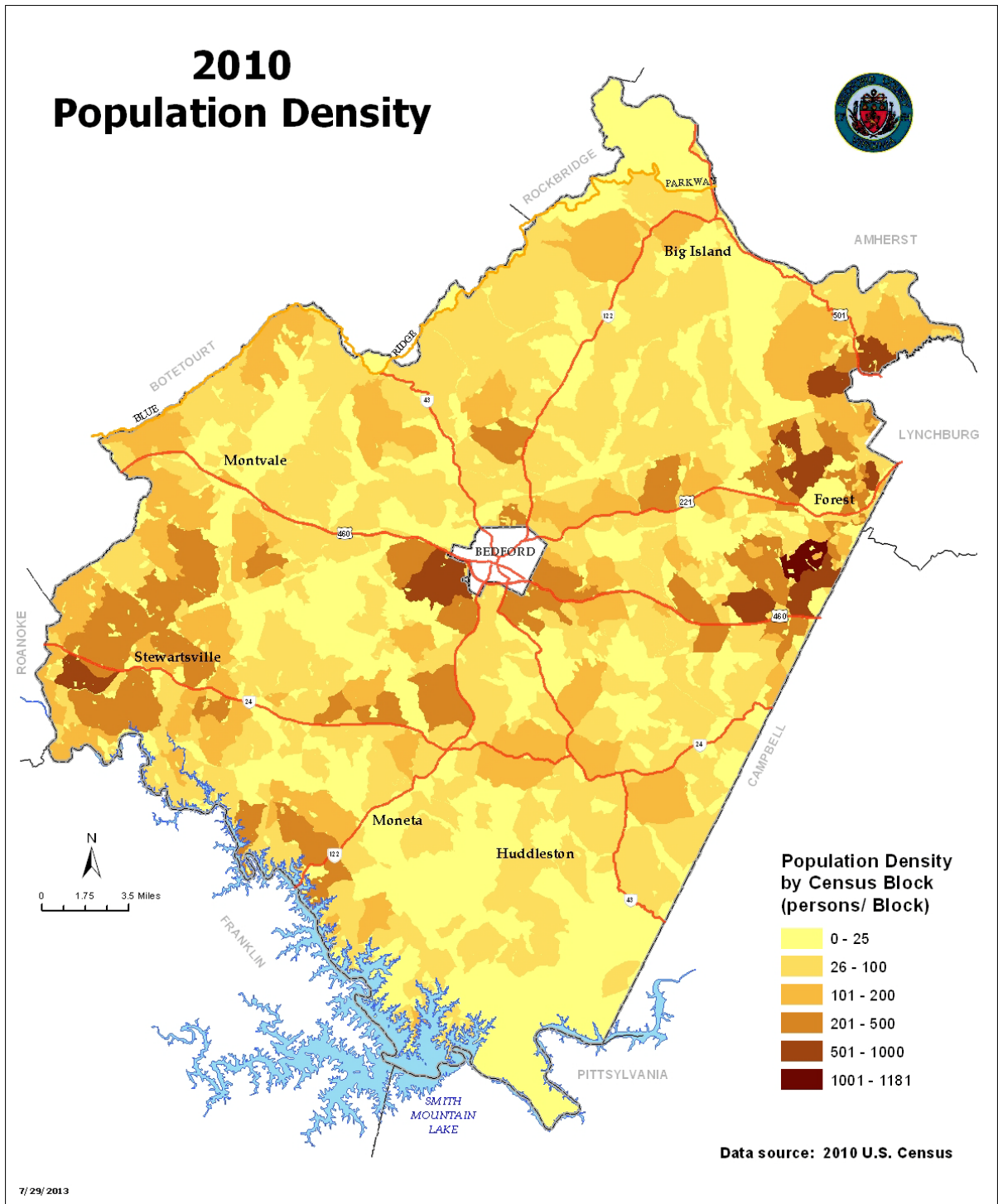
Source: 2000 and 2010 U.S. Census

From 1990 to 2010, the Jefferson Magisterial District was the fastest growing area in the County. It grew from 11,960 to 23,839, a 99.3 percent increase. The Forest CDP, which is located in the Jefferson Magisterial District, grew 61.9 percent from 1990 to 2010. The second fastest growing area of the County is the Lakes Magisterial District, which grew 60.2 percent from 1990 to 2010. The Blue Ridge Magisterial District experienced the second lowest growth total in the County at 21.1 percent over the same twenty-year period but is the second most populous area with 14,811 people. The Center Magisterial District grew by 35.1 percent from 1990 to 2010, the third fastest growing area for this time period. The

growth in the Center District does not include the new Town boundary areas because the reversion to Town status occurred after the 2010 Census. From 1990 to 2010, the population of the Peaks Magisterial District increased by 1,056 people, a 17.4 percent increase.

The population density of the County has increased significantly from 1990 to 2010. It has grown from 60.6 people per square mile in 1990, to 80.1 in 2000, to just over 91 people per square mile in 2010. Map 2.1 shows the population density of the County in 2010 by census blocks. As the map shows, the densest areas are those located in Forest, Stewartsville and around the Town of Bedford (formerly the City of Bedford).

Map 2.1
Population Density



*Boundary of "Bedford" shown is that of the Town of Bedford (2013) and not the former City of Bedford. Statistics are based on the Census data of 2010 prior to reversion.

Population Projections

Population projections are an important part of the comprehensive planning process. Projections allow communities to assess whether growth will continue at low, moderate, or high rates, or conversely, whether a period of declining or stagnant growth is anticipated. While projections are based on a set of assumptions about the future, they serve as a guideline for measuring change and planning for future needs. If projections indicate that Bedford County will continue to experience high growth throughout the next two to three decades, then the County must plan for the necessary demands on public services and facilities, especially the availability of water and sewer as well as school capacity. In addition, the County must assess the impacts of an expanding population on land use patterns and costs of services, and determine suitable locations for residential growth and appropriate means to pay for services and/or mitigate its costs.

As discussed earlier, the County has experienced annual growth at a rate of approximately 3.2 percent throughout the past thirty years (1980-2010). Table 2.3 illustrates projected growth for the period of 2000-2050 on five-year increments at a range of 1 to 3.5 percent annual growth in order to assess low, moderate, and high estimates. Please note that the Year 2030 is highlighted to reflect the planning horizon for this Plan, and that the population projection numbers in the 3.2 percent annual percentage increase column are bold to reflect the growth trends for the past thirty years.

**Table 2.3
Population Projections (2000 – 2050)**

Year	Annual Percentage Increase						
	1.00%	1.50%	2.00%	2.50%	3.00%	3.20%	3.50%
2000	60,371*	60,371*	60,371*	60,371*	60,371*	60,371*	60,371*
2010	68,676*	68,676*	68,676*	68,676*	68,676*	68,676*	68,676*
2015	72,179	73,984	75,824	77,701	79,614	80,390	82,400
2020	75,861	79,701	83,716	87,911	92,295	94,103	97,866
2025	79,731	85,861	92,429	99,463	106,995	110,154	116,234
2030	83,798	92,497	102,049	112,534	124,036	128,943	138,050
2035	88,072	99,645	112,670	127,321	143,792	150,938	163,960
2040	92,565	107,346	124,397	144,053	166,695	176,683	194,733
2045	97,287	115,642	137,344	162,982	193,245	206,821	231,281
2050	102,249	124,580	151,639	184,399	224,024	242,099	274,689

*Actual data, not a population projection
Source: Bedford County Division of Planning

Based on this exercise, it can be assumed that if the County maintains an annual growth rate of 3.2 percent, the population will almost double by the year 2030, reaching a total of 128,943 persons. While this estimate is certain to be impacted by economic conditions, such as job availability and housing prices, it should be examined carefully as a probable forecast

of growth. A low growth projection using the 1 percent annual growth rate yields a population of 75,861 persons by the year 2020 and 83,798 persons by the year 2030. Projections assuming a high growth rate at approximately 3.5 percent show a 2020 population of 97,866 persons and a 2030 population of 138,050 persons.

The Virginia Employment Commission (VEC) produces population projections for use by state agencies and the General Assembly, as well as local governments, businesses, and the general public. As reflected below in Table 2.4, the VEC projects a total of 77,257 persons in Bedford County by the year 2020, 86,325 by 2030, and 95,943 by 2040. These projections reflect a decennial growth rate of 12.49, 11.74, and 11.14 percent over the next thirty years. This growth rate is considerably lower than each of the three previous decades. The VEC projects statewide population increases of 10.53 percent (2010 to 2020), 9.46 percent (2020 to 2030), and 9.17 percent (2030 to 2040). If these projections hold true, Bedford County will experience growth at a rate that is about 2.2 percent higher on average than that of the Commonwealth.

Table 2.4
Population Projections by VEC (2020 – 2040)

Year/Time Period	Bedford County	Virginia
2000	60,371*	7,079,030*
2010	68,676*	8,001,024*
2020	77,257	8,811,512
2030	86,325	9,645,281
2040	95,943	10,530,229
% Change '00 - '10	13.76*	13.02*
% Change '10 - '20	12.49	10.13
% Change '20 - '30	11.74	9.46
% Change '30 - '40	11.14	9.17
% Change '00 - '40	58.92	48.75

**Actual data, not a population projection*
Source: Virginia Employment Commission

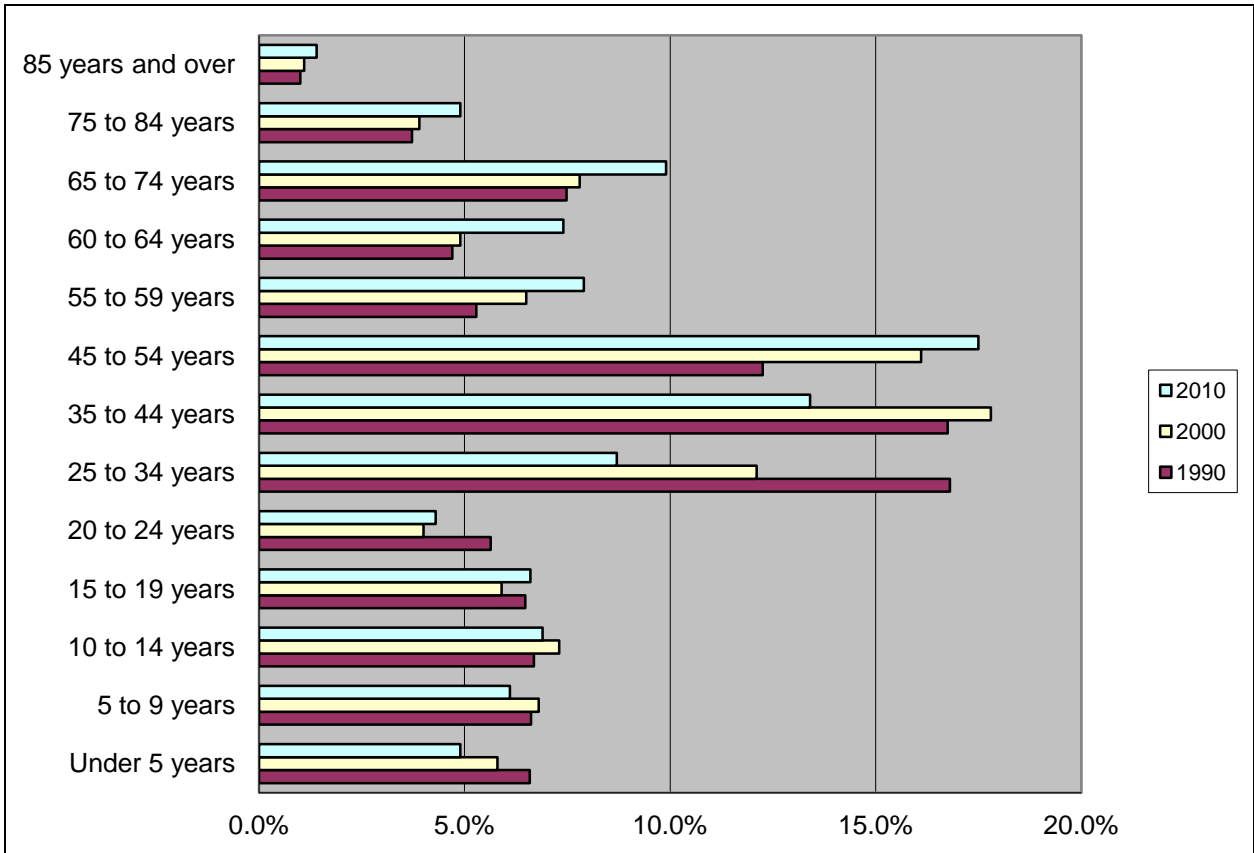
The projections discussed above should serve as a reference point in determining future infrastructure and utility needs, school expansion and new construction, and public service needs, as well as the need to guide the character and location of growth. Although these projections are based on a set of assumptions, they serve as the best estimate for what the County can expect for the future.

Gender and Age Characteristics

Figure 2.2 (Population by Age Groups) shows shifts in the age of the County’s population over the past twenty years. Since 1990, the County has seen a decline in population between ages under 5 to 34 years of age and an increase in population of age groups 35 and over. The

County's median age has increased significantly from 35.7 years in 1990 to 44.3 years in 2010. The median age of the population of both Virginia (37.5 years) and the United States (37.2 years) are younger than Bedford County's statistics show. However, an increasing median age is a trend that is occurring nationally as well as across the Commonwealth.

Figure 2.2
Population by Age Groups (1990 – 2010)



Source: U.S. Census

According to the U.S. Census, Bedford County has been nearly evenly split between males and females from 1990 to 2010. Table 2.5 (Gender and Age Characteristics) charts the sex and age characteristics for Bedford County from 1990 to 2010. For 2010, the population of Virginia and the United States had the same statistic of 49 percent male and 51 percent female. Generally, there are more males per 100 females in the younger age brackets (age 34 years and younger), and fewer males per 100 females in the older age brackets (age 35 and older) at the state and national levels. In Bedford County, there are more males per 100 females in the 10 years to 24 years age brackets, the 40 years to 44 years age bracket, and the 60 years to 64 years age bracket.

**Table 2.5
Gender and Age Characteristics (1990 – 2010)**

Subject	1990		2000		2010	
	Number	Percent	Number	Percent	Number	Percent
Total Population	45,656	100%	60,371	100%	68,676	100%
SEX						
Male	22,715	49.8%	30,107	49.9%	34,057	49.6%
Female	22,941	50.2%	30,264	50.1%	34,619	50.4%
AGE						
Under 5 years	3,007	6.6%	3,527	5.8%	3,388	4.9%
5 to 9 years	3,019	6.6%	4,117	6.8%	4,219	6.1%
10 to 14 years	3,053	6.7%	4,410	7.3%	4,726	6.9%
15 to 19 years	2,957	6.5%	3,543	5.9%	4,549	6.6%
20 to 24 years	2,572	5.6%	2,409	4.0%	2,932	4.3%
25 to 34 years	7,673	16.8%	7,305	12.1%	5,973	8.7%
35 to 44 years	7,648	16.8%	10,723	17.8%	9,229	13.4%
45 to 54 years	5,594	12.3%	9,711	16.1%	12,008	17.5%
55 to 59 years	2,413	5.3%	3,932	6.5%	5,447	7.9%
60 to 64 years	2,147	4.7%	2,956	4.9%	5,058	7.4%
65 to 74 years	3,415	7.5%	4,692	7.8%	6,816	9.9%
75 to 84 years	1,699	3.7%	2,363	3.9%	3,366	4.9%
85 years and over	459	1.0%	683	1.1%	965	1.4%
Median age (years)	35.7		39.7		44.3	
18 years and over	34,757	76.1%	45,871	76.0%	53,371	77.7%
Male	17,124	37.5%	22,649	37.5%	26,250	38.2%
Female	17,633	38.6%	23,222	38.5%	27,121	39.5%
21 years and over	33,090	72.5%	44,257	73.3%	51,160	74.5%
62 years and over	6,834	15.0%	9,436	15.6%	14,175	20.6%
65 years and over	5,573	12.2%	7,738	12.8%	11,147	16.2%
Male	2,492	5.5%	3,542	5.9%	5,246	7.6%
Female	3,081	6.7%	4,196	7.0%	5,901	8.6%

Source: 2000 and 2010 U.S. Census

Race and Hispanic Origin

The number of people in Bedford County in 2010 that were of one race was 67,885 or 98.8 percent. Table 2.6 provides census data about race and Hispanic origin in Bedford County from 1990 to 2010. Over 91 percent (62,775) reported their race as white in Bedford County in the 2010 Census. Persons that were of two or more races equaled 791 or 1.2 percent. The black or African American race comprised 5.7 percent, which totaled 3,942 people. Persons of Asian race had the next highest number at 707 or 1 percent. There were 14 native Hawaiian or other Pacific Islanders and 266 people were of some other race. Since 1990, the number of whites increased minimally from 91.7 percent in 1990 to 92.2 percent in 2000

before declining to 91.4 percent in 2010 while the number of blacks or African Americans has declined from 7.9 percent in 1990, to 6.2 percent in 2000, to 5.7 percent in 2010.

Table 2.6
Race and Hispanic Origin (1990 – 2010)

Subject	1990		2000		2010	
	Number	Percent	Number	Percent	Number	Percent
Total Population	45,656	100%	60,371	100%	68,676	100%
RACE						
One Race	-	-	59,926	99.3%	67,885	98.8%
White	41,856	91.7%	55,649	92.2%	62,775	91.4%
Black or African American	3,612	7.9%	3,767	6.2%	3,942	5.7%
American Indian and Alaska Native	60	0.1%	119	0.2%	181	0.3%
Asian	114	0.2%	261	0.4%	707	1.0%
Native Hawaiian and Other Pacific Islander	-	0.0%	9	-	14	0.0%
Other Race	14	<0.1%	121	0.2%	266	0.4%
Two or More Races			445	0.7%	791	1.2%
HISPANIC ORIGIN						
Hispanic or Latino (Any Race)	177	0.4%	449	0.7%	1,090	1.6%
Not Hispanic or Latino	45,479	99.6%	59,922	99.3%	67,586	98.4%

Source: 2000 and 2010 U.S. Census

In the United States, 97.6 percent of the population was of one race in 2010 and of that number, 75.1 percent were white. Blacks or African Americans made up 12.3 percent of the population, American Indians and Alaska natives made up 0.9 percent, Asians comprised 3.6 percent, native Hawaiians or other Pacific Islanders were 0.1 percent, and those of some other race were 5.5 percent of the total population. The make-up of Virginia was similar to the makeup of the country, with 97.1 percent of people being one race, 68.6 percent white, and 19.4 percent black or African American.

One of the growing ethnic groups throughout the country is the Hispanic or Latino group. Nationally, Hispanic or Latino (of any race) people comprised about 16.3 percent of the total population in 2010. In Virginia, the percentage of Hispanic or Latino people was 7.9 percent, while Bedford County was significantly less at 1.6 percent in 2010.

Marital Status

According to the US Census, the marital status of Bedford County residents aged 15 years and older has generally remained consistent from 1990 to 2010 (Table 2.7). As a percentage, those who have never married increased slightly from 18.1 percent in 1990 to 20.9 percent in 2010. The percent of married residents has declined, 67.9 percent (1990) to 63.3 percent (2010). Of the 3,114 people who were widowed, 79 percent (2,455) were female. The percentage of people who are divorced increased from 6 percent in 1990 to 8.5 percent in

2010. The number of people who are divorced in 2010 was equally split between males and females.

**Table 2.7
Marital Status (1990 – 2010)**

Subject	1990		2000		2010	
	Number	Percent	Number	Percent	Number	Percent
Population (15 years and over)	36,577	100%	48,276	100%	55,198	100%
MARITAL STATUS						
Never Married	6,611	18.1%	7,973	16.5%	11,523	20.9%
Married	24,827	67.9%	32,957	68.3%	34,933	63.3%
Separated	703	1.9%	852	1.8%	953	1.7%
Widowed	2,238	6.1%	2,708	5.6%	3,114	5.6%
Divorced	2,198	6.0%	3,786	7.8%	4,675	8.5%

Source: 2000 U.S. Census; 2006-2010 American Community Survey 5-year Estimate

Education

As shown in Table 2.8, 85 percent of the population in Bedford County 25 years and older were high school graduates and 24.2 percent earned a bachelor's degree or higher in 2010. Over the past twenty years, the number of high school graduates increased from 68.8 percent in 1990, to 80.1 percent in 2000, to 85 percent in 2010. The increase was also seen among college graduates that earned a bachelor's degree or higher. In 1990, 15.6 percent were college graduates, 20.9 percent in 2000, and 24.2 percent in 2010.

**Table 2.8
Educational Attainment (1990 – 2010)**

Subject	1990		2000		2010	
	Number	Percent	Number	Percent	Number	Percent
Population (25 years and over)	31,129	100%	42,413	100%	47,831	100%
EDUCATIONAL ATTAINMENT						
Less than 9th Grade	4,706	15.1%	2,986	7.0%	2,141	4.5%
9th to 12th Grade, No Diploma	5,015	16.1%	5,445	12.8%	5,014	10.5%
High School Graduate	9,670	31.1%	13,899	32.8%	15,711	32.8%
Some College, No Degree	4,981	16.0%	8,505	20.1%	10,080	21.1%
Associates Degree	1,915	6.2%	2,709	6.4%	3,318	6.9%
Bachelor's Degree	3,101	10.0%	5,813	13.7%	7,506	15.7%
Graduate or Professional Degree	1,741	5.6%	3,056	7.2%	4,061	8.5%
Percent High School Graduate or Higher		68.8%		80.1%		85.0%
Percent Bachelor's Degree or Higher (includes high school graduates or higher)		15.6%		20.9%		24.2%

Source: 2000 and 2010 U.S. Census

Household and Family Characteristics

The US Census defines households as any housing units occupied by one or more persons. The total number of households in Bedford County in 2010 was 27,465 with approximately 99.6 percent of the population (or 68,767 people) living in households. According to Table 2.9, the percentage of people living in households has remained steady since 1990. A relatively consistent increase in the number of households has occurred since 1990. In 1990, there were 17,292 households, 23,838 in 2000, and 27,465 in 2010. However, the average household size (number of people in each household) has continued to decrease over the years. In 1990, the average household size was at 2.62, falling to 2.52 in 2000 and 2.49 in 2010. Virginia (2.58) and the United States (2.58) both had slightly higher average household sizes than Bedford County in 2010.

**Table 2.9
Household and Family Characteristics (1990 – 2010)**

Subject	1990		2000		2010	
	Number	Percent	Number	Percent	Number	Percent
Total Households	17,292	100%	23,838	100%	27,465	100%
Family Households	13,678	79.1%	18,158	76.2%	20,318	74.0%
<i>Married-couple Family</i>	12,087	69.9%	15,584	65.4%	17,025	62.0%
<i>Female Householder</i>	1,100	6.4%	1,788	7.5%	2,226	8.1%
<i>Male Householder</i>	491	2.8%	786	3.3%	1,067	3.9%
Non-family Households	3,614	20.9%	5,680	23.8%	7,147	26.0%
Average Household Size	2.62		2.52		2.49	
Total Population	45,656	100%	60,371	100%	68,767	100%
In Households	45,358	99.3%	59,995	99.4%	68,389	99.6%
In Group Quarters	298	0.7%	376	0.6%	287	0.4%
<i>Institutionalized Population</i>	280	0.6%	181	0.3%	225	0.3%
<i>Non-institutionalized Population</i>	18	<0.1%	195	0.3%	62	0.1%

Source: 2000 and 2010 U.S. Census

Family households comprised 74 percent (or 20,318 people) of all households and non-family households the other 26 percent (or 7,147 people). Approximately 6,017 out of 7,147 non-family households were householders living alone. Included in this category were 2,377 householders 65 years and over. Approximately 0.4 percent of the population (287 people) lived in group quarters in 2010. The two major categories of the group quarter population are institutionalized and non-institutionalized, which had 225 people and 62 people, respectively. The 225 institutionalized people included 93 in correctional facilities and 88 in nursing homes.

Families (which according to the US Census require that members in the household be related to the head of that household by birth, marriage, or adoption) totaled 20,318 in Bedford County in 2010. Since 1990, the percentage of family households has been declining from 79.1 percent in 1990, to 76.2 percent in 2000, to 74 percent in 2010. In Virginia, family households made up 67 percent of the total in 2010, and non-family households 33 percent. The country had 68.1 percent family households and 31.9 percent non-family households.

The total number of families can be divided into married-couple families, female householder families with no husband present, and male householder families with no wife present. Married-couple families numbered 17,025. There were 2,226 female householder families, and male householder families totaled 1,067 in 2010. Since 1990, the percentage of married-couple family households has declined as a percentage of the total number of households. Married-couple families, however, have maintained a fairly high percentage of all families since 1990 but has been declining (from 69.9 percent in 1990 to 62 percent in 2010). A 24.4 percent increase in female householder families and a 35.9 percent increase in male householder families can be seen from 2000 to 2010. According to the Population Reference Bureau, there has been a decline in “traditional” families as other types of families across the nation, and single-parent and unmarried-couple families have increased.

About 67 percent of the total households in Virginia in 2010 were family households. Of these families, 50.2 percent were married-couple families and 12.4 were female householder families. In the United States, 68.1 percent of the households were family households. The family households on the national scale included 48.4 percent married-couple families and 13.1 female householder families.

Income/Poverty

The median household income in Bedford County for 2010 was \$54,110, the median family income was \$65,508, and the per capita income was \$27,732. Table 2.10 shows these income levels for Bedford County for 1989, 1999, and 2010 along with the poverty rates.

As incomes have risen over the years, the percentage of people and families below the poverty line has generally declined or remained the same. For individuals, the percentage of people in poverty has increased from 7 percent in 1989, to 8.2 percent in 2010. For families, the percentage has increased from 5.2 percent in 1989, to 6.4 percent in 2010.

Table 2.10
Income Levels for Bedford County (1989 – 2010)

Subject	1989		1999		2010	
	Number	Percent	Number	Percent	Number	Percent
Median Household Income	\$ 30,712		\$ 43,136		\$ 54,110	
Median Family Income	\$ 34,407		\$ 49,303		\$ 65,508	
Per Capita Income	\$ 14,305		\$ 21,582		\$ 27,732	
Families in Poverty	721	5.2%	945	5.2%	1,293	6.4%
Persons in Poverty	3,162	7.0%	4,263	7.1%	5,380	8.2%

Source: U.S. Census, 2006-2010 American Community Survey 5-yr estimates

Bedford County ranks third, behind Roanoke County and Botetourt County, among central Virginia localities in median household income and median family income (Table 2.11). Bedford County also has the third lowest percentage of people in poverty. Compared to Virginia and the United States, Bedford County’s median household income (\$54,110) was lower than Virginia’s (\$61,406), but higher than that of the United States (\$51,914). Bedford’s median family income (\$65,508) was lower than Virginia (\$73,514), but higher than that of the United States (\$62,982). However, Bedford’s poverty rate is considerably less than both Virginia’s (10.3 percent) and the U.S. (13.8 percent).

Table 2.11
Income Levels for Bedford County and Surrounding Localities (1999 - 2010)

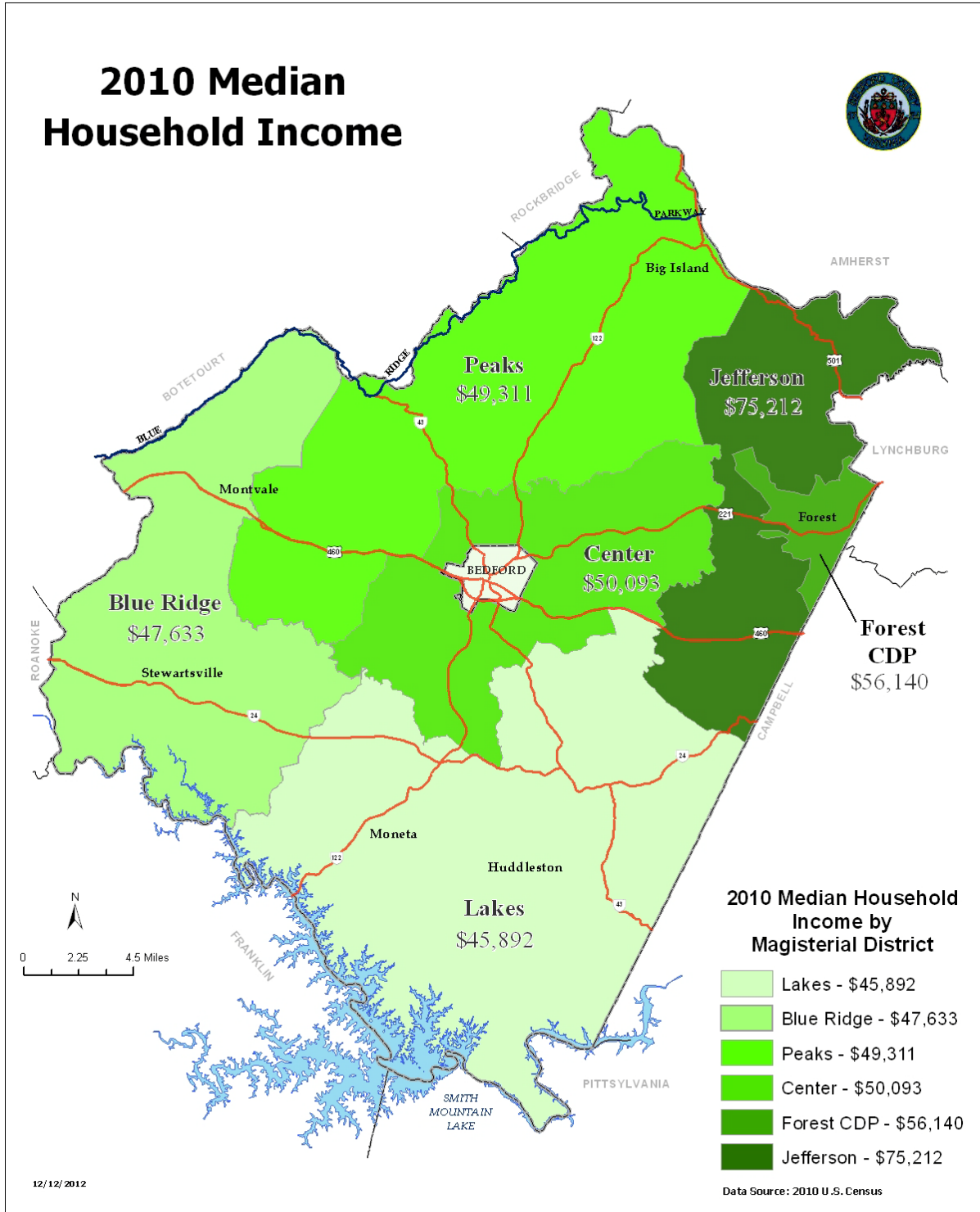
Locality	1999 Median Household Income	1999 Median Family Income	Percent of People in Poverty	2010 Median Household Income	2010 Median Family Income	Percent of People in Poverty
Amherst County	\$ 37,393	\$ 42,876	10.7%	\$ 44,757	\$ 55,211	13.1%
Appomattox County	\$ 36,507	\$ 41,563	11.4%	\$ 49,224	\$ 58,954	13.8%
Bedford City (now Town)	\$ 28,792	\$ 35,023	19.7%	\$ 32,262	\$ 41,026	16.5%
Bedford County	\$ 43,136	\$ 49,303	7.1%	\$ 54,110	\$ 65,508	8.2%
Botetourt County	\$ 48,731	\$ 55,125	5.2%	\$ 64,724	\$ 73,032	5.6%
Campbell County	\$ 37,280	\$ 42,901	10.6%	\$ 43,478	\$ 53,566	12.2%
Franklin County	\$ 38,056	\$ 45,163	9.7%	\$ 45,555	\$ 53,066	13.2%
Lynchburg City	\$ 32,234	\$ 40,844	15.9%	\$ 37,058	\$ 50,196	22.7%
Pittsylvania County	\$ 35,153	\$ 41,175	11.8%	\$ 39,224	\$ 49,166	15.1%
Roanoke County	\$ 47,689	\$ 56,450	4.5%	\$ 59,446	\$ 74,660	5.1%
Rockbridge County	\$ 36,035	\$ 41,324	9.6%	\$ 44,417	\$ 53,889	12.4%
VIRGINIA	\$ 46,677	\$ 54,169	9.6%	\$ 61,406	\$ 73,514	10.3%
UNITED STATES	\$ 41,994	\$ 50,046	12.4%	\$ 51,914	\$ 62,982	13.8%

Source: 2000 U.S. Census, 2006-2010 American Community Survey 5-year estimates

Map 2.2 shows the median household income and Map 2.3 shows the median family income levels for 2010 for the five magisterial districts in the County and for the Forest CDP. As reflected on the maps, the Jefferson Magisterial District had the highest median household

income at \$75,212, followed by the Center Magisterial District (\$50,093), the Peaks Magisterial District (\$49,311), the Blue Ridge Magisterial District (\$47,663), and the Lakes Magisterial District (\$45,892). For family income, the Jefferson Magisterial District also had the highest median family income at \$86,942. The Center Magisterial District had the second highest median family income at \$60,561, followed by the Peaks Magisterial District (\$57,817), the Blue Ridge Magisterial District (\$57,539), and the Lakes Magisterial District (\$50,771). The Forest CDP has a median household income of \$56,140 and a median family income of \$77,500. Compared to the state and national income levels, only the Jefferson Magisterial District had higher income levels.

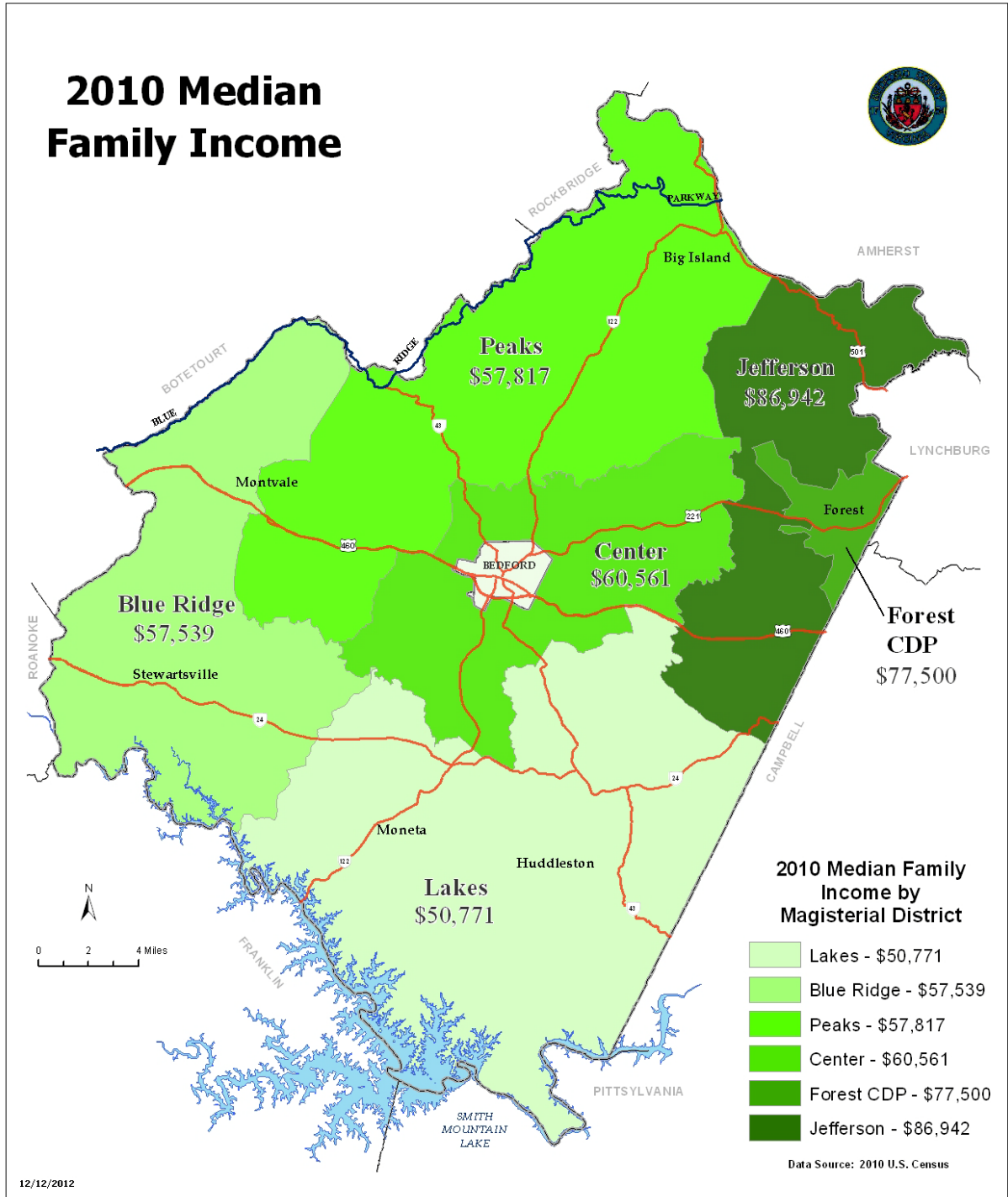
**Map 2.2
Median Household Income – 2010**



**Boundary of "Bedford" shown is that of the Town of Bedford (2013) and not the former City of Bedford. Statistics are based on the Census data of 2010 prior to reversion.*

March 23, 2015

**Map 2.3
Median Family Income – 2010**



**Boundary of "Bedford" shown is that of the Town of Bedford (2013) and not the former City of Bedford. Statistics are based on the Census data of 2010 prior to reversion.*

School Growth Projections

In order to properly prepare for necessary services and programming needed for a high quality of life in Bedford County, it is important not only to understand overall population statistics but to parse this information into age categories and the needs that come with each age group. There are trends across the nation and in Bedford County indicating that the population is aging and the needs of this population must be factored into land use and community service programming decisions. Another critical service is that of public education for the young in the County. Understanding the changes in this age demographic is not always easily projected, but must be attempted to map the educational programs and facilities that are necessary.

Bedford County Public Schools' Assessment and Planning office uses the cohort progression method to predict the number of students who will attend Bedford County Public Schools for the next five years (2017 projection). The cohort progression method involves applying an average growth rate over time to the current year's membership by grade level cohort. The calculation is based on birth data, which is used to forecast kindergarten enrollment and student membership by grade. Birth data by place of residence is obtained from the Virginia Department of Health, Division of Health Statistics. The K-12 student membership numbers are obtained from the Virginia Department of Education (VDOE) fall membership (September 30) report.

The cohort-progression ratio is the number of students in a particular grade divided by the number of students in the previous grade in the previous school year. In other words, it is the rate of students in the cohort being "promoted" to the next grade level. This ratio varies by year and grade level based on families moving in and out of the county, students transferring to different schools within the division, student retention, and other factors. The cohort-progression ratio incorporates all the different factors affecting student enrollment, retention, and promotion in one number.

To develop the membership forecast, cohort-progression ratios are calculated between every pair of consecutive grades for the past 10 school years. Mathematical models are then applied to determine the cohort-progression ratio average. The average ratio is applied to the appropriate grade level to project that particular grade forward in time. This information is presented more fully in the Education chapter of this plan. The results of this analysis are depicted in Table 2.12 below.

Table 2.12
Bedford County Public School K-12 Enrollment Projections

	2012-13 Enrollment	2017 (low) Enrollment Projection	2017 (median) Enrollment Projection	2017(high) Enrollment Projection
All Schools	10,316	9,274	9,763	10,251

Source: Bedford County Public Schools Facility Plan 2012

Summary

As the previous demographic and historic data shows, Bedford County is a dynamic area of Central Virginia with many opportunities and challenges that accompany strong growth and development. These effects of growth and development are not in and of themselves negative, however, the need for careful planning and thoughtful evaluation of the historic trends and projections are very important for the County. This assessment of data is a critical first step in developing a strong and logical road map for the future of Bedford County. The following chapters will set the structure for this journey through goal statements in critical areas of impact of the County; detailed background and determining factors for the development of each goal; and action-oriented objectives and strategies to guide citizens and decision makers in achieving the community-based goals for the County.

Chapter Three

Community Character, Design and Aesthetics

Goal and Intent

Preservation of the scenic beauty, pastoral character, and historic resources of the County

The County is committed to preserving its rural charm, ensuring that new development enhances the beauty of the area and maintains the cultural integrity of the community. Agriculture and open pastoral settings are not only a historic reference point for Bedford County, they are economic and cultural assets for residents worthy of investment and protection.

Background and Findings

There is little doubt that Bedford County will continue to grow and develop. And yet, the sense of living in a rural setting is still strongly felt and supported by residents of the County. Identifying critical features and supporting appropriate agricultural and forestry production within the County is an important step toward maintaining a pastoral surrounding that is easily accessible to all residents. The views, historic landmarks, and natural landscapes within and surrounding the County are prominent and important features of what this community values. The ability of residents to conveniently view – often from their own front porches – breathtaking mountain peaks, pastoral vistas, and historic landmarks is not only pleasing, it is an important asset worth protecting in this community.

Bedford is sandwiched between two growing urban centers: Roanoke and Lynchburg. These cities create suburban pressures on the surrounding areas. The County regulates these pressures through zoning regulations and tax incentives for preserving agricultural and forestal lands by guiding development to targeted focused growth areas.



Historic features and structures are important touchstones of a community that help provide the feeling of place and sense of belonging. The County has many representative structures and land uses that tell the story of how Bedford County was developed. Identifying and

preserving these community assets is as important as providing for orderly development of new structures and future land use planning.



Bedford County entered into a Cost-Share Program agreement with the Virginia Department of Historic Resources in order to conduct the Historic Architectural and Archaeological Survey of Bedford County, Virginia. The final report from September 1998 included information on 280 architectural resources that were surveyed in the County as well as information on archaeological resources. The architectural survey was

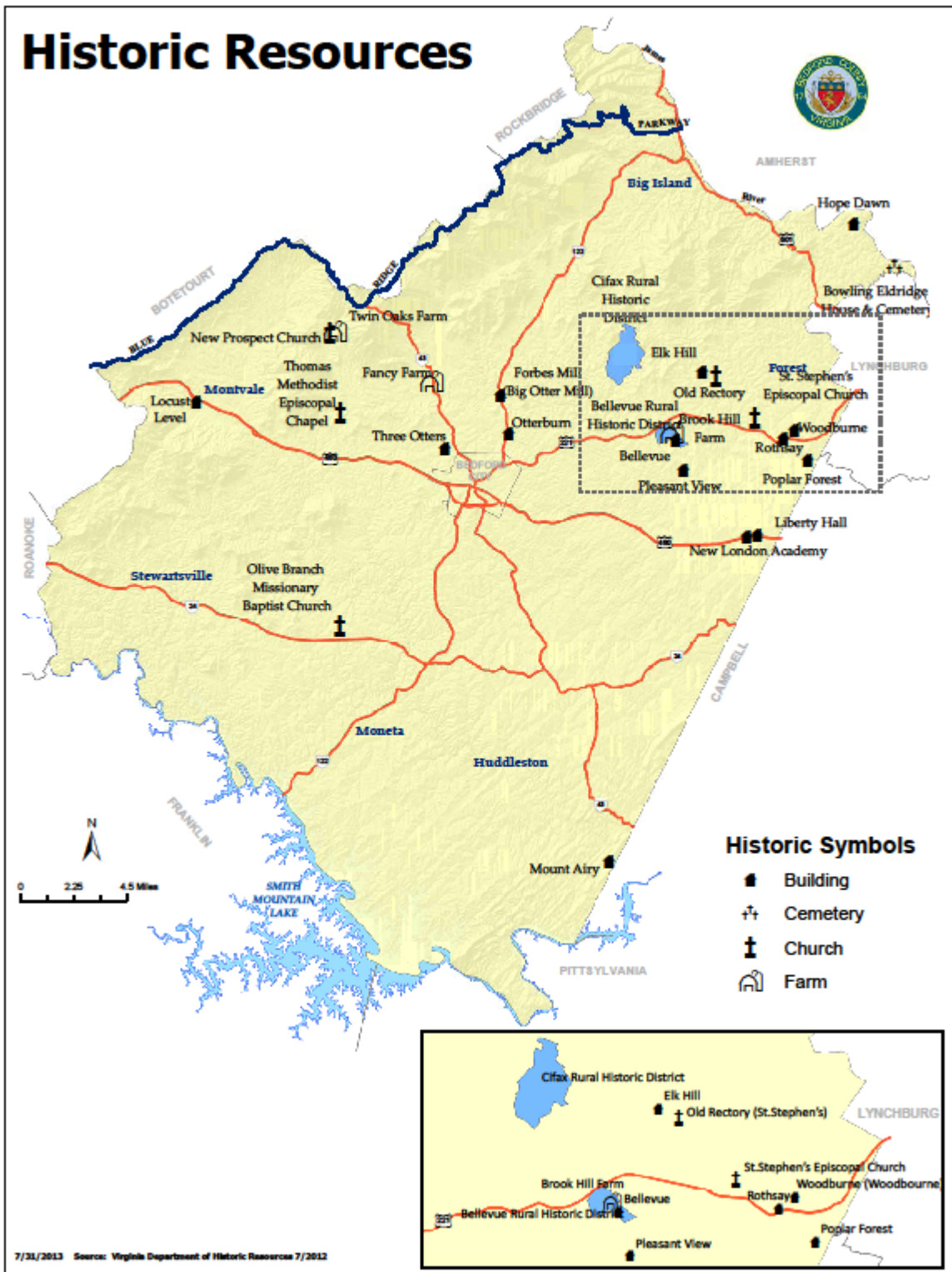
conducted across the entire county but particular attention was paid to the areas experiencing the greatest development pressure (as identified by the Bedford County Planning Department at the time) in Big Island, Body Camp, Goode, Huddleston, Kelso Mill, Montvale, Smith Mountain Lake, Thaxton, Woodford, and areas around Bedford City (now the Town of Bedford) and near Lynchburg. The archaeological survey focused on almost 300 acres in 11 recognized development areas. The survey identified five rural historic districts and the area of Thaxton for potential National Register listing. A Preliminary Information Form was prepared for Thaxton, which is the first step in pursuing National Register listing.

The information documented during this survey process can be the basis for future historic preservation and planning efforts. In the report, specific recommendations for implementing preservation measures involve the use of Comprehensive Plan policies, ordinances, project review, and project inspections. This document is available to the public at the Department of Community Development.

The state and national historic preservation programs have identified 23 sites of historic significance in the County that are listed on their registers. These sites along with other significant geographic and cultural landmarks are named and located on the map in Map 3.1.

Map 3.1
Cultural Landmarks and Historic Resources

Historic Resources



Determining Factors

- Citizens of the County are strongly committed to maintaining agricultural areas and natural areas within and around the County.
- Attractive and well-designed housing development is an important value of the Bedford community.
- Residential development pressure from surrounding urban areas is a concern to be addressed through design standards, land use protections, and urban center concentration of development.
- A large number of residents of the County out-commute to work, creating a bedroom community affect in some parts of the County.
- Watershed resources are crucial and protection of land areas that impact the quality of water in the County must be strongly considered in all development or redevelopment opportunities.
- All policies and programs of the County should be designed to be fiscally sustainable.
- Seek an appropriate balance between individual property rights and the community's goals.

Objectives and Strategies

- 3.1 Preservation of prime farmland, agricultural lands, forested lands, and other open spaces that maintain and enhance the County's rural character
- 3A. Conservation Subdivisions.** Revise the Zoning Ordinance, Subdivision Ordinance, and other appropriate ordinances to allow conservation subdivisions (clustering) in agricultural, residential and planned districts. In 2013, the County adopted permitting regulations and standards for Cluster Development in agricultural zoning districts.
 - 3B. Agricultural/Forestal Districts.** Support the development of Agricultural/Forestal districts throughout the County.
 - 3C. Private/State/Federal Programs.** Encourage rural property owners and farmers to participate in private, State and Federal programs designed to conserve land resources.
- 3.2 Preservation of scenic vistas, viewsheds, and community character along roadways
- 3B. Agricultural/Forestal Districts.**
 - 3C. Private/State/Federal Programs**
 - 3D. Historic Registers.** Support and assist property owners in nominating sites to the National Register of Historic Places and the Virginia Landmarks Register.
 - 3E. Design Guidelines.** Research and evaluate design guidelines for industrial, commercial and large-scale residential uses.

- 3.3 Preservation of historically significant sites and their surrounding areas
 - 3C. Private/State/Federal Programs**
 - 3D. Historic Registers.**
 - 3F. Local Preservation Districts.** Research and evaluate the development of locally developed and regulated districts for the preservation of historic and cultural properties and sites in the County.

- 3.4 Preservation and enhancement of the distinct identities and character of existing neighborhoods and dwellings that complement the pastoral character of the County
 - 3A. Conservation Subdivisions.**
 - 3B. Agricultural/Forestal Districts.**
 - 3C. Private/State/Federal Programs.**
 - 3D. Historic Registers.**
 - 3G. Neighborhood Master Planning.** Support neighborhood planning through research and evaluation of tools for the preservation of existing neighborhoods in the County and the creation of neighborhoods in areas of redevelopment and new development.

- 3.5 New development (residential, commercial and industrial) that has visually appealing architectural elements and complements the pastoral character of the County
 - 3C. Private/State/Federal Programs.**
 - 3E. Design Guidelines.**

- 3.6 Planned residential and commercial development that is compatible with adjacent and surrounding neighborhoods
 - 3C. Private/State/Federal Programs.**
 - 3E. Design Guidelines.**

- 3.7 Revise the Zoning Ordinance to address community character goals and objectives for the County
 - 3A. Conservation Subdivisions**
 - 3C. Agricultural/Forestal Districts**
 - 3E. Design Guidelines.**

Chapter Four

Housing

Goal and Intent

A variety of safe, sanitary and affordable housing for all County residents

The County is committed to preserving Bedford's rural charm, ensuring that new housing development and maintenance of current housing stock enhances the quality of life. The County seeks an appropriate balance between individual property rights and the community's goals. It is vital that growth be guided appropriately to ensure that adequate public services are provided and that all citizens have access to diverse housing options with adequate services and opportunities for employment near home.

The County supports mixed-land uses, where appropriate, that provide access to neighborhood services that support an environmentally friendly and walkable community. As with all development, private choices affect public policy concerning intersecting land uses, public facilities and services, transportation loads, and environmental protection. Conversely, public policy affects housing location and costs through the provision of utilities, zoning, subdivision regulations, and building codes. Thus, the County seeks to provide a variety of housing options for residents in the context of preserving valuable County resources and enhancing life for all citizens.

Affordable housing opportunities for residents and newcomers to the County are necessary and desired to create a diverse and stable workforce and citizenry. By promoting areas for housing development and engaging in the conversation with private developers about shared infrastructure costs, the county hopes to bring greater diversity and affordability to the housing stock in Bedford County.

Background and Findings

The housing characteristics of a locality are an important source of information that can be used to track development trends.



Bedford County experienced a high rate of residential growth until 2008 when growth rates began to decline due to the subprime mortgage crisis. However, residential growth rates in Bedford County remain the highest in the region from 1990-2010 (see Table 4.5).

Scenic attractions such as Smith Mountain Lake (SML), the Peaks of Otter, and the Jefferson and George Washington National Forests add another element to the housing dynamic in the County as they generate a demand for seasonal and vacation housing. The D-Day Memorial

and the existence of several other major historical and cultural sites in the County also add to this demand.

The 2010 Census of Population and Housing is the primary source of information on housing characteristics such as unit type, condition, tenure, and cost. Additional information is provided through local building permit analysis and other planning studies. An analysis of housing in Bedford County serves to illustrate trends in quantities of units and growth within the housing market. This chapter will also examine factors such as occupancy, tenure, value and cost, and housing conditions and characteristics.

The number of housing units in Bedford County has grown continuously over the past 50 years, with significant increases in the past 20 years. From 1990 to 2010, the total number of housing units increased from 19,641 to 31,937, a 62.6% increase (see Table 4.1). Nearly twice as many housing units were built for a population that had more than doubled over three decades. This increase reflects the trend of the creation of second (vacation) homes in the Lakes Magisterial district in the County as well as the expansion of seasonal rental properties that are growing in that same district.

Table 4.1
Housing Occupancy and Tenure (1990 – 2010)

Subject	1990		2000		2010	
	Number	Percent	Number	Percent	Number	Percent
Housing Units	19,641	100%	26,841	100%	31,937	100%
Occupied Housing Units	17,292	88.0%	23,838	88.8%	27,465	86.0%
<i>Owner-occupied</i>	14,844	75.6%	20,637	76.9%	23,231	72.7%
<i>Renter-occupied</i>	2,448	12.5%	3,201	11.9%	4,234	13.3%
Vacant Housing Units	2,349	12.0%	3,003	11.2%	4,472	14.0%
<i>For seasonal, recreational or occasional use</i>	1,173	6.0%	1,269	4.7%	1,824	6.0%

Sources: U.S. Census 1990, 2000, and 2010

Tenure, which is the legal possession of land, can be a good indicator of the current housing situation. A large number of renter-occupied or vacant dwellings may indicate a more transient population. However, if a large majority of the homes in an area were owner-occupied, it would indicate a higher percentage of permanent residents.

The U.S. Census Bureau divides occupied housing units into owner-occupied and renter-occupied housing units. In the 2010 Census, 72.7 percent (or 23,231) of the total occupied housing units were owner-occupied and 13.3 percent (or 4,234) were renter-occupied. In 1990 in Bedford County, roughly 75.5 percent (or 14,844) of the occupied housing units were owner-occupied and 12.5 percent (or 2,448) were renter-occupied. Since 2007, the Forest area has seen the largest increase in approved/constructed renter-occupied housing units. Prior to 2007, the trend in renter-occupied housing growth was at Smith Mountain

Lake. However, most of those developments that have been approved at Smith Mountain Lake but have not been constructed still have the potential to develop in the future.. There is certainly a trend for development of seasonal, renter-occupied/investor-owned housing at SML. This data points out the uniqueness of the SML area relative to Bedford County as a whole.



Vacancy status is another indicator of the state of housing in a location. In 2010, the estimated number of vacant housing units in Bedford County was 4,472, or 14 percent of the total housing units. While the number of vacant housing units has increased from 1990 to 2010, the percentage of

vacant housing units decreased from 1990 to 2000 but increased in 2010. The vacancy rates of occupied housing units also decreased from 1990 to 2010 (see Table 4.2). From 1990 to 2010, the owner-occupied vacancy rate went from 1.9% to 1.5% but remained flat from 2000-2010. In contrast, the renter-occupied vacancy rate went from 8.6% to 7.2% from 1990 to 2010 showing a steady decline each decade.

Table 4.2
Vacancy Rates of Occupied Housing Units (1990 – 2010)

Occupied Housing Units	1990	2000	2010
Owner-occupied Vacancy Rate	1.9%	1.5%	1.5%
Renter-occupied Vacancy Rate	8.6%	8.0%	7.2%

Source: U.S. Census 1990, 2000, and 2010

Several categories are used to further classify the vacant units in 2010. The first category listed by the U.S. Census Bureau is “for rent”, which made up 10.2 percent of the total. “For sale only” vacant units were 12.9 percent and “rented or sold, not occupied” comprised 3.5 percent. “For migratory workers” vacant units totaled 0.1 percent and “other vacant” units were 32.5 percent. The largest percentage of vacant units was 40.8 percent in the “for seasonal, recreational, or occasional use” category. People owning vacation or second homes in Bedford County, especially near Smith Mountain Lake, contribute to the large percentage of “for seasonal, recreational, or occasional use” vacant units.

Housing Structures

Table 4.3 shows the breakdown of housing units contained in an individual structure. In 2010, single family detached units made up 76.4% of all housing units, up slightly from 1990 (73.1%). Attached 1-unit, 3 or 4 units, and 5 to 9 units in a structure all increased in overall numbers with only 2 units in a structure declining from 1990 to 2010. The number of housing units in structures with ten or more units increased from 139 in 1990 to 251 in 2010. Mobile homes increased in number (4,004 to 5,289) from 1990 to 2010, but marginally decreased in percentage of the total housing stock in the County.

**Table 4.3
Housing Units in Structure (1990 – 2010)**

Subject	1990		2000		2010	
	Number	Percent	Number	Percent	Number	Percent
Housing Units	19,641	100%	26,841	100%	31,410	100%
1-unit, detached	14,354	73.1%	19,960	74.4%	24,012	76.4%
1-unit, attached	435	2.2%	666	2.5%	892	2.8%
2 units	158	0.8%	223	0.8%	170	0.5%
3 or 4 units	166	0.8%	219	0.8%	255	0.8%
5 to 9 units	239	1.2%	491	1.8%	541	1.7%
10 to 19 units	139	0.7%	60	0.2%	179	0.6%
20 or more units	0	0%	115	0.4%	72	0.2%
Mobile home	4004	20.4%	5,041	18.8%	5,289	16.8%
Boat, RV, van, etc.	146	0.7%	66	0.2%	-	0.0%

Source: U.S. Census 1990, 2000, and 2010

The quality of housing structures is also an important indicator of the health of a community’s housing stock. Table 4.4 provides information from the U.S. Census about these quality measures as they relate to both single family and multi-family units in the County. Because there are significant differences relating to these quality characteristics across the County, these statistics are provided by district as well as a picture of the full County. Access to plumbing and kitchen facilities are one indicator of the quality of housing as can be the age of the housing structure. The number of housing units lacking access to plumbing and kitchen facilities dropped significantly from 1.4 percent to 0.2 percent and 1 percent to 0.2 percent from 2000 to 2010.

**Table 4.4
Structural and Facility Characteristics by District in 2010**

Geographic Area	TOTAL Housing Units	Median Number of Rooms	PERCENT					
			One unit: single detached or attached	Buildings with 10 or more units	Lacking complete plumbing facilities	Lacking complete kitchen facilities	YEAR STRUCTURE BUILT	
							1990 to March 2010	1939 or Earlier
BEDFORD	31,410	6.0	79.2	0.8	0.2	0.2	41.0	6.3
Blue Ridge	6,708	5.7	72.0	0.5	0.0	0.0	34.4	7.3
Center district	4,234	5.9	76.8	1.0	0.2	0.6	36.3	7.7
Jefferson district	9,238	6.9	85.0	1.0	0.2	0.0	49.9	3.2
<i>Forest CDP</i>	<i>3,896</i>	<i>6.5</i>	<i>78.1</i>	<i>2.3</i>	<i>0.0</i>	<i>0.0</i>	<i>41.2</i>	<i>1.4</i>
<i>Remainder of Jefferson district</i>	<i>5,342</i>	-	-	-	-	-	-	-
Lakes district	7,608	5.8	82.3	1.1	0.0	0.0	43.8	5.5
Peaks district	3,453	5.8	73.0	0.3	1.2	1.2	29.9	12.8

Source: U.S. Census 1990, 2000, and 2010

Regional Trends

Table 4.5 compares growth in the total number of housing units from 1990 to 2010 for Bedford County, its surrounding localities, the region, and the Commonwealth of Virginia. In 2010, Bedford County had the second highest number of housing units in the region behind only Roanoke County. Since the 2000 Census, Bedford County has surpassed both Pittsylvania County and the City of Lynchburg in the number of housing units in the region. Bedford County's growth in housing was the highest in the region from 1990 to 2000 (36.7%). However, Bedford County fell behind Franklin County and Appomattox County in regional housing growth (17%) from 2000-2010. During this same period, the region experienced housing growth decline from 19.1% to 13.8%, and the state's growth in housing also declined from 16.3% to 14.2%. During the past two decades, Bedford County's growth in housing accounted for 19.1% of the region's total housing growth, the highest of any surrounding locality.

**Table 4.5
Regional Housing Trends (1990 – 2010)**

Jurisdiction	Housing Units			Percent Change		Difference	Regional Percent Change
	1990	2000	2010	'90-'00	'00-'10	'90-'10	'90-'10
Amherst County	10,598	12,958	13,884	22.3%	7.1%	3,286	5.3%
Appomattox County	4,913	5,828	6,921	18.6%	18.8%	2,008	3.3%
Bedford City (now Town)	2,625	2,702	3,056	2.9%	13.1%	431	0.7%
<i>Bedford County</i>	<i>19,641</i>	<i>26,841</i>	<i>31,410</i>	<i>36.7%</i>	<i>17.0%</i>	<i>11,769</i>	<i>19.1%</i>
Botetourt County	9,785	12,571	14,392	28.5%	14.5%	4,607	7.5%
Campbell County	19,008	22,088	24,422	16.2%	10.6%	5,414	8.8%
Franklin County	17,526	22,717	28,475	29.6%	25.3%	10,949	17.8%
Lynchburg City	27,233	27,640	31,334	1.5%	13.4%	4,101	6.6%
Pittsylvania County	22,861	28,011	30,973	22.5%	10.6%	8,112	13.2%
Roanoke County	31,689	36,121	39,661	14.0%	9.8%	7,972	12.9%
Rockbridge County	7,975	9,550	11,003	19.8%	15.2%	3,028	5.3%
REGIONAL TOTAL	173,854	207,027	235,531	19.1%	13.8%	61,677	-
VIRGINIA	2,496,334	2,904,192	3,315,739	16.3%	14.2%	819,405	-

Source: U.S. Census 1990, 2000, and 2010

Table 4.6 indicates the housing growth from 1990 to 2010 in each of the County's magisterial districts and the housing growth in the Forest Census Designated Place (CDP) from 1990 to 2010. These areas are shown on Map 4.1.

**Table 4.6
Housing Density and Distribution (1980 – 2000)**

Magisterial District	Housing Units			Percent Change		
	1990	2000	2010	'90 – '00	'00 – '10	'90 – '10
Blue Ridge	4,922	6,137	6,708	24.7%	9.3%	36.3%
Center	2,754	3,615	4,234	31.3%	17.1%	53.7%
Jefferson	4,835	7,381	9,238	52.7%	25.2	91.1%
Lakes	4,573	6,633	7,608	45.0%	14.7%	66.4%
Peaks	2,557	3,075	3,453	20.3%	12.3%	35.0%
COUNTY TOTAL	19,641	26,841	31,241	36.7%	16.4%	59.1%
Forest CDP	2,287	3,286	3,896	43.7%	18.6%	70.4%
Land Area (square miles)	754	754	754	-	-	-
Housing Density (units per square mile)	26	35.6	41.4	36.9%	16.3%	59.2%

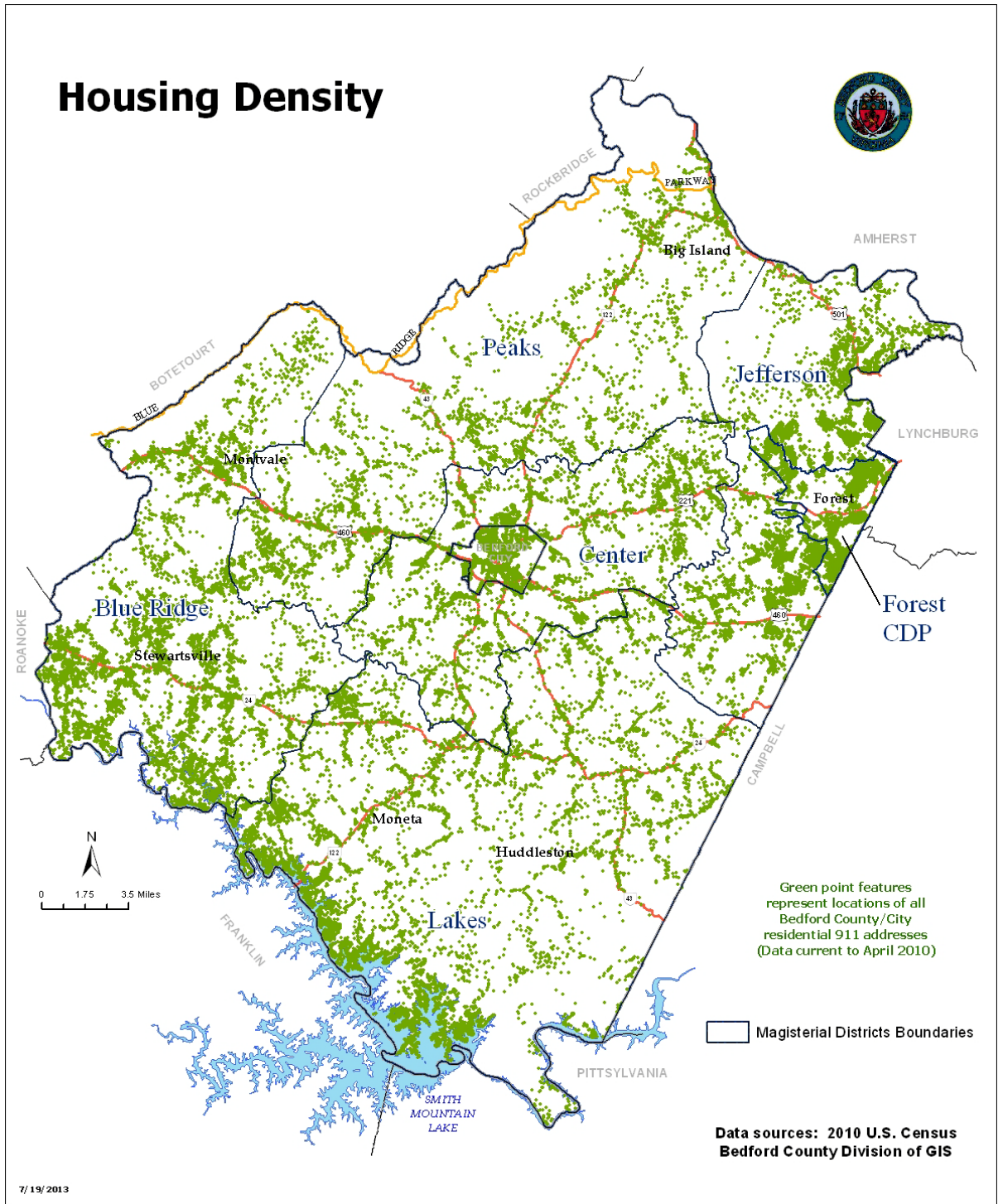
Sources: U.S. Census 1990, 2000, and 2010

From 1990 to 2010, the Jefferson Magisterial District grew 91.1 percent in the number of housing units, the fastest in Bedford County. The Forest CDP (census designated place), which is located in the Jefferson Magisterial District, grew 70.47 percent from 1990 to 2010.

The Forest CDP is a census designated place due to its resemblance to a city, town or village but lacks a governing body. For statistical purposes, the Forest CDP data is also included in the Jefferson Magisterial District as well. The second fastest growing area of the County is the Lakes Magisterial District, which grew 66.4 percent from 1990 to 2010. The Center Magisterial District grew 53.7 percent over the same twenty-year period, and was the second fastest growing area between 2000 and 2010. The Blue Ridge Magisterial District grew by 36.3 percent from 1990 to 2010 but grew only 9.3 percent from 2000 to 2010, the lowest growth area in the County. From 1980 to 2000, the number of housing units in the Peaks Magisterial District increased by almost 35 percent. While growth is occurring faster in some areas of the County, all areas are experiencing significant growth.

The housing density in Bedford County has nearly doubled from 1990 to 2010. In 1990, there were 26 housing units per square mile, 35.6 housing units per square mile in 2000, and 41.4 housing units per square mile in 2010. When compared to the state of Virginia's housing unit density of 78.6 units per square mile in 2010, Bedford County has a fairly low housing density. Map 4.1 illustrates the distribution of housing units throughout the County.

**Map 4.1
Housing Density Distribution**



Building Permits

The total number of building permits per year from fiscal year 2006 through fiscal year 2010 was 9,304. Permits are divided into various categories, such as new dwellings, mobile homes, retail and commercial, and other (which includes alterations and additions). According to annual reports compiled by the Bedford County Division of Building Inspections, new dwellings made up 22.7 percent of the permits during the last five fiscal years, while mobile homes accounted for 6.6 percent, retail and commercial 3.9 percent, additions and alterations 20.3 percent, and the remaining 46.5 percent categorized as docks, pools, accessory structures, miscellaneous structures (agricultural structures, greenhouses, etc.) and other miscellaneous permits (electrical, plumbing, mechanical, demolition, etc.). New dwelling permits (single-family and multi-family) have declined the most in the past five years from 666 in fiscal year 2006 to 223 in fiscal year 2010. Manufactured housing permits have steadily declined from fiscal year 2006 through fiscal year 2010, dropping from 152 to 96 permits. New stick built dwellings (single-family and multi-family) have declined 66.5 percent compared to new manufactured housing permits that have declined only 36.8 percent from fiscal year 2006 to 2010. Retail and commercial permits have fluctuated between 67 and 85 during the last five fiscal years.

The Jefferson Magisterial district has had the most residential building permits from new dwellings (single family dwellings, multi-family dwellings, and mobile homes) issued from fiscal year 2006 to fiscal year 2010. The Lakes Magisterial district was second in residential permits during this time period, followed by Blue Ridge, Center, and Peaks Magisterial districts (see Figure 4.1). All of the magisterial districts saw a steady decline in new residential building permits from fiscal year 2006 to fiscal year 2008. However, from fiscal year 2009 to fiscal year 2010 the Jefferson, Lakes and Center Magisterial districts had an increase in new residential building permits.

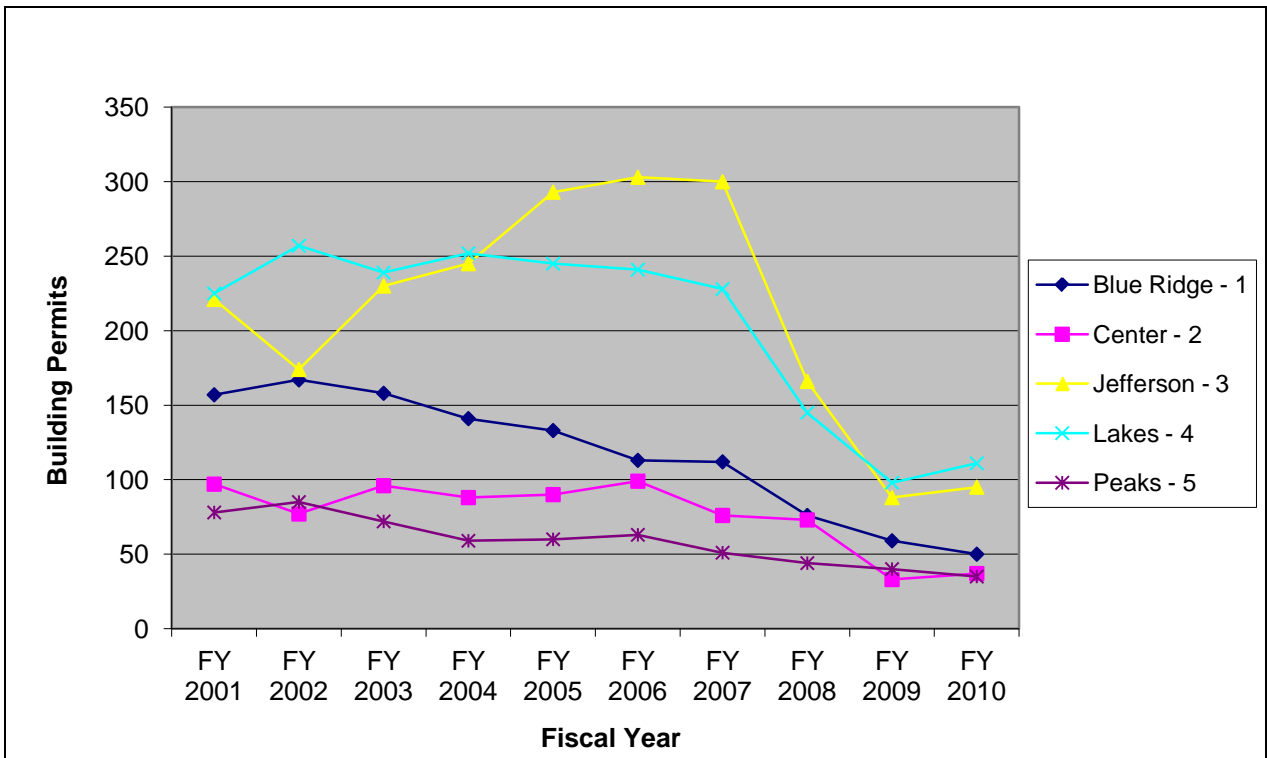
Housing Costs/Value

Housing costs can provide insight on the cost of living and on the housing conditions. The amount of money being spent on housing needs can be expressed in various forms. One way to study housing costs is through owners' costs. These costs are estimated in 5 year intervals (2006-2010) by American Community Survey defined by the US Census to include mortgages, taxes, house protection-related insurances, fees (such as homeowner association fees) utilities, and home improvement fees (averaged annually based on the value and age of the home). Monthly owner costs for the units with mortgages ranged from less than \$300 to \$2,000 or more. The highest percentage of units had monthly owner costs in the \$1,000 to \$1,499 range with the next highest percentage of units having costs from \$700 to \$999. The median monthly owner costs for mortgaged units was \$1,241, non-mortgaged units was \$291 in 2010.

Gross rent, which includes electricity, fuel, water, and other municipal services, and monthly cash rent, is a housing cost measurement for renter-occupied housing units. In 2010, the median gross rent was \$643, with the highest percentage of rental units having a gross rent from \$500 to \$749. Contract rent is the monthly rent agreed to or contracted for, regardless of any furnishings, utilities, fees, meals, or services that may be included. The median

contract rent estimated for 2007-2011 (American Community Survey 5-year estimate) was \$491, with the highest percentage of rental units having a contract rent in the \$450 to \$499 price range.

Figure 4.1
Residential Building Permits by Magisterial District (FY2001 - FY2010)



Source: Bedford County Division of Building Inspections

Table 4.6 reflects the median value of occupied housing units for the region, the state, and the country. According to the 2010 Census, the median value in 2010 for Bedford County was \$187,200 (a 32 percent increase since the 2000 Census). Bedford County ranks third in the region behind Botetourt and Roanoke County in the median value of housing. In 1999, the County's median housing value was slightly higher than that of Virginia and the US. However, in 2010 the County's median housing value fell behind both. Roughly 18.4 percent of the occupied housing units were valued below \$100,000, 35.7 percent between \$100,000 and 199,999, 21.1 percent between \$200,000 and \$299,999, 16.2 percent between \$300,000 and \$499,999, 7 percent between \$500,000 and \$999,999, and 1.5 percent were valued at \$1,000,000 or more.

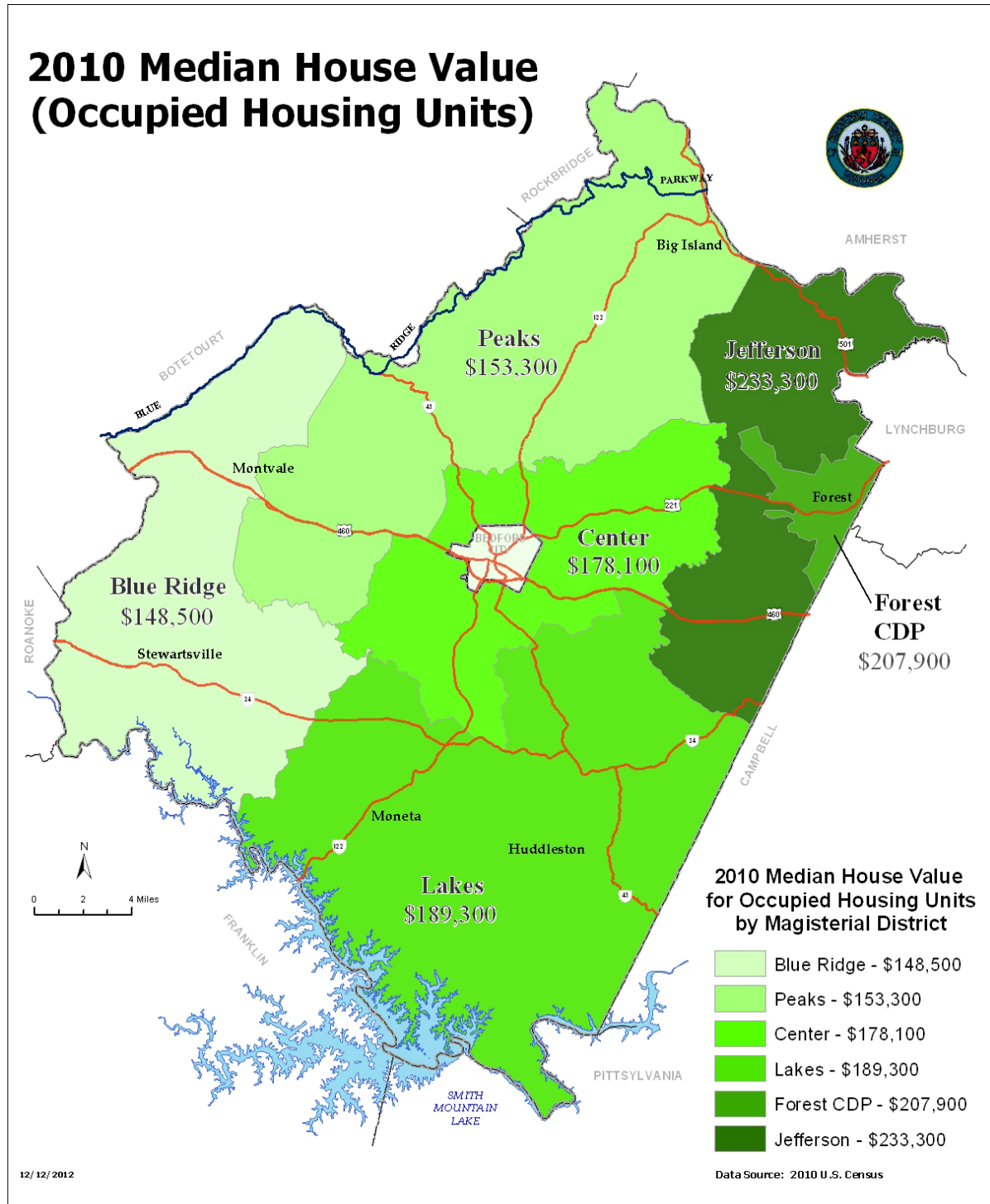
Table 4.6
Median Value for Bedford County and Surrounding Jurisdictions (1999-2010)

Jurisdiction	1999 Median Value	2010 Median Value	% Change
Amherst County	\$ 88,800	\$142,200	60.1%
Bedford City (Now Town)	\$ 90,400	\$139,100	53.9%
Bedford County	\$127,000	\$187,200	47.4%
Botetourt County	\$130,500	\$202,500	55.2%
Campbell County	\$ 96,900	\$134,000	38.3%
Franklin County	\$105,000	\$156,100	48.7%
Lynchburg City	\$ 85,300	\$139,100	63.1%
Pittsylvania County	\$ 80,300	\$102,000	27.0%
Roanoke County	\$118,100	\$189,500	60.5%
Rockbridge County	\$ 92,400	\$180,900	95.8%
VIRGINIA	\$125,400	\$255,100	103.4%
UNITED STATES	\$119,600	\$188,400	57.5%

Source: U.S. Census 2000, 2010, 2006-2010 American Community Survey 5- year Estimates – DP04, GCT3510, B25097

Map 4.2 shows the median value for occupied housing units for 2010 for the five magisterial districts in the County and for the Forest CDP. As reflected on the map, the Jefferson Magisterial District had the highest median value at \$233,300, followed by the Lakes Magisterial District (\$189,300), the Center Magisterial District (\$178,100), the Peaks Magisterial District (\$153,300), and the Blue Ridge Magisterial District (\$148,500). The Forest CDP has a median value of \$207,900. Compared to the state and national income levels, only the Jefferson Magisterial district was comparable to the State of Virginia’s median value with both the Jefferson and Lakes Magisterial districts having higher home values than the National median value.

Map 4.2
Median Value for Occupied Housing Units – 2010



Affordable Housing

Affordable housing is defined by the U.S. Housing and Urban Department as housing for which the occupant is paying no more than 30 percent of his or her income for gross housing costs, including utilities. According to the US Census, most of Bedford County residents are finding affordable dwelling units as there are few that are paying above 30 percent of their income for housing. However, there is a portion of the population paying above this and providing access to affordable housing for all residents is important to ensure a diverse and thriving community life in the County.

The state and federal government provides assistance through rental and mortgage subsidies for portions of the population whose income



is 80 percent or below the median income for the area. The County will pursue such alternative housing for low and moderate-income residents through innovative public-nonprofit efforts to develop affordable single-family and multi-family units.

In today's economy there remains a need for alternative housing choices to upgrade the quality of life for Bedford County residents. The areas of particular focus for the efforts of providing affordable housing are in the mixed use areas of the County (highlighted on the Future Land Use Map) where higher density allowance will serve to enhance the building affordability of housing that can thus be passed on to the consumer. Additionally, all residential and agricultural areas of the County should allow clustering of housing that both protects critical environments and provides for more efficient and lower-cost development of infrastructure and buildings.

Workforce Housing

There is an important income group in most communities that do not qualify for the federal and state subsidies as their income levels are at or slightly above the 80 percent of median income for the area. However, the housing stock available to them is still often outside the “affordable” range of 30 percent or less of their annual income. Thus, the need to address what has been coined “workforce housing” is an important assessment of a community’s overall housing stock. Bedford County recognizes that housing in many varieties and prices are critical to a dynamic and vibrant community and economy. Too often, people working in jobs within a locality cannot afford to live in the neighborhoods of that same community. A 1999 federal housing study estimated 3.9 million working families had critical housing needs (paying more than half their income for housing), another 1.6 million lived in overcrowded conditions, and another 2.7 million were forced to commute over 45 minutes. Bedford County has a large number of out-commuters (73 percent of the working population). This

may indicate an imbalance in the number of desirable jobs for the workforce in the County. Given this imbalance, the development of a diverse housing stock for the regional workforce is a factor for Bedford County's residential development trends.

Determining Factors

- The County supports community center development in appropriate locations that provide housing, jobs, and community services to area residents.
- Watershed resources are crucial and protection of land areas that impact the quality of water in the County must be strongly considered in all development or redevelopment opportunities.
- Areas that currently have developed lands and can support further development are primary targets for growth in housing, commercial, and industrial uses in the County.
- Preserving natural flora and fauna in the County is strongly supported by residents.
- The cost of providing services to residents must be factored into the overall costs of development for residential and commercial areas of the County so as to not unduly burden the tax liabilities of the general citizenry.
- Attractive and well-designed housing development is an important value of the Bedford community.
- A large number of residents of the County out-commute to work, creating a bedroom community affect in some parts of the County.
- Coordination with the Town of Bedford and surrounding Counties is important to guiding appropriate development along these political boundaries that can be addressed through design standards, land use protections, and urban development areas.
- Affordable housing that meets the federal guidelines of housing expenditures is an important criteria for new housing development in the County.
- All policies and programs of the County should be designed to be fiscally sustainable.
- Seek an appropriate balance between individual property rights and the community's goals.

Objectives and Strategies

- 4.1 A variety of dwelling units in all price ranges
- 4A. **Design Guidelines.** Research and evaluate design guidelines and standards that provide community enhancing and environmental sensitivity factors for all new large-scale development.
 - 4B. **Zoning Ordinance Revisions.** Revise the Zoning Ordinance to address housing issues including, but not limited to, encouraging workforce and targeted-income affordable housing dwelling units through density bonuses in all residential areas served by adequate infrastructure, and allowing flexibility in the types of housing units allowed in all residential areas served by adequate infrastructure.
 - 4C. **Annual Report.** Staff will provide an annual report to the Planning Commission and Board of Supervisors describing population and housing trends and issues with recommended corrective actions as appropriate.
 - 4D. **Grant Programs.** Utilize grant programs to improve substandard housing conditions and assist residents with low to moderate incomes. Grant requests that do not require County money shall be given preference.
 - 4E. **Mixed Use Housing.** Facilitate and educate the development community in the use of Traditional Neighborhood Concepts for new housing developments which promote an appropriately scaled mix of residential and commercial uses along with recreational and alternative transportation opportunities.
 - 4F. **Affordable Housing Guidelines.** Affordable housing that meets the federal guidelines of housing expenditures not exceeding 30 percent of gross income.
- 4.2 Increased housing opportunities for lower and middle income segments of the population through encouragement of the development of a variety of housing price and size options
- 4A. **Design Guidelines.**
 - 4B. **Zoning Ordinance Revisions.**
 - 4C. **Annual Report.**
 - 4D. **Grant Programs.**
 - 4E. **Mixed Use Housing.**
 - 4F. **Affordable Housing Guidelines.**
- 4.3 Housing development that provides safe, sanitary and desirable places to live
- 4A. **Design Guidelines.**
 - 4C. **Annual Report.**
 - 4D. **Grant Programs.**
 - 4E. **Mixed Use Housing.**
 - 4F. **Affordable Housing Guidelines.**

4.4 A viable and appropriate mix of residential, commercial, and industrial development that ensures the County's revenues in relationship to the cost of providing necessary and desired services are relatively balanced and sustainable.

- 4C. Annual Report.**
- 4E. Mixed Use Housing.**
- 4F. Affordable Housing Guidelines.**

4.5 Well-planned and designed residential neighborhoods in areas equipped to provide essential public services

- 4A. Design Guidelines.**
- 4B. Zoning Ordinance Revisions.**
- 4C. Annual Report.**
- 4F. Affordable Housing Guidelines.**

4.6 Adequate housing for the elderly and persons with special needs

- 4A. Design Guidelines.**
- 4B. Zoning Ordinance Revisions.**
- 4C. Annual Report.**
- 4D. Grant Programs.**
- 4E. Mixed Use Housing.**
- 4F. Affordable Housing Guidelines.**

Chapter Five

Natural Environment

Goal and Intent

Protection and enhancement of the environmental quality and natural resources of the County

The quality of the environment in Bedford County is an important consideration in determining growth and development policies. The maintenance of air and water quality, the prevention of soil erosion, and preservation of unique features of the County are significant indicators of a quality environment that is healthy and attractive for area residents.

Background and Findings

Natural features of Bedford County consist of many interrelated components that function as a complex system. These natural features, including geology, soils, topography, hydrology, surface water, air quality, climate and visual features are all sensitive to changes generated by

man. An analysis of these features is important in determining the suitability of various parts of the County for different types of land uses. Certain natural conditions such as steep slopes, floodplains, and certain soils are not conducive to intensive development and should be considered when deciding where to encourage or



discourage development. Inappropriate land development can result in unnecessary soil erosion, tree removal and destruction of view sheds, overflowing septic tank drainfields, and stream siltation cumulatively destroying the County's scenic beauty. This chapter is divided into the County's land, water, air and biological resources.

Geology

Bedford County straddles the Piedmont and Blue Ridge physiographic provinces. Metamorphic and igneous rocks of the Precambrian age underlie the majority of the County. These Precambrian rocks have been thrust northwest over the Paleozoic sedimentary formations that underlie the nearby Appalachian Valley.

The large-scale faults occurring in the County include the Rockfish Valley Fault which tracks NE-SW through western Bedford County and is a regional scale, ancient, geologic feature. This feature is expressed topographically as a 1-3 mile wide linear valley. There is no evidence for movement on the Rockfish in recent geologic time. Minor faulting is pervasive throughout the County and is evident in both large and small geologic features. There is no evidence to suggest recent fault movement in the County. Small quartz dikes and veins as well as larger igneous dike intrusions are also present suggesting fractures in Bedford County's rock masses. The extensive fracture zones are a primary determinant of groundwater availability in Bedford County. Limited data available concerning this relationship indicates that the County's interrelated fractures facilitate groundwater transport over distances on the order of miles. Groundwater transport in fractures has important connotations in determining well withdrawals, well density, and groundwater pollutant transport.



Geography

Bedford County is covered primarily with rolling Piedmont terrain. To the east, the County contains broad to narrow ridges with dissecting short drainage ways. Slope within the area is characterized as gentle or strong on ridge tops and moderately steep to very steep on ridge sides. The western portion of the County is bordered by the Blue Ridge Mountains and consists of broad to narrow ridges with dissecting short drainage ways, scattered mountain peaks and hills. Slope in the area is characterized as moderately steep to very steep on the ridge sides and steep to very steep on the mountainsides. The lowest elevation in the County, of 540 ft above sea level, is located in the eastern border at Goose Creek. At an elevation of 4,225 ft, Apple Orchard Mountain is the County's highest point.

Topographic slope is expressed as the percent of vertical change per hundred feet of horizontal distance. Thus, a 15 percent slope is one that increases or decreases fifteen feet vertically for every one hundred feet horizontally. In general, slope does not prohibit construction in Bedford County. Major slope problems occur only in the western and northern portions of the County where slopes are 40 percent and greater. Much of this land is situated in the Thomas Jefferson National Forest and therefore unavailable for development.

The suitability of land for development relative to topographic slope can be analyzed according to certain standards. These standards relate to development suitability in terms of least construction cost and least environmental impact and are summarized in Table 5.1.

**Table 5.1
Land Use Development Suitability Based on Topographic Slope**

TOPOGRAPHIC SLOPE	SUITABLE LAND USE TYPES*
Flat to gently sloping** (0 to 8 percent)	<ul style="list-style-type: none"> -Suitable for many types of industrial, commercial, institutional, and residential uses. -The slope permits good condition for natural and slow drainage. -Well suited for primary and secondary roads, and utility corridors.
Moderately sloping (8 to 15 percent)	<ul style="list-style-type: none"> -Suitable for residential uses but too steep for extensive industrial, commercial, and high density uses. -Suited for secondary roads. -Will require higher grading and construction costs. -Generally steep for cropland.
Steep to severely sloping (15 to 25 percent)	<ul style="list-style-type: none"> -Suitable for individual homes but too steep for residential subdivisions. -Substantial limitations for other land uses. -Excessive grading, excavation, and construction costs. -Suited for low-intensity uses and for active recreation (camping, hunting, and hiking).

**Does not limit other activity but costs would increase*

***Some land within this category lies within flood-prone areas*

Source: Long Range Program 1986-1991, Peaks of Otter Soil and Water Conservation District, September, 1986.

Soils

Soils are one of our most valuable basic natural resources. Soil forms the outer few feet of the earth's surface. It is the foundation on which many of our daily activities occur. It is the medium in which crops, pastures, and forest are grown and upon which houses, roads, and industries are built.

Soils vary in their characteristics and capabilities. Soils develop layers or horizons with certain characteristics and properties that make them different from each other. The major soil characteristics include color, texture, consistency, mottling, degree of acidity, permeability, and depth to bedrock. These features are used to identify, classify, and name soils. The major soil associations and descriptions of their use in Bedford County are as described in Table 5.2.

**Table 5.2
Soil Associations and Use Suitability**

Soil Association	Percent of Bedford County/Town	Percent Cleared	Use Suitability				
			Crops	Pasture	Timber	Septic Fields	Buildings
Dekalb	0.5%	0.0%					
Sequoia-Berk-Braddock	3.0%	40.0%		0	0		
Edneytown-Ashe	12.0%	5.0%		X	0		
Hayesville-Edneytown-Braddock	28.0%	50.0%	0	0	0	0	0
Gunstock	0.3%	95.0%		0	X		
Cecil-Madison	48.0%	60.0%	0	0	0	0	0
Iredell-Poindexter-Mecklenberg	2.2%	10.0%	0	0	0		
Nason-Tatum-Manteo	6.0%	5.0%	X	0	0%	0	0
			Blank - Not Suitable X - Moderately Suitable 0 - Suitable				

The soil suitability chart demonstrates the availability of land for development. The predominance of soils that are suitable for buildings and septic fields will limit the incentive to develop lands that are not suitable for development. The identification of soils serves as a basis for the protection of sensitive areas.

Prime Farmland

Prime farmland is land that is best suited to producing food, feed, forage, fiber, and oilseed crops. It produces the highest yield with minimal amounts of energy and economic resources and the least damage to the environment. The general criteria for prime farmland are as follows:

- Generally adequate and dependable supply of moisture from precipitation and irrigation
- Favorable temperature and growing-season length
- Acceptable levels of acidity or alkalinity
- Few or no rocks
- Permeability to air and water
- Slope of 0 to 6 percent
- Not excessively erodible
- Not saturated with water for long periods and not flooded during growing season

Bedford County contains approximately 80,708 acres of prime farmland, which is 17 percent of the total acreage of the County. This land is mainly located in the northern and southeastern portions of the County. Because of its ability to produce high sustainable yields with minimal effort and ecological damage, prime farmland should remain as farmland and not be developed. Agricultural lands provide economic value as well as contribute to the unique character of the County. The primary challenge in preserving this valuable land use,

and its associated economic and aesthetic characteristics, is the realization that land suitable for agricultural use is also suitable for urban development.

An important tool that residents of the County can use to protect the agricultural lands within its borders is the conservation easement. An easement is a voluntary legal agreement between a landowner and a public body or conservation group in which the parties agree to protect the open space and natural resource values of the land. The Virginia Outdoors Foundation (VOF), The Central Virginia Land Conservancy (CVaLC), and the Blue Ridge Land Conservancy (BRLC) are among many organizations in the state that hold easements within the state and have resources and information available to qualifying landowners about the benefits of this program.

An additional resource the County can use is the Agricultural and Forestal District (AFD) designation.

These districts can be established to conserve, to protect, and to encourage the development and improvement of the



Commonwealth's

agricultural and forestal lands for the production of food and other agricultural and forestal products. The districts can also conserve and protect agricultural and forestal lands as valued natural and ecological resources that provide essential open space for clean watershed protection, for wildlife habitat, and for aesthetic purposes.

Forested Areas

Forests are environments that depend on the relationship between the living organisms and the physical environment in order to maintain their productivity and sustainability. Soil type, slope, moisture, climate, exposure, fire, wind, land-use history, and sun are some factors that impact the character of the forest.

Approximately 66 percent of the 16 million acres of forestland in Virginia is hardwood, 22 percent pine, and 12 percent oak-pine mixed. Hardwood forests cover over 70 percent, or 11 million acres, of the total forest area in Virginia. According to Forest Service data, the total forestland in Bedford County in 1992 is 288,600 thousand acres. Private, non-industrial landowners own almost 75 percent of the 16 million acres in Virginia. Of the remaining forestland, state and federal government own 12 percent and forest industries 13 percent.



Bedford County also contains a portion of the George Washington and Jefferson National Forests, which were administratively combined in 1995. About 1,646,328 acres of the National Forests fall within Virginia. Roughly 80 percent of the George Washington and Jefferson National Forests are hardwood species and conifers make up

the remaining 20 percent. The Forests also provide recreational opportunities, including the Appalachian National Scenic Trail, public hunting lands, ATV routes, and Wildernesses.

A study of National Forests in the U.S. conducted in 2001 ranked the George Washington and Jefferson National Forests seventh on the list of endangered forests. The biggest threats to the Forests according to the study are logging and watershed degradation.

Surface Water

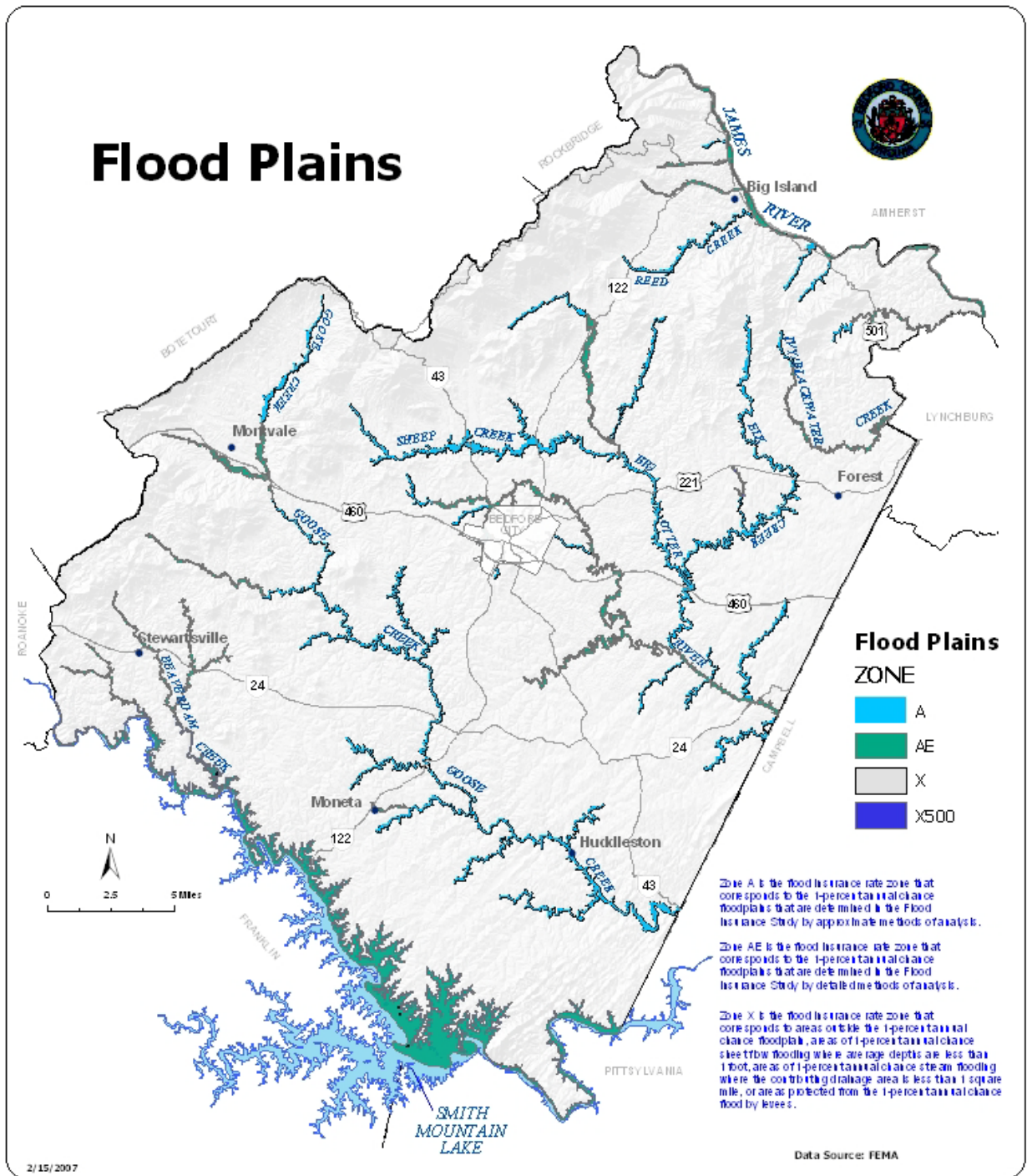
Dam Inundation Zones

In 2008, the State of Virginia required localities to be provided maps of dam break inundation zones for potential impacts to new developments. The impounding structure (dam) regulations require the owner of the regulated dam to conduct a dam break analysis for the following events: a sunny day dam break, the probable maximum flood with dam break, and the spillway design flood with and without a dam break. For any new development within a mapped dam break inundation zone, the locality shall notify the dam owner and forward the request to the Virginia Department of Conservation and Recreation (DCR) for review. DCR must make a determination of potential impacts to the proposed development and provide comment to the locality. This state mandate requires the inclusion of these map regulations into both the subdivision and zoning ordinances, the intent being that development in the path of a potential dam break would be aware of this danger and a plan be in place for such an event.

Floodplains

Floodplains are those areas of land adjacent to bodies of water that are subject to periodic flooding. Because these lands are subject to flooding, their development potential is limited. Residential subdivisions, industrial parks, and commercial buildings are inappropriate in these areas due to the potential for excessive damage during floods. Floodplains should be utilized as open space and parkland in order to reduce the risk of property damage and to maintain the natural environment and water quality of the river or stream. Map 5.1 shows the County's hundred-year floodplain. The hundred-year floodplain is a representation of the possible maximum flood during a hundred-year period.

Map 5.1
Bedford County Floodplain Map



Wetlands

Virginia has about one million acres of wetlands and roughly one-quarter are tidal and three-quarters are non-tidal. The U.S. Fish and Wildlife Service's National Wetlands Inventory (NWI) estimates the number and location of wetlands using aerial photography. According to NWI, Bedford County has approximately 356.5 acres of vegetated Palustrine wetlands, which is the most common type in Virginia (Hershner 2000).

Federal, state, and local governments have passed regulatory programs to protect wetlands. Representatives from all three levels of government typically review and comment on requests to disturb wetlands. Section 404 of the Clean Water Act is the main federal law regulating the filling of wetlands. The U.S. Army Corp of Engineers is the lead administrative agency for Section 404 in conjunction with the U.S. Environmental Protection Agency. The Virginia General Assembly passed legislation in 1996 and 1999 that encouraged the use of Wetland Mitigation Banks. The first wetland bank created in Virginia was the Great Dismal Swamp Wetland Mitigation Bank. It is important to look at the functions and services the wetlands provide as well as the number of acres disturbed. The main goal of wetlands protection has been to achieve no net loss of the resource. Bedford County recognizes that wetland losses can be harmful to the environment and is in support of the Commonwealth's efforts to track wetland losses and gains by watershed.

Water Quality

Bedford County has endured water quality problems in the past, predominantly in its surface water. Surface water concerns have centered on large industrial and domestic waste loads from sources in the County and upstream (i.e., Roanoke) degrading water quality. Concerns exist, but have been abated to a large extent by the National Pollutant Discharge Elimination System (NPDES) permit system and improved municipal wastewater treatment. At present, non-point pollution, predominantly farm runoff, is the greatest concern with respect to surface water quality in the county. Farm lot runoff and silt from erosion contribute phosphorus, nitrogen, and organic material to the County's rivers and streams resulting in siltation as well as eutrophication. Water quality is of particular concern in regards to Smith Mountain Lake, a primary source of drinking water for Bedford and Franklin Counties.

Stormwater Management

On September 13, 2011, The Virginia Soil and Water Conservation Board approved modifications to the Virginia Stormwater Management Program Regulations (VSMP) that delegated the Virginia General Permit for Discharges of Stormwater from construction activities to localities. A program must be developed by localities and approved by The Virginia Soil and Water Conservation Board prior to its implementation. The new stormwater requirements will affect new construction activities after its implementation and effective date of July 1, 2014.

Watersheds

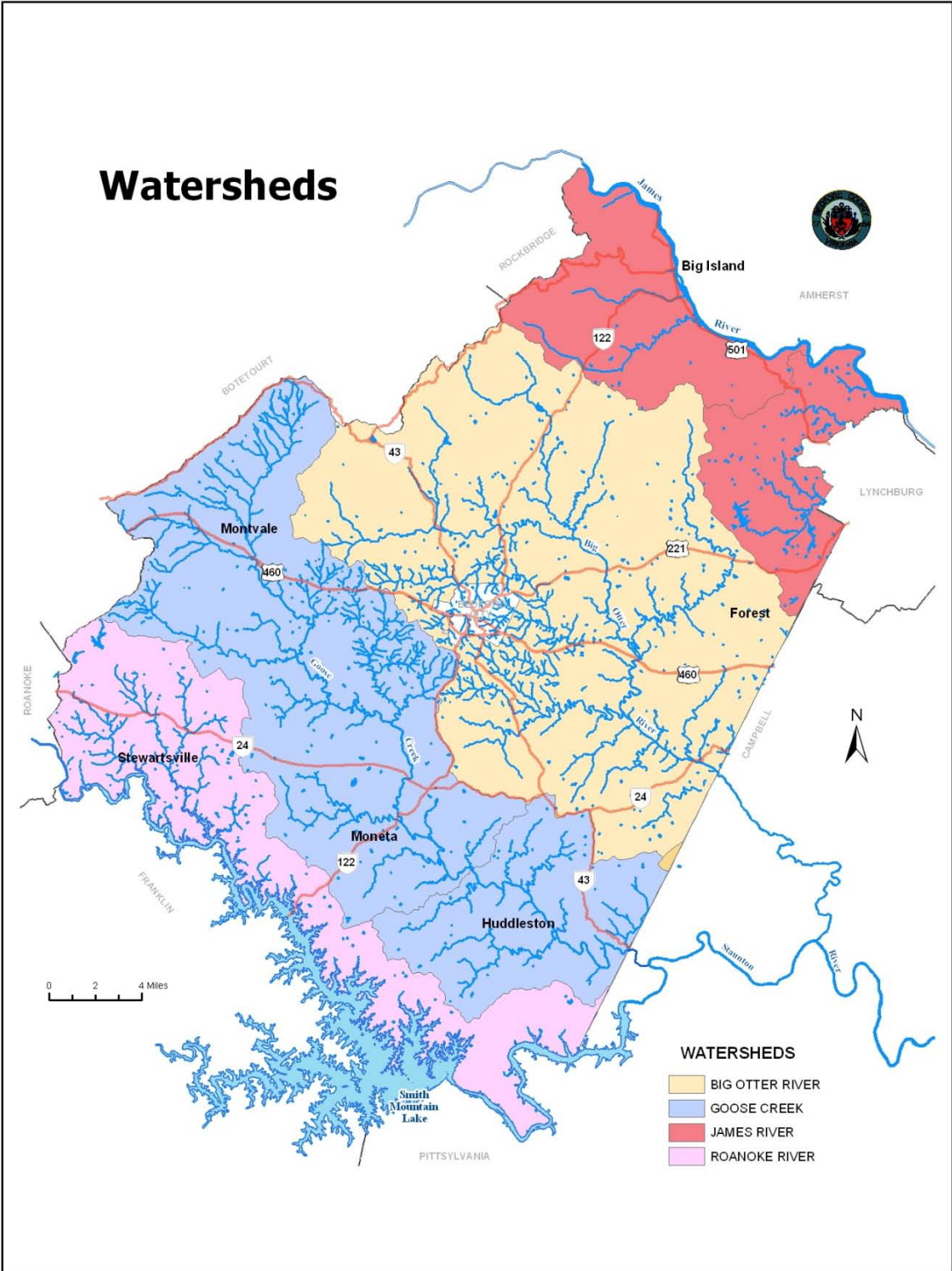
A watershed is an area of land from which all water, sediment, and dissolved materials drain into a common outlet (Virginia's DEQ). The James River watershed (northern boundary of the County) and the Roanoke River watershed (along the southern boundary of the County) are the main watersheds within the County. Two minor watersheds also exist within the County: the Big Otter River watershed and the Goose Creek watershed. These watersheds, identified in Map 5.2, provide an ample supply of surface and ground water in the County but must be carefully managed to insure a suitable degree of quality for domestic, industrial, commercial and/or recreational use.

Bedford County understands the importance of good water quality. It is a challenge to maintain high water quality levels while also offering recreational and economic opportunities to residents and businesses. Whether as ground water or surface water, the County strives to preserve these natural water quality "assets" through the Virginia Water Protection Permit Program that is administered jointly by the Virginia Department of Environmental Quality (DEQ) and the U.S. Corps of Engineers (COE). Problems, which can result from poor protection of watershed assets, include excessive stormwater runoff and flooding, increased non-point source pollution, habitat destruction, and impairment of stream water quality.

Bedford County has water bodies that have been declared by the Virginia Department of Environmental Quality (DEQ) as "impaired" and placed on the State's Total Maximum Daily Loads (TMDL) list. In accordance with US Environmental Protection Agency (EPA) requirements, once a water body is on the TMDL list then watershed stakeholders must attempt to restore water quality by developing and implementing a strategy that will limit the pollutant loadings.

The County's two most prominent rivers are the James River, at the northern border of the County, and the Roanoke River to the south. The main tributaries of the James River include Snow Creek, Peters Creek, Battery Creek, Hunting Creek, Reed Creek, Judith Creek and Ivy Creek. Elk Creek, Big Otter River, Stony Creek, Little Otter River, Machine Creek, Goose Creek and Beaverdam Creek are the main tributaries of the Roanoke River.

Map 5.2 Bedford County Watershed Map



Shoreline Protection Program

The Shoreline Management Plan (SMP) by American Electric Power (AEP) for the Smith Mountain and Leesville reservoirs, collectively known as the Smith Mountain Pumped Storage Project, was implemented in 2003. The purpose of the SMP is “to provide for public and private access while protecting and enhancing the Project’s natural resources or without compromising the Project’s primary function, which is the production of electricity, and ensure that the existing and future public recreational needs of the Project are addressed.”

AEP received further authority from the Federal Energy Regulatory Commission (FERC) in 2005 to permit development within the project boundary and to fulfill Article 41 of the license requirements for the project, which is to “protect and enhance the project’s environmental, scenic, and recreational values”. The shoreline has been classified into six categories: High Density Commercial, High Density Multi-Use, Public Use, Low Density Use, Impact Minimization Zone, and Conservation/Environmental. Regulations for each classification and for activities that take place within the project boundary are defined in the SMP.

AEP’s responsibility to protect the quality of the Lake’s water extends only to the 800-foot elevation point, which encompasses but a few feet beyond the water’s edge in most cases, on Smith Mountain Lake and to the 620-foot elevation point on Leesville Lake. Thus primary responsibility for water quality protection lies within the land use regulations of each of the Lake’s bordering Counties (Bedford County shoreline accounts for approximately 40%) and those State regulations of the Departments of Environmental Quality, Conservation and Recreation and Health.

In accordance with the approved plan, the SMP is to be reviewed by AEP and the public every 5 years. On December 31, 2010, a revised SMP was submitted to FERC for approval and is currently under review. A committee of representatives from Bedford, Franklin, Campbell and Pittsylvania County continue to work with AEP on adjustments and updates to the SMP now and in the future.

Groundwater

Bedford County’s surface geology is sufficiently complex to make prediction of groundwater flow paths and hydraulic conductivity very difficult. Multiple faulting has broken up some of the underlying formations so that a homogeneous rock mass does not exist. In general the more coarse grained, granitic rocks are a better water source than



the more fine-grained, schistose rocks found in these formations. This is due to the granular, granitic rocks having higher permeability. The hydraulic conductivity of fractures at greater depth throughout the County is open to debate.

Groundwater in Bedford County may be acidic and exhibit high iron concentrations. Likelihood of this being true increases with well depth. Water drawn from springs and bedrock is often soft to moderately hard and low in undesirable components. However, in the Villamont-Montvale and Smith Mountain Lake areas, high concentrations of iron are common and the water is moderately hard to hard.

Instances of ground-water pollution have been documented in the County. The threat represented by groundwater pollution is of particular concern given the fractured nature of the geology underlying much of Bedford County. Bedford County geology lends itself to comparatively rapid well recharge with water moving along fault and fracture zones for extended distances. Excessive well drawdown and pollutant transport are particular concerns in this geologic setting. In order to predict which areas of the County are more susceptible to groundwater pollution, Bedford County has a groundwater pollution potential map (1989) that uses the DRASTIC method developed by the US Environmental Protection Agency (EPA) using parameters that are consistent on a national basis. These parameters include depth of recharge, net recharge, aquifer media, soils, topography, impact of Vadose Zone, and hydraulic conductivity in order to determine the groundwater pollution potential.

In 2006, Bedford County and the United States Geological Survey (USGS) began a 10 year groundwater study to establish surface and groundwater monitoring stations. The study will build a data set that can be used to aid long term decisions to preserve the resource. Once completed, this information will be used to more accurately predict groundwater flow paths hydraulic conductivity, and pollution potential.

Vegetation

The climax terrestrial community endemic to Bedford County is the mixed deciduous forest. This particular forest community is characterized as having a preponderance of broad-leaf tree species, well-developed forest understories, and diverse species composition. The associated dominant wildlife species are deer and bear. At present due to man's history of activity in Bedford County and various local factors 60 percent of the County is wooded; however, none of these wooded areas are virgin timber stands.

Wildlife

Bedford County's wildlife and fisheries are large and varied. Throughout its wooded areas, white-tailed deer, squirrels, wild turkey, opossum, skunk, red fox and songbirds are commonly found. In the western mountain regions of the County, black bear (photo by Zeph Cunningham), bobcat, and grouse inhabit the wooded areas. In and around the several wetlands within the County, beaver,



muskrat, mink, and otter can be found.

The western mountain streams are annually stocked with rainbow trout, while largemouth bass, brim, and channel catfish are stocked in many of the farm ponds and small lakes within the County.

To the south, Smith Mountain Lake is home to several species of fish, with bass and catfish among the most prevalent and sought after by anglers. The Lake has become a destination for fishermen from all over the nation and site of several annual fishing tournaments. The introduction of invasive weeds and non-native fish is a continual threat. The Tri-County Lake Administration Commission (TLAC) has an active program assessing invasive weeds and has instituted several programs to minimize that threat including chemical treatments and grass carp.

According to the Virginia Department of Conservation and Recreation, Bedford County has two species with Federal or State threatened or endangered status. In addition, there are five species that have Federal or State status as a “species of concern” or “special concern” status. Table 5.3 lists the species and their state and federal status. The statuses of “species of concern” and “special concern” are non-regulatory categories that state that the species merit special concern by either U.S. Department of Fish and Wildlife or the Virginia Department of Game and Inland Fisheries.¹

**Table 5.3
Species with Federal and State Legal Status**

Species Common Name	Federal Status	State Status
Roanoke Logperch (fish)	Listed Endangered	Listed Endangered
Small Whorled Pogonia (vascular plant)	Listed Threatened	Listed Endangered
Peaks of Otter Salamander (amphibians)	Species of Concern	
Yellow Lance (mussel)	Species of Concern	
Kankakee mallow (vascular plant)	Species of Concern	

Source: Virginia Department of Conservation and Recreation, Division of Natural Heritage

Air Quality

Bedford County's air quality is a major asset to the environment and scenic beauty of the County. The Environmental Protection Agency establishes standards monitored by the Department of Environmental Quality, which determine whether a region is an "air quality attainment area" or not. Bedford County lies within a region that achieves this designation. The air quality meets a specified standard, but is not measured against itself from sample to sample. Because there are no air quality comparisons, trends cannot be established. Those

¹ Virginia Department of Conservation and Recreation, Division of Natural Heritage.
http://www.dcr.virginia.gov/natural_heritage/nhrinfo.shtml#search

areas that do not achieve designation as an air quality attainment area are required to design a plan and to take steps to improve air quality.

The rural nature of the County with considerable forest canopy enhances turbulence near the ground dispersing emissions and blocking emission plumes from reaching the ground. This plus sufficient yearly rainfall contributes to maintaining air quality. Two exceptions to this are along the major highways, such as Routes 24, 122, 460 and 221, and in and adjacent to commercial and industrial areas of the County. In these areas there are high traffic volumes resulting in a large amount of automobile emissions as well as emissions from point sources (i.e., smokestacks). Citizens of the County have expressed particular concern regarding the air quality in Montvale and Big Island resulting from the industrial activity in those areas.

Air pollutants that do exist come primarily from the combustion of fossil fuels from stationary and mobile sources, originating not only locally, but also from other areas. The coal-fired boilers and motor vehicle emissions are



the major sources. Planting appropriate tree species throughout highway corridors is a good way to mitigate the effects of automobile emissions.

As Bedford County is in compliance with the national ambient air quality standards it is considered a “Prevention of Significant Deterioration” area under Clean Air Act regulations. This means that any new point source of pollutant emissions would not be allowed to emit pollutants in such a manner as to degrade the present level of air quality.

Climate

The National Oceanic and Atmospheric Administration describes the climate of Bedford County as “modified continental with mild winters and warm and humid summers”.² The Blue Ridge Mountains to the northeast act as a blocking and modifying effect on storms and air masses. The Chesapeake Bay and the Atlantic Ocean to the east modify the temperature and contribute to the humidity in the summer.

² Climatography of the United States No. 20 - Bedford, VA. No. AA, 1980

The mean annual temperature is 56.7 degrees. Temperatures are generally moderate. “Daytime highs during the winter are usually around 50 degrees with nighttime lows in the upper 20’s. Daytime highs in the summer are usually in the upper 80’s and nighttime lows in the lower 60’s.”³ The average last freezing temperature in spring is on April 20 and the average first freezing temperature in the fall is October 16. These dates bracket a growing season of 179 days. Temperatures may vary widely in the County depending on elevation, air masses, and other factors.

Precipitation averages around 42.1 inches per year with the maximum usually occurring in August and the minimum in October. Snowfall averages 16.1 inches per year.⁴ Showers and thundershowers frequently characterize summer rains. Hurricanes and tornadoes are very rare occurrences in Bedford. But “thunderstorms, accompanied by severe lightning, high wind, and hail, are much more frequent and produce the greatest amount of storm damage.”⁵

Determining Factors

- Citizens of the County are strongly committed to maintaining agricultural areas and protecting the natural environment within and around the County.
- Watershed resources are crucial and protection of land areas that impact the quality of water in the County must be strongly considered in all development or redevelopment opportunities.
- The protection of quality groundwater in the County is a high priority for residents.
- Agricultural opportunities, scenic vistas and rural landscapes are an important asset to the County and merit special protection and preservation investment strategies.
- Protecting the natural environment through the regulation of development in mountaintops, foothills and steep slopes is a high priority of County residents.
- Areas that currently have developed lands and can support further development are primary targets for growth in housing, commercial, and industrial uses in the County.
- Preserving natural flora and fauna in the County is strongly supported by residents.
- Coordination with the Town of Bedford and surrounding Counties is important to guiding appropriate development along these political boundaries that can be addressed through design standards, land use protections, and urban development areas.
- Smith Mountain Lake is an important natural resource of the County and development impacts on this resource must be strongly considered.
- All policies and programs of the County should be designed to be fiscally sustainable.
- Seek an appropriate balance between individual property rights and the community’s goals.

³ Climatology of the United States No. 20 - Bedford, VA. No. AA, 1980

⁴ IBID

⁵ Climatology of the United States No. 20 - Bedford, VA. No. AA, 1980.

Objectives and Strategies

- 5.1 Surface water that meets or exceeds the appropriate state and federal water quantity and quality standards, consistent with the general needs for the County's residents, wildlife and livestock
- 5A. Zoning Ordinance Revisions.** Research and revise the Zoning Ordinance to address the County's natural resource goals and objectives.
 - 5B. Incentives.** Research and propose incentives for landowners to voluntarily protect the natural habitat on their property and maintain and re-establish riparian buffers on the County's streams, creeks, lakes and ponds.
 - 5C. Low Impact Development (LID) Standards.** Administer and evaluate alternative storm water management solutions, including LID standards to be defined and regulated through code updating and enforcement.
- 5.2 A reliable source of contaminant free ground water to meet the general needs of County residents
- 5A. Zoning Ordinance Revisions.**
 - 5D. Septic Pump-out Program.** Research and implement a voluntary pilot septic pump-out program in the Smith Mountain Lake district in partnership with the County Health Department.
 - 5E. Groundwater Monitoring.** Research, evaluate and implement a groundwater monitoring program.
- 5.3 Land within the County maintained at a sustainable level to support the native and harvested flora and fauna
- 5A. Zoning Ordinance Revisions.**
 - 5C. Low Impact Development (LID) Standards.**
 - 5F. Livestock Grazing.** Support appropriate grazing practices to protect wetlands and flowing creeks or creek beds and seek funding and support for landowners to voluntarily implement best management practices where grazing practices are in conflict with preservation of these resources.
- 5.4 Natural and scenic assets of the County shall be preserved
- 5A. Zoning Ordinance Revisions.**
 - 5G. Dark Sky Initiative.** Research and evaluate a program for protecting rural evening character.
- 5.5 Stable, comprehensive, sustainable populations of native flora and fauna Countywide
- 5A. Zoning Ordinance Revisions.**
 - 5B. Incentives.**

Chapter Six

Transportation

Goal and Intent

Safe and accessible transportation systems that provide for the effective and efficient movement of people and goods

The roads and trails that intersect through Bedford County are critical pathways of movement and development for residents. Providing efficient and thoughtful development and protection of these important resources is critical for the safe movement of people and goods through and around the County. Ensuring appropriate access points and development nodes along major corridors will maintain these critical transportation networks for all citizens of the County.

The non-traditional transportation corridors are important for recreational uses by both residents and tourists that visit the County for its beauty and access to natural and cultural areas. Providing for convenient access to trails that interconnect with County attractions and natural areas will enhance these resources and provide for alternative transportation corridors throughout the County.

Background and Findings

Transportation is the movement of people, goods, and ideas to facilitate the physical and verbal interaction of community. Society has created many means for this interaction including highways, railways, pipelines, waterways, airports, power lines, telecommunication lines, and airwaves.

Each of these means of transportation provides a different type of service to meet specific transportation desires.

The availability (quantity, quality, and cost) of transportation has considerable effect on the interaction and functioning of human activities. The general pattern of physical development and the



location and character of housing, community facilities, commercial, business, and industrial areas are all directly affected by the availability of transportation. Low cost, readily-available transportation, for example, tends to promote high-density development, while limited transportation facilities usually result in a lower-density development pattern.

Transportation facilities in Bedford County include roughly 153 miles of major highways, 60 miles of railway, two general utility airports, approximately 1,000 miles of secondary roads, and approximately 619 miles of private roads. In addition, there are major highways, railways, and airports near the eastern and western boundaries of Bedford County that provide expanded access to and from the County beyond truck and car transportation.

Highways and Byways

There are several major highways that move traffic through and around Bedford County. These include three interregional highways: U.S. Routes 29, 460, and 501. U.S. Route 29 is a multi-lane highway passing from Washington, D.C. through Lynchburg and southward to Danville and the cities of North Carolina's Piedmont Crescent. U.S. Route 460, an east-west highway from Norfolk to St. Louis, connects Bedford County with the Hampton roads area to the east and to Roanoke and the main highways of the west. At Roanoke it connects with Interstate 81, a north-south interstate highway that passes through the Shenandoah Valley. U.S. Route 501 parallels the James River on the County's northeastern border, connecting that part of Bedford County with the Shenandoah Valley to the west. To the east, Route 501 provides access to Lynchburg, South Boston, and central North Carolina.

State highway Route 221 parallels U.S. Route 460 between Bedford and Roanoke and Virginia

Routes 43 and 122 (shown here) pass north-south through the County. State Route 24 serves the southern portion of the County. The Blue Ridge Parkway, a



scenic roadway along the mountain ridges, traverses part of the County from the James River to U.S. Route 460 near Roanoke.

There are approximately 40 miles of divided highway in Bedford County - Route 460 and portions of Route 24 (between Stewartsville and Vinton) and Route 221 (Between Forest and Lynchburg). The remaining roads in the County are two lane roads with widths between 10 and 24 feet. The standard acceptable width for roads is 24 feet with additional width at intersections for left and right turns.

Highways in Bedford County have been classified under two different classification systems. The Commonwealth of Virginia classifies roads in three broad categories; the primary and secondary systems maintained by the State, and private roads. The primary system that

includes all roads with State or Federal route designations under 600 is a statewide network connecting cities, towns, and other points of interest (Table 6.1).

Table 6.1
2013 Bedford County Primary Road Lengths

Route	Length (in miles)
24	33.11
43	24.76
122	32.74
221	16.87
460	30.79
501	14.29
County Total	152.56

Source: Virginia Department of Transportation

The secondary system is the County network of basic access routes. Table 6.2 breaks down just over 1,000 miles of the secondary system found in Bedford County, an increase of 36 miles in new secondary roads since 2007.

Table 6.2
Secondary Road Types and Lengths

Type of Road	Length (in miles)
Hard Surfaced	758.78
Total Untreated Surfaces	242.664
<i>Untreated All Weather Surface</i>	<i>216.79</i>
<i>Untreated Light Surface</i>	<i>26.29</i>
<i>Unsurfaced</i>	<i>0.0</i>
Total Secondary Roads	1,001.44

Source: Virginia Department of Transportation

There is also an extensive network of private roads not maintained by the State. Because these private roads are not part of the County or State maintenance program, it is nearly impossible to assess the number of miles of road in this category. The County attempted to categorize these roads in 2013 and estimated approximately 619 miles of private roads existed at that time. In addition, there are approximately 37 miles of roads within the County that are on federal land (Blue Ridge Parkway) that are not included in Table 6.2.

Beyond the primary and secondary roads, the Commonwealth Transportation Board will officially designate a road as a Byway if it meets the following criteria:

- The route provides important scenic values and experiences
- There is a diversity of experiences, as it transitions from one landscape scene to another
- The route links together or provides access to scenic, historic, recreational, cultural, natural, and archeological elements

- The route bypasses major roads or provides opportunity to leave high-speed routes for variety and leisure in motoring
- The route allows for additional features that will enhance the motorist’s experience and improve safety
- Local government has initiated zoning or other land-use controls, so as to reasonably protect the aesthetic and cultural value of the highway

State Highway Route 43 is a designated Virginia Byway in Bedford County. It was designated as such in December of 1992 and encompasses approximately 35 miles of roadway from the southeastern corner of the County to the Blue Ridge Parkway. Route 24 from its intersection with Route 43 to the Campbell County line received Byway designation in October 2012, done jointly with Campbell County. This designation is an important road protection designation as well as a beneficial tourism asset for the County.

Corridors of Statewide Significance (CoSS)

(From the Office of Intermodal Planning and Investment, 2035 VTrans)

What are now referred to as the “Corridors of Statewide Significance”, were originally introduced as part of the VTrans (Long Range, Statewide Multimodal Policy Plan) 2025 effort as a Multimodal Investment Networks (MINs). Eleven MINs were to be a focus of statewide investment throughout the Commonwealth of Virginia. It was envisioned that these corridors would be given increased consideration over single-mode solutions in modal plans. The CoSS are broadly drawn and include modal facilities, such as highways (I-81, I-95, US 29, US 460, etc.), rail lines, transit services, port facilities and airports.

In order to be considered a CoSS, a corridor must meet all the following criteria:

- Multimodal – CoSS must involve multimodal modes of travel or must be an extended freight corridor. Major freight corridors include I-81 and US 460. Additional modes of travel include transit, such as Metrorail along the I-66 corridor; airports, both commercial and general aviation; freight and passenger rail; port facilities, including the Port of Virginia in the Hampton Roads region and the Virginia Inland Port, located at the junction of I-81 and I-66.
- Connectivity – a corridor must connect regions, states, and/or major activity centers. I-95 is an important multi-state corridor, while others, such as US 58, mostly function within the Commonwealth of Virginia. Some corridors connect cities throughout the state, such as the US 29 corridor, which connects the major Northern Virginia activity center with Charlottesville, Lynchburg and Danville.
- High Volume – the corridor must involve a high volume of travel. This would include all the major interstates through the Commonwealth of Virginia, as well as multiple US highways.
- Function – the corridor must provide a unique statewide function and/or address statewide goals.

These 11 identified corridors were given names that are separate from the highway facility route number in order to emphasize their multimodal nature.

The only CoSS that runs through Bedford County is the “Heartland Corridor” (Route 460). This corridor connects Hampton Roads to Petersburg, Lynchburg, and Blacksburg and connects to the west to West Virginia and Kentucky. The “Heartland Corridor” is an important freight corridor, providing a connection between The Port of Virginia and the Midwest. In addition, there are some transit providers along the corridor along with multiple air facilities, both commercial and general aviation.

Classification of Roadways

Roadways in the Commonwealth of Virginia are grouped into classes/systems according to the character of services they are intended to provide. The Virginia Department of Transportation (VDOT) and the Transportation Mobility and Planning Division (TMPD) are responsible for maintaining the Commonwealth’s official Federal Functional Classification System. The TMPD determines the functional classification of a road using the guidelines established by the Federal Highway Administration (FHWA).

The FHWA classifies roadways by their geographical areas (rural, urbanized and small urban). Definitions for each geographical area are provided below:

- Rural – areas outside of the boundaries of small urban and urbanized areas.
- Urbanized – areas designated by the US Census Bureau having a population of 50,000 or more.
- Small Urban – urban places, as designated by the US Census Bureau, having a population of 5,000 or more not within and urbanized area.

Rural roadways are classified into four major systems: rural principal arterials, rural minor arterials roads, rural major and minor collector roads, and rural local roads. Rural roadway system characteristics are listed below (*from FHWA Functional Classification Guidelines – Section II – Concepts, Definitions, and System Characteristics*):

- Rural Principal Arterial
 - Serves corridor movements having trip length and travel density indicative of substantial statewide or interstate travel.
 - Serves all or virtually all urban areas of 50,000 and over population and a large majority of those with a population of 25, 000 and over.
 - Provides an integrated network without stub connections except where unusual geographic or traffic flow conditions dictate otherwise
- Rural Minor Arterial
 - Link cities and larger towns and form an integrated network providing interstate and inter-county service
 - Be spaced at such intervals, consistent with population density, so that all developed areas of the State are within a reasonable distance of an arterial highway

- Provide service to corridors with trip lengths and travel density greater than those predominantly served by rural collector or local systems. Minor arterials therefore constitute routes whose design should be expected to provide for relatively high overall travel speeds, with minimum interference to- through movements.
- Rural Collector Roads (Major)
 - Provide service to any county seat not on an arterial route, to the larger towns not directly served by the higher systems, and to other traffic generators of equivalent intra-county importance, such as consolidated schools, shipping points, county parks, important mining and agricultural areas, etc.
 - Link such places with nearby larger towns or cities, or with routes of higher classification.
 - Serve more important intra-county travel corridors.
- Rural Collector Roads (Minor)
 - Be spaced at intervals, consistent with population density, to collect traffic from local roads and bring all developed areas within a reasonable distance of a collector road.
 - Provide service to the remaining smaller communities.
 - Link the locally important traffic generators with their rural hinterland.
- Rural Local Roads
 - Serve primarily to provide access to adjacent land.
 - Provide service to travel over relatively short distances compared to collectors or other highway systems.

Urbanized roadways are classified into four major systems: urban principal arterials, urban minor arterials streets, urban collector streets, and urban local streets. Urbanized roadway system characteristics are listed below (*from FHWA Functional Classification Guidelines – Section II – Concepts, Definitions, and System Characteristics*):

- Urban Principal Arterial
 - Highest Traffic volume corridors
 - Serves the major centers of activity of a metropolitan area
 - Carry a high proportion of the total urban area travel on a minimum of mileage
 - Carry significant amounts of intra-area travel
 - Roads serving the longest trip desires
- Urban Minor Arterial
 - Interconnect with and augment the urban principal arterial system and provide service to trips of moderate length at a somewhat lower level of travel mobility than principal arterials.

- Include all arterials not classified as a principal and contains facilities that place more emphasis on land access, and offer a lower level of traffic mobility.
- Should include urban connections to rural collector roads where such conditions have not been classified as urban principal arterials.
- Urban Collector Streets
 - Provides land access service and traffic circulation within residential neighborhoods, commercial and industrial areas.
 - May penetrate residential neighborhoods (differing from arterial systems), distributing trips from the arterials through the area to the ultimate destination.
 - Collects traffic from local streets in residential neighborhoods and channels it into arterial system.
- Urban Local Streets
 - Facilities not in one of the higher systems.
 - Serves primarily to provide direct access to abutting land and access to the higher order systems.
 - Offers lowest level of mobility and usually contains no bus routes.

Classification of urbanized area roadway systems is generally applicable to small urban areas. However, small urban area systems will not generate the internal traffic that is warranted to be classified as an urban principal arterial service. The principal arterial system of roadways in small urban areas will largely consist of rural arterials into and through the area. The characteristics for the minor arterial street systems, collector street systems, and local street systems in small urban areas are similar to those for urbanized areas (*from FHWA Functional Classification Guidelines – Section II – Concepts, Definitions, and System Characteristics*).

**Table 6.3
Bedford County Roadways Classified by the Federal
Aid System as “Collectors” and Above**

Route Number	Sequence Number	Facility Name	Segment From	Segment To	2030 AADT Forecast*
24	10	Washington Avenue	Roanoke County Line	Rte 635 West	26,000
24	20	Stewartsville Rd	Rte 635 West	Rte 886 West	26,000
24	30	Stewartsville Rd	Rte 886 West	Rtes 757/619	26,000
24	40	Stewartsville Rd	Rtes 757/619	Rte 635 East	26,000
24	50	Stewartsville Rd	Rte 635 East	Rte 616 East	16,900
24	60	Stewartsville Rd	Rte 616 East	Rte 746	14,400
24	70	Stewartsville Rd	Rte 746	Rte 608	7,900
24	80	Stewartsville Rd	Rte 608	Rte 801	7,800
24	90	Stewartsville Rd	Rte 801	Rte 122	9,151
24	100	Shingle Block Rd	Rte 122	Rte 735	3,500
24	110	Shingle Block Rd	Rte 735	Rte 43 West	3,000
24	120	Glenwood Drive	Rte 43 West	Rte 43 East	3,800
24	130	Wyatts Way	Rte 43 East	Rte 707	4,500
24	140	Wyatts Way	Rte 707	Rte 709	4,500
24	150	Wyatts Way	Rte 709	Campbell County Line	4,500
43	10	Bedford Highway	Campbell County Line	Rte 728	600
43	20	Dearing Ford Rd	Rte 728	Rte 626	600
43	30	Leesville Rd	Rte 626	Rte 628	4,700
43	40	Leesville Rd	Rte 628	Rte 707	4,700
43	50	Leesville Rd	Rte 707	Rte 24 East	4,900
43	60	Virginia Byway	Rte 24 West	Rte 723 North	2,700
43	70	Virginia Byway	Rte 723 North	.19 Mi S of S. County Line Bedford	2,400
43	75	Virginia Byway	.19 Mi S of S. County Line Bedford	S. County Line Bedford	2,400
43	80	Peaks Street	N. County Line Bedford	Rte 644	2,400
43	90	Peaks Rd	Rte 644	Rte 682 North	2,400
43	100	Peaks Rd	Rte 682 North	Rte 643 East	2,400
43	110	Peaks Rd	Rte 643 East	Blue Ridge Parkway	1,300
48	170	Blue Ridge Pkwy	Botetourt County Line	Rte 43	2,000
48	190	Blue Ridge Pkwy	Rte 43	Botetourt County Line	2,000
48	195	Blue Ridge Pkwy	Botetourt County Line	Rte 501	2,000
48	200	Blue Ridge Pkwy	Rte 501	Amherst County Line	2,000
122	10	Moneta Rd	Franklin County Line	Rte 655 North	12,100
122	20	Moneta Rd	Rte 655 North	Rte 122 Bus	10,800
122	30	Moneta Rd	Rte 122 Bus	Rte 805	10,100
122	50	Moneta Rd	Rte 805	Rte 801	10,100
122	60	Moneta Rd	Rte 801	Rte 24	7,800
122	70	Moneta Rd	Rte 24	Rte 735	8,800
122	80	Moneta Rd	Rte 735	Rte 746	10,000
122	90	Moneta Rd	Rte 746	S. County Line Bedford	8,200
122	100	Longwood Avenue	N. County Line Bedford	Rte 644	8,200
122	110	Big Island Hwy	Rte 644	Rte 643 South	9,800

Route Number	Sequence Number	Facility Name	Segment From	Segment To	2030 AADT Forecast*
122	120	Big Island Hwy	Rte 643 South	Rte 638	5,362
122	130	Big Island Hwy	Rte 638	Rte 602 South	3,100
122	140	Big Island Hwy	Rte 602 South	Rte 501	3,100
221	10	Colonial Trail	N. County Line Bedford	Rte 671	10,000
221	20	Colonial Trail	Rte 671	Rte 668	10,000
221	30	Colonial Trail	Rte 668	Rte 643	16,000
221	40	Colonial Trail	Rte 643	Rte 646 East	15,500
221	45	Colonial Trail	Rte 646 East	Elk Creek Bridge	16,950
221	50	Colonial Trail	Elk Creek Bridge	Perrowville Road	16,000
221	60	Colonial Trail	Perrowville Road	Thomas Jefferson Drive	32,450
221	70	Colonial Trail	Thomas Jefferson Drive	Rte 620	30,100
221	75	Colonial Trail	Rte 620	Enterprise Drive	38,100
221	80	Colonial Trail	Enterprise Drive	Cottontown Road	38,000
221	85	Colonial Trail	Cottontown Road	W. County Line Lynchburg	44,000
460	10	W Lynchburg Salem Turnpike	Botetourt County Line	Rte 695	28,100
460	20	W Lynchburg Salem Turnpike	Rte 695	Rte 726	25,700
460	30	W Lynchburg Salem Turnpike	Rte 726	Rte 831 West	25,700
460	40	W Lynchburg Salem Turnpike	Rte 831 West	Rte 831 East	25,700
460	50	W Lynchburg Salem Turnpike	Rte 831 East	1.23 mi East of Rte 831 East	27,300
460	55	W Lynchburg Salem Turnpike	1.23 mi East Of Rte 831 East	West County Line Bedford	27,300
460	60	E Lynchburg Salem Turnpike	East County Line Bedford	Rte 777	36,500
460	65	E Lynchburg Salem Turnpike	Rte 777	Rte 803	27,700
460	70	E Lynchburg Salem Turnpike	Rte 803	Rte 668 West	32,800
460	80	E Lynchburg Salem Turnpike	Rte 668 West	.75 Mi West Rte 811	30,000
460	90	E Lynchburg Salem Turnpike	.75 Mi West Rte 811	East County Line Campbell	42,400
501	10	Lee Jackson Highway	West County Line Lynchburg	Holcomb Rock Road	8,500
501	20	Lee Jackson Highway	Holcomb Rock Road	Rocky Mountain Road	6,270
501	30	Lee Jackson Highway	Rte 657	.16 Mi S. E. Rte 672	4,400
501	31	Lee Jackson Highway	.16 Mi S. E. Rte 672	.46 Mi N. W. Rte 672	4,900
501	32	Lee Jackson Highway	.46 Mi N. W. Rte 672	Rte 612	4,900
501	40	Lee Jackson Highway	Rte 612	Rte 122	4,900
501	50	Lee Jackson Highway	Rte 122	Blue Ridge Parkway	2,900
501	60	Lee Jackson Highway	Blue Ridge Parkway	Amherst County Line	2,900
608	10	Tolers Ferry Road	Rte 734 South	Rte 740	2,400

Route Number	Sequence Number	Facility Name	Segment From	Segment To	2030 AADT Forecast*
608	20	Tolers Ferry Road	Rte 740	Rte 626 South	2,700
608	30	White House Road	Rte 626 North	Rte 654	5,900
608	40	White House Road	Rte 654	Rte 122	3,700
608	50	Altice Road	Rte 122	Rte 757	500
608	61	Emmaus Church Road	Rte 757	Rte 24	2,700
616	10	Horseshoe Bend Road	Rte 655 South	Rte 655 North	3,700
616	20	Horseshoe Bend Road	Rte 655 North	Rte 757 East	2,200
616	30	Sandy Level Road	Rte 757 West	Rte 24	500
619	15	Turner Branch Road	Rte 634	Urban Area Boundary	3,200
619	16	Turner Branch Road	Urban Area Boundary	Rte 757	3,200
619	20	Jordantown Road	Rte 24	Rte 635 East	6,000
619	30	Jordantown Road	Rte 635 East	Rte 839	6,000
619	40	Jordantown Road	Rte 839	Rte 699	3,700
619	50	Jordantown Road	Rte 699	Rte 726	2,400
621	10	Cottontown Road	Coffee Road	Hooper Road	2,300
621	20	Cottontown Road	Hooper Road	Rte 884(Ivylea Drive)	900
621	30	Cottontown Road	Rte 884(Ivylea Drive)	Rt 1240(Lake Vista Drive)	2,800
621	40	Cottontown Road	Rt 1240(Lake Vista Drive)	Rte 660(Hawkins Mill Road)	5,500
621	50	Cottontown Road	Rte 660(Hawkins Mill Road)	Rte 1204(Brookfield Road)	7,100
621	60	Cottontown Road	Rt 1204(Brookfield Road)	Rte 221(Forest Road)	11,100
622	10	Waterlick Road	Thomas Jefferson Drive	Campbell County Line	18,700
626	10	Smith Mountain Lake Pkwy	Rte 656	Dead End	2,500
626	20	Smith Mountain Lake Pkwy	Rte 656	Rte 608 North	3,100
626	30	Smith Mountain Lake Pkwy	Rte 608 North	Rte 805	2,100
626	40	Smith Mountain Lake Pkwy	Rte 805	Rte 833 South	2,200
626	50	Smith Mountain Lake Pkwy	Rte 833 South	Rte 43	2,100
626	60	Smith Mountain Lake Pkwy	Rte 43	Rte 628	1,400
628	10	Bishop Creek Road	Campbell County Line	Rte 626	1,600
628	20	Mentow Road	Rte 626	Rte 43	2,000
634	10	Hardy Road	Franklin County Line	Rte 619	7,300
634	20	Hardy Road	Rte 619	Roanoke County Line	13,200
635	15	Shady Run Road	Rte 634	Rte 1630	1,300
635	20	Beagle Club Road	Rte 1630	Rte 24 West	1,400
635	40	Lovers Lane	Rte 619 East	Rte 24 East	660
637	10	Charlemont Road	Rte 638 South	Rte 638 North	490
638	10	Sedalia School Road	Rte 122	Rte 637 North	420
638	20	Charlemont Road	Rte 637 South	Rte 615	450
638	30	Charlemont Road	Rte 615	Rte 644	590

Route Number	Sequence Number	Facility Name	Segment From	Segment To	2030 AADT Forecast*
643	10	Jopling Road	Rte 43 North	Rte 640 East	1,200
643	20	Jopling Road	Rte 640 East	Rte 122 South	390
643	30	Otterville Road	Rte 122 North	Rte 674	410
643	40	Otterville Road	Rte 674	Rte 644	440
643	50	Cifax Road	Rte 644	Rte 221	1,900
644	10	Fancy Farm Road	Rte 43	Rte 122	870
644	20	Centerville Road	Rte 122	Rte 671	2,900
644	23	Lankford Mill Road	Rte 671	Rte 643	210
644	27	Old Cifax Road	Rte 643	Rte 638	450
644	30	Old Cifax Road	Rte 638	Rte 663(Perrowville Road)	950
644	40	Coffee Road	Rte 663(Perrowville Road)	Rte 657(Rocky Mountain Road)	2,300
644	50	Coffee Road	Rte 657(Rocky Mountain Road)	Rte 621(Cottontown Road)	1,100
644	60	Coffee Road	Rte 621(Cottontown Road)	West County Line Lynchburg	3,500
645	10	Trents Ferry Road	Holcomb Rock Road	West County Line Lynchburg	1,320
651	10	Mountain View Road	Rte 24	Roanoke County Line	13,800
653	10	Goodview Road	Rte 655 East	Rte 757 East	3,500
654	10	Radford Church Road	Rte 655 West	Rte 608	3,400
655	10	Rock Spring Road	Rte 653 East	Rte 616 South	3,100
655	20	Diamond Hill Road	Rte 616 North	Rte 122 North	7,000
655	30	Hendricks Store Road	Rte 122 South	Rte 654 West	7,100
659	10	Hawkins Mill Road	Rte 660	West County Line Lynchburg	4,600
660	10	Hawkins Mill Road	Route 621	Rte 1252	5,600
660	20	Hawkins Mill Road	Rte 1252	Route 659	4,700
661	10	Bateman Bridge Drive	Thomas Jefferson Drive	Sweeny Circle	8,600
661	20	Homestead Road	Sweeny Circle	Rte 1415 (Enterprise Drive)	8,400
663	10	Perrowville Road	Rte 221(Forest Road)	Rte 622 N.(Hooper Road)	14,000
663	20	Perrowville Road	Rte 622 N.(Hooper Road)	Quail Ridge Road	9,500
663	30	Perrowville Road	Quail Ridge Road	Rte 644(Coffee Road)	1,800
668	10	Goode Road	Rte 460 West	Rte 703	1,000
668	20	Goode Road	Rte 703	Rte 762 North	960
668	30	Goode Road	Rte 762 North	Rte 221	2,100
671	10	Centerville Road	Rte 644	Rte 221	2,300
671	20	Timber Ridge Road	Rte 221	Rte 715	2,500
680	10	Sheep Creek Road	Rte 682	Rte 684	1,300
682	10	Kelso Mill Road	Rte 680	Rte 43 North	930
684	10	Penicks Mill Road	Rte 831	Rte 680	900
695	10	Goose Creek Valley Road	Rte 460	Rte 693	1,700
695	20	Goose Creek Valley Road	Rte 693	Rte 680 South	1,100

Route Number	Sequence Number	Facility Name	Segment From	Segment To	2030 AADT Forecast*
695	30	Goose Creek Valley Road	Rte 680 South	Botetourt County Line	500
707	10	Lone Oak Crossing	Rte 43	Rte 24	1,600
709	10	New London Road	Rte 24	Rte 811	4,100
714	10	Falling Creek Road	South County Line Bedford	Rte 784	3,400
714	20	Falling Creek Road	Rte 784	Rte 715 West	1,600
714	30	Falling Creek Road	Rte 715 West	Rte 808 East	570
714	40	Falling Creek Road	Rte 808 East	Rte 24	600
715	10	Timber Ridge Road	Rte 803	Rte 671	2,400
718	10	Bell Town Road	East County Line Bedford	Rte 890	1,500
726	10	Quarterwood Road	Rte 619	Rte 460	2,300
735	10	Rock Cliff Road	Rte 24	Rte 122	1,600
746	10	Dickerson Mill Road	Rte 24	Rte 749	1,700
746	20	Dickerson Mill Road	Rte 749	Rte 691 West	940
746	30	Dickerson Mill Road	Rte 691 West	Rte 680	930
746	40	Dickerson Mill Road	Rte 680	Rte 122	1,300
757	10	Goodview Road	Rte 24	Rte 619	9,200
757	20	Goodview Road	Rte 619	Rte 758	7,400
757	30	Goodview Road	Rte 758 (Thomasson Mill Road)	Rte 1535 (Hemlock Shores Drive)	6,000
757	34	Goodview Road	Rte 1535 (Hemlock Shores Drive)	Rte 653 E.(Goodview Town Road)	6,000
757	40	Goodview Town Road	Rte 616 South	Rte 616 North	510
757	50	Goodview Town Road	Rte 616 North	Rte 608	2,300
761	10	Holcomb Rock Road	Lee Jackson Highway	Trents Ferry Road	1,760
801	10	Stony Fork Road	Rte 122	Rte 24	4,600
803	10	Timber Ridge Road	Rte 460	Rte 715	1,800
811	10	Thomas Jefferson Drive	Campbell County Line	Rte 709 (New London Road)	2,420
811	20	Thomas Jefferson Drive	Rte 709 (New London Road)	Route 460	8,000
811	30	Thomas Jefferson Drive	Route 460	0.17 Mi Sw. Mill Spring Drive/Uab	16,500
811	35	Thomas Jefferson Drive	0.17 Mi Sw. Mill Spring Drive/Uab	Rte 1620 (Mill Spr. Drive)	6,600
811	37	Thomas Jefferson Drive	Rte 1620 (Mill Spr Drive)	Rte 622 (Waterlick Road)	12,700
811	40	Thomas Jefferson Drive	Rte 622 (Waterlick Road)	Rte 661	22,500
811	50	Thomas Jefferson Drive	Rte 661	Rte 221(Forest Road)	21,900
831	10	Thaxton School Road	Rte 460 West	Rte 684	1,000
831	20	Thaxton School Road	Rte 684	Rte 460 East	1,700
854	10	Burnbridge Road	Rte 221	Rte 811	6,000
1415	10	Enterprise Drive	Route 221	Rte 661 (Bateman Bridge Drive)	29,400
1425	10	Graves Mill Road	Forest Road	West County Line Lynchburg	20,000

*Average Annual Daily Traffic is abbreviated AADT
Source: Virginia Department of Transportation

Roadway Improvement Projects

The Region 2000 Local Government Council's Rural Long Range Transportation Plan 2035 (RLRTP) identified 90 roadway deficiencies in Bedford County. County Planning and Engineering staff reviewed the recommendations in the RLRTP to prioritize which deficiencies were the most important to address. The following six deficiencies were agreed upon by staff and the Board of Supervisors in the following order (along with the corresponding RLRTP number) along with a general recommendation to address all short term safety measures related to speed reductions and the posting of warning signs:

1. #43 – Route 24 between Jordantown/Goodview roads and Route 801/Stony Fork
2. #02 – Route 122 at Route 801/Stony Fork at the Twin Bridges
3. #59 – Route 460 from Botetourt line to western City limit
4. #53 – Route 460 from eastern City limit to Route 811
5. #42 – Route 221 at Route 671 (Centerville Rd / Timber Ridge Rd)
6. #73 – Route 122 at Halesford Bridge (for right-of-way preservation)

Air

There are two general utility airports in the County, New London and Smith Mountain, as well as several private landing fields. In addition, Lynchburg and Roanoke Regional airports are easily accessible from Bedford County.

New London

New London airport is located off Virginia Route 811 approximately 10 miles south of Forest and 14 miles east of the Town of Bedford. The hard surface runway is 3,200 feet in length and 40 feet wide. It has runway



markers and lights for night flying. The New London Airport is attended in the daytime. It frequently hosts recreational “fly-ins” and on occasional weekends doubles as a drag strip.

Smith Mountain

Smith Mountain Airport, located east of Moneta, has a hard surface runway of 3,058 feet in length and is 50 feet wide. In addition, the airport is equipped with a rotary beacon and

runway markers and lights. The airport is attended during daytime hours. Limited services are available.

Lynchburg Regional

Lynchburg Regional Airport is located near U.S. Route 29 off Route 678 in Campbell County. The longest of the airport's two runways is a 7,100 feet instrument landing strip. Lynchburg Regional is attended from 7:00 a.m. to 11:00 p.m. The City of Lynchburg has received a federal grant for the construction of a new terminal building at the airport.

Roanoke Regional

Roanoke Regional Airport is located off Interstate 581 in the City of Roanoke. It has two runways, 5,810 and 6,800 feet; both are instrument landing strips. The airport is attended 24 hours a day. The potential for expansion of Roanoke Regional is limited due to nearby mountains. The mountains and fog problems limit the availability of the airport for use by large planes.

Rail

Though truck service dominates the movement of goods within and across the County, rail access is still a critical and important resource for the movement of goods and people now and in the future.

The Norfolk-Southern railroad has a line running through Bedford County from Lynchburg through the Town of Bedford to Roanoke. Another rail line crosses the southern end of the County connecting Altavista and Roanoke. The lines connect with other rail lines, such as the Seaboard System and CSX. The eastern terminus of the Norfolk-Southern at Norfolk connects with a large deep-water port. The western connections of Norfolk-Southern are Omaha, Kansas City, Detroit, and St. Louis.



The TransDominion Express (TDX) is a proposed passenger rail system connecting Southwest Virginia with Washington D.C. and Richmond. The Bristol Rail Passenger Study recommended the TDX for implementation in 1998. The TDX would decrease congestion on highways, reduce air pollution, stimulate tourism and commerce and provide an efficient alternative to the standard modes of intra-state travel. The TDX is modeled after the successful Cascades Line in Oregon and Washington State. This successful program has

spurred commerce and development at many of the locations along its route. Additionally, the Cascades Line far exceeded all expectations and became self-sufficient in a much shorter time span than originally anticipated. The TDX is anticipated to have similar results here in Virginia.

The TDX will impact Bedford County by having one un-staffed station within the Town of Bedford and a fully functioning staffed station in nearby Lynchburg and Roanoke. If the rider projections materialize, this service will not only spur commercial development in and around the station locations, but it will provide an invaluable transportation alternative to the citizens of Bedford County. Hotels and restaurants are the most likely beneficiaries from this service. Additionally rental services and public bus services will benefit from passengers of the TDX. Also, by reducing the number of vehicles traveling on Virginia’s highways, the TDX will help reduce the current stress being placed on the state highway system. Maintenance to these systems should be reduced, thus allowing more funding to be put towards new construction.



Proposed TransDominion Express (TDX) Route Map (<http://www.tdxinfo.org/proposed-route-map/>)

In 2013, the State of Virginia became the first state to take greater control of regional passenger rail service under federal law by reaching an agreement to partner with Amtrak. This new operating and cost sharing agreement with Amtrak supports the Commonwealth’s ongoing vision to provide alternative ways of travel to citizens instead of using congested roadway corridors like I-95, I-81, Route 460 and Route 29. This agreement will enable the state to expand passenger rail travel in the future with Amtrak along with realization of the TDX. The Board of Supervisors passed a resolution of support for consideration by the Virginia Department of Rail and Public Transportation of a train stop in the town of Bedford.

Greenways and Blueways

Greenways are linear stretches of open space that include recreational, cultural, and natural areas such as parks, trails, and other “green” spaces. Greenways typically follow natural or manmade features such as streams, railways, or roads and are used for transportation,

education, recreation, and environmental protection, including protection of viewsheds. Greenways may link neighborhoods, schools, parks, businesses, and people along bike-walkways (multi-use trails).

Blueways are navigable rivers and streams that provide water-based recreational opportunities for citizens. For Example, the James (shown here) and Staunton Rivers follow west and east patterns as they leave their sources high up in the mountains and make their way along the edges of Bedford County. These corridors enhance the social and



psychological well being of citizens by providing them with enjoyable activities and settings in which to spend their leisure time. The development and use of the greenways and blueways system is an outgrowth of community interest in conservation of natural resources, exercise and outdoor recreation, and viable alternatives to motorized transportation.

The planning and design of new transportation routes that include sidewalks, bike routes and lanes, off-road trails and water-based recreation and transportation opportunities in addition to the roadway, is essential to the success of this alternative transportation system.



Bedford County participated in the development of *the Region 2000 Greenways, Blueways, and Trails Plan* that was approved in November 2010. The plan was created to guide development of a system of linked trails, river and park connections within the Region 2000 area. The goals of this interconnected regional system include:

- Enhance natural and cultural areas
- Expand the alternative transportation network
- Increase access to recreation, exercise, and healthy lifestyle options

Planning Assumptions and Considerations

The foregoing facts and summary of transportation factors provide a context for determining the future transportation needs of Bedford County. In addition to the Six-Year Plan determined annually in conjunction with VDOT, there are other projects to consider for planning to prioritize construction and related funding.

Bedford County's population growth has been the largest in Region 2000 over the past 30 years. The majority of the population growth in the County has been concentrated in the Jefferson Magisterial District and in the Lakes Magisterial District. Given the current population in these areas along with future population growth, roadways such as Route 122 South and Route 221 (from Forest to the Town of Bedford) are candidates for expansion.

The Reversion agreement between the City of Bedford (now the Town of Bedford) and the County called for Bedford Middle School (in the Town of Bedford) to be closed and a new middle school be built to serve the Liberty attendance zone by summer 2016. A site near Liberty High School has been identified by the School Board. Roadways, such as Route 122 North, may need improvements in the future in order to accommodate an increase in traffic to any new school facility.

The potential replacement of the Hales Ford Bridge is a consideration of the County. Given the amount of traffic the bridge receives daily, construction of a new bridge in another location is an option to avoid closing the existing bridge to traffic while the replacement is under construction. Should a new bridge be built, road improvements and the realignment of existing roadways to the new bridge location would have to be considered as part of the bridge replacement project.

Determining Factors

- Citizens of the County are strongly committed to maintaining agricultural areas and protecting the natural environment within and around the County.
- The County supports community center development in appropriate locations that provide housing, jobs, and community services to area residents.
- Watershed resources are crucial and protection of land areas that impact the quality of water in the County must be strongly considered in all development or redevelopment opportunities.

- The protection of quality groundwater in the County is a high priority for residents.
- Agricultural opportunities, scenic vistas and rural landscapes are an important asset to the County and merit special protection and preservation investment strategies.
- Protecting the natural environment through the regulation of development in mountaintops, foothills and steep slopes is a high priority of County residents.
- Areas that currently have developed lands and can support further development are primary targets for growth in housing, commercial, and industrial uses in the County.
- The cost of providing services to residents must be factored into the overall costs of development for residential and commercial areas of the County so as to not unduly burden the tax liabilities of the general citizenry.
- Parks and other recreational areas are desired to be easily accessible to residents across the County.
- County residents desire high quality safety, emergency and human services and expect priority investment in necessary infrastructure to ensure future availability of services throughout the County.
- A large number of residents of the County out-commute to work, creating a bedroom community affect in some parts of the County.
- Coordination with the Town of Bedford and surrounding Counties is important to guiding appropriate development along these political boundaries that can be addressed through design standards, land use protections, and urban development areas.
- Smith Mountain Lake is an important resource of the County and development impacts on this resource must be strongly considered.
- All policies and programs of the County should be designed to be fiscally sustainable.
- Seek an appropriate balance between individual property rights and the community's goals.

Objectives and Strategies

- 6.1 Roadway improvements that support and enhance the Comprehensive Plan and Future Land Use Map
- 6A. Transportation Plan.** Develop and adopt a County-wide Transportation Plan with regional links that can include rail and other alternative transportation options based on the densities reflected on the Future Land Use Map.
 - 6B. Bicycle/Pedestrian Plan.** May develop and adopt a County Bicycle and Pedestrian Facilities Plan.
 - 6C. Greenways/Blueways Plan.** May develop an appropriate and achievable County Greenways and Blueways Plan in cooperation and support of the Region 2000 plan.
 - 6D. Impact Fees.** Research and evaluate potential impact fees using a per-unit fiscal impact of development for transportation.
 - 6E. Corridor Studies.** Conduct Corridor Studies that assess the impacts, benefits and overall costs to citizens along the following roadways: Forest Road (Route 221- Graves Mill Road area), Route 122, Thomas Jefferson Road (Route 811), Perrowville Road (Route 663), and Waterlick Road (Route 622).

- 6F. Transportation Systems Management Study.** Coordinate with appropriate regional agencies and organizations to conduct a Transportation Systems Management Study to maximize efficiency of the existing transportation system including consideration of public transportation.
- 6G. Access Management.** Incorporate appropriate access management guidelines into the County’s Zoning Ordinance and Subdivision Ordinance.
- 6H. Pedestrian Facilities.** Recommend sidewalks/pedestrian facilities in all new industrial, commercial and residential developments.
- 6I. Alternative Funding Sources.** Identify and pursue alternative funding sources for transportation projects.
- 6J. Hales Ford Bridge.** Coordinate with VDOT, Franklin County and AEP to expedite the location, design and construction of the Hales Ford Bridge expansion/replacement.
- 6K. Bedford Ride.** Evaluate impact and appropriately support Bedford Ride and other similar programs that provide transportation to the elderly and other at-risk populations within the County.
- 6L. Scenic By-ways.** Identify and nominate County roads to the scenic byway program such as Rte 122 between Bedford City and Big Island.

6.2 Existing transportation facilities maintained and/or improved to meet increased demand and economic development opportunities

- 6A. Transportation Plan.**
- 6B. Bicycle/Pedestrian Plan.**
- 6C. Greenways/Blueways Plan.**
- 6D. Proffer Guidelines.**
- 6E. Corridor Studies.**
- 6F. Transportation Systems Management Study.**
- 6G. Access Management.**
- 6H. Pedestrian Facilities.**
- 6I. Alternative Funding Sources.**
- 6J. Hales Ford Bridge.**
- 6K. Bedford Ride.**
- 6L. Scenic By-ways.**

6.3 Appropriate through and local connector transportation infrastructure

- 6A. Transportation Plan.**
- 6D. Proffer Guidelines.**
- 6E. Corridor Studies.**
- 6G. Access Management.**
- 6H. Pedestrian Facilities.**
- 6I. Alternative Funding Sources.**

6.4 Opportunities for greater use of the County and region’s rail and airport facilities

- 6A. **Transportation Plan.**
 - 6D. **Proffer Guidelines.**
 - 6I. **Alternative Funding Sources.**
- 6.5 Targeted mixed-use development areas with pedestrian facilities that decrease the need for motorized transportation
- 6A. **Transportation Plan.**
 - 6B. **Bicycle/Pedestrian Plan.**
 - 6C. **Greenways/Blueways Plan.**
 - 6H. **Pedestrian Facilities.**
- 6.6 Transportation programs for the elderly, handicapped and indigent populations
- 6A. **Transportation Plan.**
 - 6B. **Bicycle/Pedestrian Plan.**
 - 6H. **Pedestrian Facilities.**
 - 6I. **Alternative Funding Sources.**
 - 6K. **Bedford Ride.**
- 6.7 Bikeway and pedestrian access between and within targeted developed areas of the County
- 6A. **Transportation Plan.**
 - 6B. **Bicycle/Pedestrian Plan.**
 - 6C. **Greenways/Blueways Plan.**
 - 6D. **Proffer Guidelines.**
 - 6E. **Corridor Studies.**
 - 6H. **Pedestrian Facilities.**
 - 6I. **Alternative Funding Sources.**
- 6.8 Improved public access to and around Smith Mountain Lake
- 6A. **Transportation Plan.**
 - 6B. **Bicycle/Pedestrian Plan.**
 - 6C. **Greenways/Blueways Plan.**
 - 6D. **Proffer Guidelines.**
 - 6E. **Corridor Studies.**
 - 6F. **Transportation Systems Management Study.**
 - 6G. **Access Management.**
 - 6H. **Pedestrian Facilities.**
 - 6I. **Alternative Funding Sources.**
 - 6J. **Hales Ford Bridge.**
 - 6M. **Tourist Facilities.** Support the development of tourism infrastructure, such as hotels and other facilities necessary to attract and serve tourists.

Chapter Seven

Utilities

Goal and Intent

Quality public utility systems and services that support the County's planned land use

The goal in the provision of public utilities is to provide properties within the County's service area with adequate and reliable utility infrastructure and services that meet demand in a customer service oriented manner. These services are achieved through safe, environmentally sensitive, and cost efficient methods by partnering with state and local governments, utility franchises, and other public and private entities.

Background and Findings

Public utilities available within the County include water, sewerage, solid waste (addressed in a separate chapter), electrical, natural gas, and telecommunications services (telephone, cable television, and internet access). Public utilities that provide water and/or sewer service may be owned by political subdivisions such as the Bedford Regional Water Authority (BRWA), or privately owned by corporations or individuals. Once water and sewer facilities reach a specific size standard as established in the federal environmental regulations overseen by the US Environmental Protection Agency (USEPA), they are designated as "publicly regulated". The County of Bedford owns and operates the solid waste landfill and localized collection centers. As part of the Reversion agreement between the Town of Bedford and Bedford County, the County will be taking over waste disposal for the town in the future with the Town of Bedford continuing their waste pickup service. Contract solid waste haulers provide private collection services to some individuals and corporations. Electrical, natural gas, and telecommunications services are provided by a diverse set of entities, i.e. corporations, cooperatives, local political subdivisions, and privately owned systems.

The value of rights-of-way as a public asset has increased. As more utility and communications providers have become interested in serving County residents, the County has an obligation to charge fair compensation for the use of this asset. The County also has the duty to manage its rights-of-way and easement assets wisely for the public good.

Water Facilities

Bedford County contains a large number of housing units that obtain water from wells. Recent droughts have led to increased demand for public water in Bedford County. Due to population growth and development over the past fifteen years, a reliable water supply in terms of quantity and quality remains an important point of concern from a health, environmental and economic development of the County.

Through the development of a system of publicly and privately owned water supply systems, the County has taken measures to increase the availability of public water where the demand is greatest. The development of a water treatment plant at Smith Mountain Lake has enabled

the County to provide better quality and more dependable service in a section of the County with a history of poor quality and limited quantity of groundwater. The plant, which can be expanded, is becoming a major source of water for County residents in addition to providing wholesale water services to Franklin County with the potential to provide services to other municipalities through regionalization efforts.

Privately owned water systems (whether by corporations or individuals) vary greatly in the number of customers served, ranging from a few connections in a trailer park to several hundred homes in large subdivision systems. Whether they will be under the jurisdiction of regulatory agencies such as the Virginia Department of Health and or the State Corporation Commission will depend upon how many connections they have or how many customers they serve. Health Department records show approximately 37 privately owned water systems serving 15 or more customers on a year-round basis in Bedford County. These systems all rely upon wells as the source of water.

Sewer Facilities

Sewage disposal, similar to water supply, can be handled publicly or privately. Bedford County, like many other rural, developing localities, relies on private onsite sewage disposal systems as the main source of sewage disposal. Given current subdivision regulations that permit more dense development when public sewer systems are available, it is anticipated that more residences and businesses will be connected to public systems in the future.

The areas of the County that are currently served by BRWA operated public wastewater collection and treatment systems are those bordering Lynchburg in the Forest/Boonsboro area, portions of the County near New London, Montvale, the Town of Bedford and the Smith Mountain lake area near the intersection of Route 655 and 122 (Moneta Wastewater Treatment Plant, shown here).

Other residents are served by scattered public systems owned by corporations and private individuals.



Publicly-Owned Sewage Systems

The BRWA currently provides wastewater collection and conveyance services to the Forest area for treatment at the Lynchburg Regional Wastewater Treatment Plant (WWTP). Montvale's WWTP serves the area near the intersection of Routes 460 and 741, with the ability to expand its capacity, primarily targeting a growing commercial and industrial development sector of the Montvale community. Other areas within the County, such as New London, Huddleston and Stewartsville have limited wastewater collection and treatment systems that primarily serve local schools and are not equipped to support future wastewater generation. A wastewater study was completed in 2003 documenting investments necessary to bring sewer capacity to growth areas around the County. This study is a guide for

assessing what the cost of providing public wastewater to current and future development that is most desired in Bedford County as well as an indicator of where the strongest growth pressures are for development. Additional sewer feasibility studies were completed for the Huddleston area in 2007 and the Stewartsville area in 2012. Based on the Stewartsville study, soils in the Stewartsville area are poor draining. However, the provision of public sewer system for this area is not cost feasible.

Privately-Owned Wastewater Discharge Systems

Privately owned wastewater discharge systems are defined as any facility which requires a National Pollution Discharge Elimination System (NPDES) permit for point discharge. The Department of Environmental Quality records indicate there are three large NPDES private wastewater treatment works worth noting that serve small residential and commercial areas:

- 1) Oakridge Mobile Home Village (Now Ramsey Mobile Home Park) – Aerobic Digestion Plant (1500 gallons per day design flow)
- 2) Eagle Eyrie Retreat Camp and Conference Center – Sequential Batch Reactor System (Approximately 40,000 gallons per day)
- 3) Georgia Pacific Corporation – Anaerobic/Aerobic Lagoon System (12-15 million gallons per day)

There are many other private wastewater discharge systems that serve small subdivisions and neighborhoods. Currently, four (4) individual private Bedford County residences utilize a Virginia Pollutant Discharge Elimination System (VPDES).

Private Individually-Owned Onsite Sewage Disposal Systems

Due to the rural nature of Bedford County, the vast majority of County residents are served by individual onsite sewage disposal systems consisting of a septic tank and soil absorption field. These systems consist of a septic tank that serves as a settling chamber and as an anaerobic bioreactor that promotes partial digestion of retained organic matter. The septic tank effluent, which contains significant concentrations of pathogens and nutrients is then discharged to a soil absorption field for further treatment through biological processes, absorption, filtration and infiltration into the underlying soil. The Virginia Department of Health permits the construction and maintains records of onsite sewage disposal systems.

Though there are concerns about the proper maintenance of septic systems within the County, these onsite sewage disposal systems are significantly cheaper than public sewer (generally one-third the cost) and will remain an important piece of infrastructure in the County. With these factors in mind, building relationships and appropriate support systems between public and private waste treatment systems is important for community vitality and public health. The Moneta WWTP has facilities to treat septic tank waste. This can facilitate maintenance of residential septic systems, deferring the need for expansion wastewater collection systems. It has significant expansion capability.

The rural nature of the County ensures that individually owned septic systems remain the most cost efficient means of wastewater management for the majority of residents within the County. The wastewater study provides cost information for specific areas of the County.

This study, does not, however, provide recommendations on how an area should develop and whether or not service should be provided – these decisions are influenced by many factors and must be evaluated on the basis of community need and growth desires for the various areas.

These full spectrum assessments are critical to guide the County in the expansion of its wastewater management infrastructure and other critical utilities and services in key locations throughout the service areas where significant residential and economic development is planned and desired to occur. Because of its importance for any type of development, the location of water and sewer facilities will serve as a primary determinant for new growth centers throughout the County and should be carefully considered as expansion and interconnection decisions are made.

Electricity and Natural Gas

Three companies supply Bedford County with electric power. American Electric Power Company (AEP), one of the largest electric utilities serving Virginia, supplies power to most of the County. The Town of Bedford has its own municipal power plant on the James River and, in addition, purchases power from AEP and services the community of Big Island and a portion of the north side of the County. Southern portions of Bedford County are supplied power by the Southside Electric Cooperative of Crewe that is furnished electric energy by the Virginia Electric and Power Company of Richmond, the largest power company in the state. Rates vary across the County.



Columbia Gas Services, a locally-owned and managed utility, serves part of the County. Portions of the western section of the County are served by the Roanoke Gas Company.

Internet Services

Several internet providers are available to citizens of Bedford County. Verizon Telephone, Adelphia Business Solutions, Shentel, and Cebridge Connections and B2X provide hardware services to residences and businesses for internet connections. These companies and many others provide telecommunication services and wireless access to programming,

telecommunication services, and the internet. The BRWA has entered into an agreement with wireless communication service providers to mount antennas on area water tanks to provide wireless service to targeted communities where hardware access is too costly or geographically prohibitive including the Smith Mountain Lake, Hales Ford Bridge, and Forest areas of the County. Use of existing structures for mounting antennas is an important factor supported in the County's 2012 Strategic Plan for Commercial Wireless Telecommunication Facilities. The plan outlines industry stealth techniques to disguise and conceal wireless communication facilities. Above ground water tanks and electric power infrastructure are recommended as stealth structures within the plan.

In some areas of the County, private internet service providers have been unable to meet the community demand. In order to facilitate deployment of affordable broadband internet service to these un-served/underserved areas of the County, the Bedford County Broadband Authority was established in 2009. The Broadband Authority continues to work to find solutions to provide affordable broadband internet service to these un-served/underserved areas of the County.

Determining Factors

- Citizens of the County are strongly committed to maintaining agricultural areas and natural areas within and around the County.
- The County supports community center development in appropriate locations that provide housing and community services to area residents.
- Areas that currently have developed lands and can support further development are primary targets for growth in housing, commercial, and industrial uses in the County.
- Residential development pressure from surrounding urban areas is a concern to be addressed through design standards, land use protections, and urban center concentration of development.
- The cost of providing services to residents must be factored into the overall costs of development for residential and commercial areas of the County.
- Coordination with the Town of Bedford and surrounding Counties is important to guiding appropriate development along these political boundaries.
- Watershed resources are crucial and protection of land areas that impact the quality of water in the County must be strongly considered in all development or redevelopment opportunities.
- Smith Mountain Lake is an important natural resource of the County and development impacts on this resource must be strongly considered for any future development in this area of the County.
- The protection of quality groundwater in the County is a high priority for residents.
- Development occurring in a planned district should be evaluated on the full cost impacts of each project along with projected revenues and resident benefits of the planned development.
- The County will continue to adhere to multiple review criteria outlined in Article I of the Zoning Ordinance related to need and justification, effects on properties and public services, and consistency in furthering the purposes of the County's Zoning Ordinance

and planning program when evaluating and acting upon proposed amendments to the Zoning Ordinance.

Objectives and Strategies

- 7.1 Public water and sewer facilities located in areas of high population density/growth areas
 - 7A. Water and Sewer Master Plans and Amendments.** Amend and adopt the Water and Sewer Master Plan based on the land uses designated on the County's Future Land Use Map.
 - 7B. Water and Sewer Hookups.** Restrict water and sewer hookups to designated service and growth areas.
 - 7C. Agricultural/Rural Residential Areas.** Severely limit hookups to public water and sewer lines in agricultural and rural residential areas where transmission lines exist only to transfer service from the treatment source to the intended service area(s) to prevent sprawl and undesired subdivision development.
 - 7D. Capital Improvements Program.** Continue to incorporate and fund water and sewer projects into the County's Capital Improvements Program.

- 7.2 Public water and sewer facilities strategically developed and constructed in a fiscally sound manner
 - 7A. Water and Sewer Master Plans and Amendments.**
 - 7D. Capital Improvements Program.**

- 7.3 Adequate availability of drinking water sources
 - 7A. Water and Sewer Master Plans and Amendments.**
 - 7E. Zoning Ordinance Revisions.** Revise the Zoning Ordinance to address utility issues including, but not limited to, protecting drinking reservoirs.
 - 7F. Septic Pump-out Program.** Develop and administer a voluntary pilot septic pump-out program in cooperation with the BRWA targeting the Smith Mountain Lake area.
 - 7G. Groundwater Monitoring.** Facilitate a groundwater monitoring program. Review finding and take action based on results from program.
 - 7H. Wellhead Protection.** Continue to support the wellhead protection program within the County through education and voluntary inspection of private and public well facilities.

7.4 Improved or expanded utility services (electricity, natural gas, propane, cable television, internet access, fiber optics, etc.) that meet the general needs of County residents and businesses

7I. Broadband Committee. Continue to support a committee to study improving high-speed Internet service as a basic utility and economic development tool throughout the County.

Chapter Eight

Economic Development

Goal and Intent

A healthy, diversified economy that is environmentally sensitive and results in business opportunities and quality jobs

This once highly rural, agriculturally based community has seen incredible rates of growth and development. The County continues to suburbanize in many locations with significant amounts of residential growth over the past 20 years. However, commercial growth has not been as strong. Economic development is a valuable tool in assisting with issues faced now and into the future. As a community with a diverse local economy and high levels of residential growth, the County must provide a structured and detailed plan to ensure that its economy continues to develop and evolve in a planned and environmentally sensitive manner. By providing the proper infrastructure and services to existing businesses while working to attract complimentary new businesses, the County can help to increase the tax base, elevate the skills of local workers, and improve the overall quality of life for all residents.

Background and Findings

Bedford County economic development programming is centralized in the Bedford County Economic Development Authority (BCEDA). The BCEDA has the mission of sustaining and improving the quality of life for all County residents through prudent and cost effective economic development activities that result in a strong corporate tax base and good quality jobs for all. This mission is pursued through many activities and programs that include supporting and retaining existing businesses, attracting new economic opportunities, maintaining a diverse economic base, as well as identifying and communicating the contributions of a healthy and vibrant economy to County residents. Besides creating a business friendly environment for businesses to thrive, some of the specific structures in place to facilitate these efforts include a Technology Zone Implementation Policy that provides tax incentives for eligible companies, and financial incentives that often incentivize new or existing companies to locate or expand in Bedford County. The Office of Economic Development also works with state and regional resources to identify services and incentive programs on behalf of local companies, as well as assisting with grant funding sources.

Bedford County is home to a variety of businesses and industries. Based on the First Quarter 2013 Virginia Employment Commission (VEC) Quarterly Census of Employment and Wages (Table 8.1), Bedford County's largest industries by employment are public administration (18.9%), professional, scientific, and management, administrative & waste management services (16.3%), retail trade (12.6%), manufacturing (9.1%), and construction (8.4%). The VEC also reports that Bedford County had 97 new start-up firms in 2012, higher than any neighboring jurisdictions.

Though there were losses experienced in manufacturing over the past decade both locally and nationally, this sector remains an important economic driver in Bedford County and has even seen some growth in recent months since the economic downturn has begun to recover. TEVA Pharmaceuticals, formerly Barr Laboratories, is the largest private-sector employer in the County with more than 620 full time employees in 2013. Manufacturing salaries are among the highest paid in the region at \$1,042 per week, or \$54,814 per year. This is why the County works hard to retain and attract manufacturing companies. Advanced and high tech manufacturers garner even higher salaries with companies such as Babcock & Wilcox, a nuclear energy company, paying average annual wages of \$90,000.

Construction continues to be a predominant industry within the County, even with the economic recession caused by the subprime mortgage crisis in 2008, reflects the substantial growth experienced over the last 20 years. Increased growth typically translates into high levels of building and development. An important industry that is growing in Bedford County includes the Professional, Scientific, and Management, Administrative & Waste Management services (stated in Table 8.1 as 16.3% of the County's workforce). Historically, rural counties have struggled to increase professional and business related employment. However, this industry is significant with a higher percentage of jobs in Bedford County than in the overall Region 2000 geographic area.

Agriculture and Forestry is by far the largest land use in the County. It is also a powerful economic engine with more than \$23 million annually in farm sales. According to a 2010 study by the Weldon Cooper Center for Public Service, the total economic impact of agriculture and forestry in Bedford County, including secondary multiplier effects, is more than \$135 million with 2,889 jobs. Bedford County ranks third in hay production in the Commonwealth and fourth in beef cattle, general cattle, and horses. Another significant development in recent years is the emergence of wineries, a craft beer producer, and specialty farms in the County, building on the Commonwealth's push to grow agri-tourism and producer industries. While traditional crop production has seen a decline, beef cattle production has become a thriving business for many farmers in the County.

Table 8.1
Bedford County Employment by Sector (2013 First Quarter)

Employment Sector	Number of Workers	Percent of Total Employment
Agriculture, forestry, fishing & hunting, & mining	115	0.8%
Construction	1,253	8.4%
Manufacturing	1,355	9.1%
Wholesale	1,167	7.8%
Retail	1,892	12.6%
Transportation/Warehousing/Utilities	236	1.6%
Information	204	1.4%
Finance & insurance; real estate & rental & leasing	515	3.4%
Professional, scientific, and management, administrative & waste management services	2,438	16.3%
Education/Health Care/Social Assistance	1,293	8.6%
Arts, entertainment, & recreation, & accommodation & food services	1,057	7.1%
Other Services (except Pub Admin)	612	4.1%
Public Administration	2,835	18.9%
Total:	14,972	-

Source: Virginia Employment Commission (VEC) - Quarterly Census of Employment and Wages (QCEW), 1st Quarter (January, February, March) 2013

Commuting Patterns

Considering that the total labor force in Bedford County is just over 35,000 (2010 Census) and positioned between two major metro areas, it is not surprising that 73 percent commute outside of the County to work. Additionally, about 24 percent commute into the County from other jurisdictions for their job reflecting large levels of outflow with relatively minor levels of inflow. The size and rural nature of the County also means that residents and workers depend on their own automotive forms of transportation with very few workers utilizing public transportation. Table 8.2 shows the in- and out-commuting trends of the County as reported by the U.S. Census through the Virginia Employment Commission for 2010.

**Table 8.2
Bedford County Commuting Patterns 2010**

Locality	Number of Workers	Percent of Total Commuters
<i>In-Commuters From:</i>		
Lynchburg City	2,280	6.8%
Campbell County	1,755	5.2%
Bedford City	367	1.1%
Amherst County	668	2.0%
Roanoke City	189	0.6%
Roanoke County	250	0.7%
Other Counties/Cities	2,728	2.7%
Total:	8,237	-
<i>Out-Commuters To:</i>		
Lynchburg City	6,349	18.9%
Roanoke City	4,159	12.4%
Bedford City	4,159	12.4%
Roanoke County	2,066	6.2%
Campbell County	1,683	5.0%
Salem City	1,059	3.2%
Botetourt County	596	1.8%
Amherst County	413	1.2%
Franklin County	429	1.3%
Other Counties/Cities	4,439	13.2%
Total:	25,352	-
<i>People who live and work in the area</i>	4,428	

Source: Virginia Employment Commission (VEC) - Community Profile, February 21, 2013 from 2010

From VEC: Please Note: Community Patterns data is no longer produced from the Decennial Census. As an alternative, we are providing commuting data from the US Census Bureau's OnTheMap application and LEHD Origin-Destination Employment Statistics programs. Since this data is produced from an entirely different data set, it is not advisable to compare the new data with previously released commuting patterns.

Significant is the fact that the Bedford County workforce exhibited a very high outflow to other locales for purposes of employment. The City of Lynchburg was the most commuted-to locality for employment. The number of persons who both lived and worked in the County was 4,428 – or about 13 percent of the total number of workers who reside in Bedford County. The regional

employment opportunities will always be a factor for residents of the County and the local government must work to ensure an appropriate balance between industry and residential development in the County. Identifying and attracting desired industries to Bedford County is a challenge that the local leaders and economic development professionals tackle daily in this global economy. When comparing Tables 8.1 and 8.2, the County has seen an increase in the amount of jobs from 2010 (12,665) to first quarter 2013 (14,972).

Unemployment

The economic climate in Bedford County has allowed for statistically lower rates of unemployment than the state and regional average for many years. Bedford County's employment is in a fairly strong position when comparing unemployment rates in Bedford County (5.9% in July 2013) to those in surrounding counties (average of 6.3% in July 2013). A low rate of unemployment results in happier residents, more tax revenue, and creates an enticing environment for economic growth. While Bedford County's unemployment rate stacks up favorably, the County will continue to work to ensure that the trend of lowering rates continues as much as possible in the future.

Tourism

Another aspect of the County's economy that has seen a sharp rise in recent years is tourism. With such national treasures as the National D-Day Memorial, Thomas Jefferson's Poplar Forest, and the beautiful Peaks of Otter among the Blue Ridge



Mountains, Bedford County is fortunate to have amazing tourism assets. In 2012, The Bedford County Welcome Center reported 54,086 visitors at its facility and the National D-Day Memorial reported 50,000 visitors. The rural beauty of the County and its fertile grounds are equally essential to the success of the tourism economy by creating natural destination locations throughout the County and providing agribusiness opportunities that can enhance destination locations (such as vineyards and orchards). The wine industry is one that has recently become a booming tourist attraction and economic engine within the County. From wine tasting along the Bedford Wine Trail to orchard tours and festivals, and corn mazes, the County is seeing a growing number of agri-tourism visitors. This industry will undoubtedly continue to positively impact the County's local economy.

The Smith Mountain Lake area has a thriving economy that is served by the demand for a multitude of services associated with "lake living," such as boating, fishing, and fine dining. The

lake area is unequivocally the most essential tourist area within the County and sees thousands of visitors every year. The impact of a resource such as this on the County's economy is extensive. The tourism revenue from this area benefits local businesses, as well as increasing the demand for lake property, which inevitably increases the tax base. Smith Mountain Lake, with its 500 miles of shoreline and much of it in Bedford County, is of great importance to the local economy and acts as its greatest tourist attraction.

With its "Virginia Main Street" designation and small-town charm, the Town of Bedford is attractive to a variety of businesses and is highly conducive to development. The dilemma, however, is that the size of the Town, with a population of 6,222 as of the 2010 Census, is limited and only a certain amount of growth would be possible within its limits. Since Bedford County surrounds the Town, it is only logical that business development would occur in an outward flare into the borders of the County. By sharing the costs of infrastructure to service mutually beneficial development opportunities in and around the Town, both localities see increases in revenue with relatively low costs. These realities were a force behind the reversion to a Town from a City on July 1, 2013. The Revenue Sharing areas located in the County were taken into Phase I of the Town on the date of reversion. Subsequent phases of reversion will incorporate additional commercial land and residential population.

Regional Economic Development Efforts

Bedford County is part of Virginia's Region 2000 along with the City of Lynchburg, Amherst County, Appomattox County, Campbell County, and the Towns of Amherst, Altavista, Appomattox, and Bedford. The County is a member and participant in the regional economic development strategies and programming that benefit the entire region. This partnership is crucial to development as the economies of this area are so obviously interconnected. Region 2000 functions as an economic development facilitator for the member localities and is focused on working to create a supportive environment for current and prospective businesses. Region 2000 provides education and training resources through both public sources, such as the Central Virginia Community College, and private industry. The objective is to ensure that the workforce in Region 2000 remains highly skilled and highly marketable to current and prospective employers.

Region 2000 also hosts a Technology Council that is currently involved in growing STEM (Science, Technology, Engineering and Math) programs in support of regional workforce needs. In 2011, Bedford County welcomed the Center for Advanced Engineering & Research (CAER) to the New London Business and Technology Center. The CAER boasts a scaled prototype of the Babcock & Wilcox "mPower" reactor and also features a "next generation" nuclear power plant main control room simulator as well as an LTE Spectrum Sharing Testbed to bring major innovations in nuclear and wireless technologies, respectfully. The BCEDA continues to market and develop the New London Center for Business and Technology, where CAER is located, as well as the Montvale Center for Commerce.

Workforce Support and Business Development

Creating and maintaining a well-developed workforce has always been a priority for Bedford County. With the existing industries and the addition of new companies making their way to

Bedford County that rely on highly educated and skilled workers, it is vitally important that the County provide its workforce with the resources and training needed to stay competitive. With tremendous investment in technologically advanced industry already being made by the County, steps must continue to be taken to ensure a sufficiently trained workforce.

Training and education are focal points of both County and regional efforts. At the high school level, Bedford County created an agricultural curriculum to support the agriculture sector. At the college level, in partnership with Central Virginia Community College, the Region 2000 Career Center, and Virginia's Department of Business Assistance, the County works to coordinate resources toward innovative training programs to enhance the workforce needs in the County.

Bedford County aims to bring in the types of businesses that are complimentary to the existing industry base and for its residents. While it is critical that new businesses be brought in to spur the economy, care must be taken to ensure that commercial and industrial development is well planned and properly located. Bedford County offers a central location with easy access to major highways and state routes, peaceful and serene business sites, and a hard working and dependable workforce, with well-designed water, sewer, and technology infrastructure. It is up to the County leadership to ensure that the opportunities for business growth and development are done in concert with the overall quality of life and land use goals of the citizens of the community.

Determining Factors

- Citizens of the County are strongly committed to maintaining agricultural areas and protecting the natural environment within and around the County.
- The County supports community center development in appropriate locations that provide housing, jobs, and community services to area residents.
- Watershed resources are crucial and protection of land areas that impact the quality of water in the County must be strongly considered in all development or redevelopment opportunities.
- Agricultural opportunities, scenic vistas and rural landscapes are an important asset to the County and merit special protection and preservation investment strategies.
- Protecting the natural environment through the regulation of development in mountaintops, foothills and steep slopes is a high priority of County residents.
- Areas that currently have developed lands and can support further development are primary targets for growth in housing, commercial, and industrial uses in the County.
- The provision of high quality educational opportunities for children and adults must be maintained and improved through appropriate investments in infrastructure and instruction.
- Parks and other recreational areas are desired to be easily accessible to residents across the County.
- County residents desire high quality safety, emergency and human services and expect priority investment in necessary infrastructure to ensure future availability of services throughout the County.
- Attractive and well-designed housing development is an important value of the Bedford community.

- A large number of residents of the County out-commute to work, creating a bedroom community affect in some parts of the County.
- Coordination with the Town of Bedford and surrounding Counties is important to guiding appropriate development along these political boundaries that can be addressed through design standards, land use protections, and urban center concentration of development.
- Affordable housing that meets the federal guidelines of housing expenditures is an important criteria for new housing development in the County.
- Smith Mountain Lake is an important resource of the County and development impacts on this resource must be strongly considered.
- A strong, viable, active and successful County economic development program—including workforce development--supported by regional programs is essential to a future healthy economy.
- All policies and programs of the County should be designed to be fiscally sustainable. Seek an appropriate balance between individual property rights and the community's goals.

Objectives and Strategies

8.1 Business retention, business expansion, and growth in new businesses

- 8A. Economic Development Authority Strategic Plan.** Keep the Economic Development Master Plan (“EDA Strategic Plan”) up-to-date with specific new business, employment, and County net income targets, and report achievements, shortfalls, corrective actions and revised targets to the Board of Supervisors.
- 8B. Target Market Plan.** Maintain an up-to-date Target Market Plan which includes categories of desired business categories with specific site and infrastructure requirements. Integrate the plan into the overall Economic Development Master Plan and aggressively market to the defined segments.
- 8C. Information Program.** Maintain an up-to-date information program that will include a listing of all incentives available from local, state and federal sources for attracting and retaining employers.
- 8D. Existing Business Program.** Maintain Existing Business Program to initiate action plans to address developing problems, issues, and needs.
- 8E. Regional/State Programs.** Implement business recruitment activities in cooperation with regional and state economic development programs.
- 8F. Agricultural Economic Development.** Consider growth and preservation of agricultural and farm lands, and natural areas as economic development opportunities, and develop plans and incentives for increasing agricultural economic development and eco-tourism.
- 8G. Tourist Facilities.** Support the development of tourism infrastructure, such as hotels and other facilities necessary to attract and serve tourist.

- 8.2 Commercial/industrial development that is consistent with the preservation of the scenic beauty, pastoral character, and historic resources of the County
- 8A. Economic Development Authority Strategic Plan.**
 - 8B. Target Market Plan.**
 - 8E. Regional/State Programs.**
 - 8F. Agricultural Economic Development.**
- 8.3 Priority given to infrastructure (roads, water, sewer, fiber optic networks, etc.) in areas designated for future industrial and commercial development
- 8E. Regional/State Programs.**
- 8.4 Commercial and industrial development that provides employment for local workers at a pay scale that results in family-supporting wages and benefits, provides a balanced mixture of goods and services, and produces recurring net incomes
- 8A. Economic Development Authority Strategic Plan.**
 - 8B. Target Market Plan.**
 - 8C. Information Program.**
 - 8D. Existing Business Program.**
 - 8E. Regional/State Programs.**
 - 8H. Labor Force Monitoring.** Identify and monitor any shortages or gaps in the available labor pool and implement corrective action with area educational institutions, workforce services, and the private sector, as appropriate
- 8.5 A work force that is of the quantity and quality that will readily attract and retain quality employers
- 8A. Economic Development Authority Strategic Plan.**
 - 8B. Target Market Plan.**
 - 8C. Information Program.**
 - 8D. Existing Business Program.**
 - 8H. Labor Force Monitoring.**
- 8.6 Tourism/travel related development which complements the rural, scenic, and historic qualities of the County
- 8A. Economic Development Authority Strategic Plan.**
 - 8B. Target Market Plan.**
 - 8D. Existing Business Program.**
 - 8F. Agricultural Economic Development.**
 - 8G. Tourist Facilities.**

8.7 Agricultural and equine industries remain vital elements of the County's economy

8A. Economic Development Authority Strategic Plan.

8B. Target Market Plan.

8C. Information Program.

8D. Existing Business Program.

8F. Agricultural Economic Development.

Chapter Nine

Land Use

Goal and Intent

An orderly, efficient, and compatible growth and land use pattern that is sensitive to the natural environment

The County is committed to preserving its rural charm, ensuring that new development enhances the quality of life and maintains the cultural integrity of the community. The County seeks an appropriate balance between individual property rights and the community's goals. It is vital that growth be guided appropriately to ensure that adequate public services are provided and that all citizens have access to diverse housing options and gainful employment.

The County is committed to mixed-land uses, where appropriate, that provide access to necessary services while supporting environmental sensitivity. As with all development, private choices affect public policy concerning intersecting land uses, public facilities and services, transportation loads, and environmental protection. Conversely, public policy affects housing and business location and costs through the provision of utilities, zoning, subdivision regulations, and building codes. The guidance of future land use must be well aware of all of these factors and create an appropriate balance.

Background and Findings

Bedford County consists of approximately 767.5 square miles in the west-central portion of Virginia known as the Piedmont Plateau. The County is 100 miles west of Richmond, and less than 200 miles southwest of Washington, DC. The County's boundaries consist of the Blue Ridge Mountains on the north and west, the James River on the northeast and Smith Mountain Lake on the south. The area has a rolling to hilly terrain, with elevations from a low of 400 feet above sea level, to a high of 4,200 feet. The Town of Bedford is located in the heart of the County and covers an area of 8.7 square miles. Bedford County is part of the Lynchburg Metropolitan Statistical Area (MSA), commonly known as Region 2000.

Agriculture and Forest Resources

Bedford County has a rich land resource. Fertile soils sustain a large agricultural sector. Rolling hills and lush forests provide aesthetically pleasing locations for home sites and the Blue Ridge Mountains provide the County with a spectacular backdrop for the rural setting.

Farming continues to be a major business in Bedford County with approximately 43 percent of the County categorized as farms by the US Census of Agriculture (Table 9.1). However, the same figure showing the sustaining acreage in farming shows the aging of the farmer involved in this activity. If this trend continues, it is unlikely that the number of farms (and farmers) will continue to grow or even remain constant unless farming becomes more attractive to the emerging workforce age citizens.

**Table 9.1
Number of Farms, Acreage, and
Age of Farmers in Bedford County**

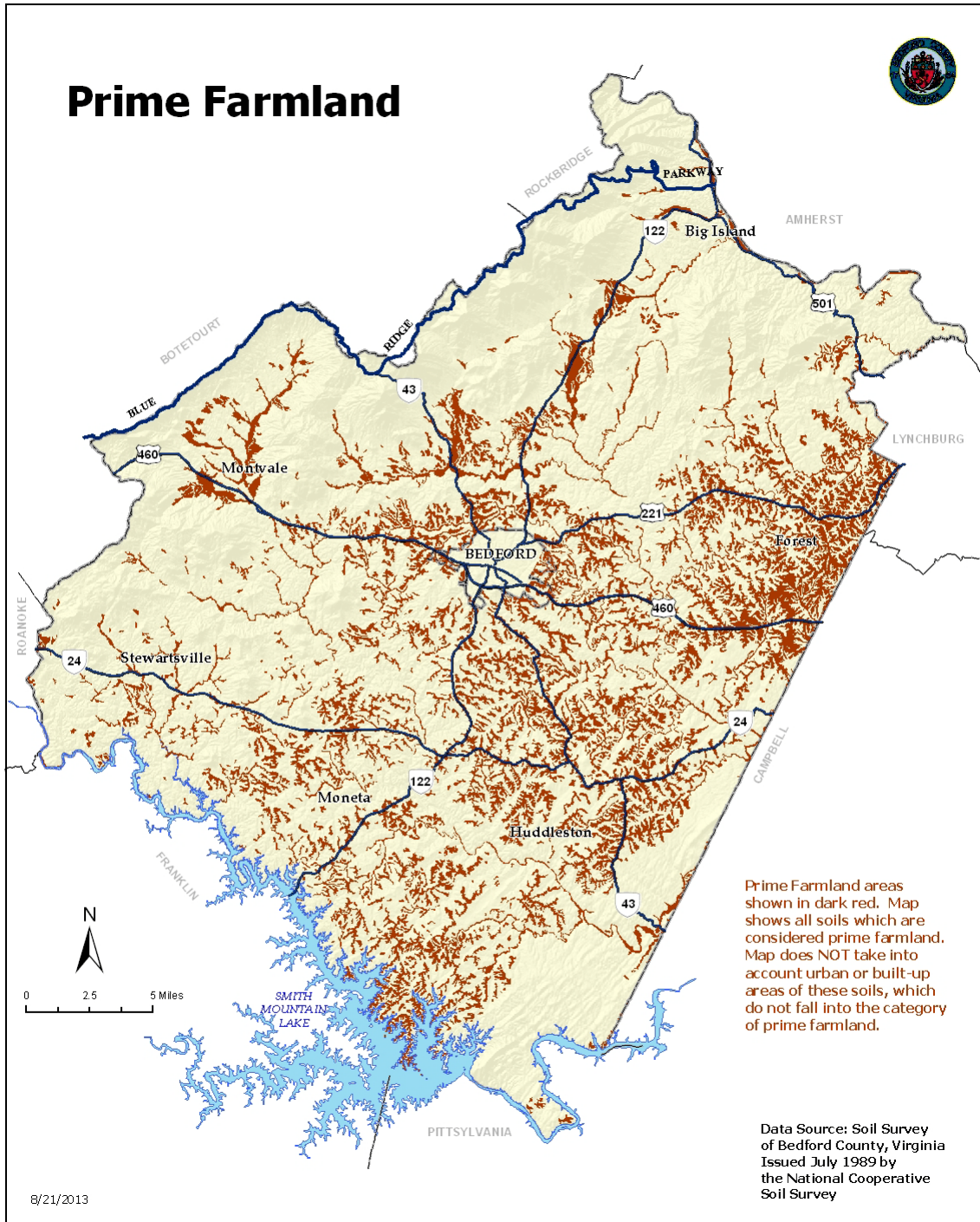
Subject	1992	1997	2002	2007
Total Number of Farms	1,227	1,198	1,289	1,428
Farms by size:				
1 to 9 acres	43	53	44	102
10 to 49 acres	260	275	345	408
50 to 179 acres	588	535	544	574
180 to 499 acres	266	262	295	274
500 to 999 acres	57	64	49	50
1,000 acres or more	13	9	12	20
Land in Farms (acres)	200,507	194,946	199,244	212,237
Average Size of Farm (acres)	163	163	155	149
Average Farmer Age	57	58	59	59

Source: U.S.D.A. National Agriculture Statistics Service – Census of Agriculture

The County’s forest resources include approximately 276,000 acres of timberland and 12,474 acres of reserved timberland (Forest Statistics for Virginia, 2003). These forest resources are located in the Jefferson National Forest, Bourassa State Forest, and also scattered across the County in state and local government ownership.

Since 1997, the County has seen an increase in the number of farms with the average farm size decreasing during the same period. With the amount of land being used for farming on the rise, rural landscapes and natural resources that aid to create agricultural opportunities in this region are important assets to document and consider for land use purposes. The designation of prime farmland is one such documenting technique. The categories considered in identifying such land include soil type, slope of the geography and climate. Since Bedford’s climate is one that supports both seasonal horticultural pursuits and animal husbandry of many kinds, this factor applies favorably countywide. However, the slope of the land and the types of soils vary. Map 9.1 shows the areas in Bedford County with a slope of less than 6 percent and soil types that support agricultural production (see also Chapter 5 for discussion of Prime Farmland). As you can see from the map, these land types are also ideal for development of housing and other structural uses. The balance of these competing needs on similar land areas is an important consideration when developing land use guidance for any locality.

**Map 9.1
Prime Farmland in Bedford County**

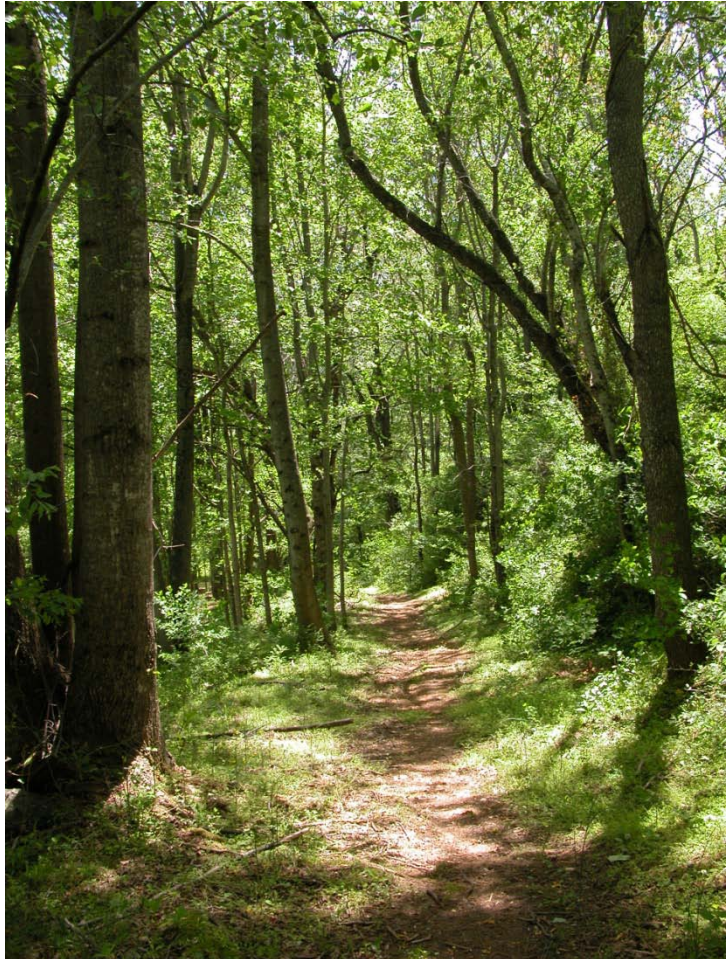


Natural Features and Landmarks

Types of resources throughout the County include water features, mountains, farmland, wildlife habitat, and cultural landscapes. Determining where these resources are located is an important step toward understanding the appropriate development and protection of land in the County. There are innumerable significant natural and cultural resources throughout the County, and land use regulation must take into account the impact on adjacent uses and thus, on individual property rights. There are features and landmarks that are truly community resources that merit even greater weight when determining how surrounding lands will be regulated. Based on community-wide input and value, the following resources are listed for special land use consideration and protection.

Greenways and Blueways

Greenways are linear stretches of open space that include recreational, cultural, and natural areas such as parks, trails, and other “green” spaces. Greenways typically follow natural or manmade features such as streams, railways, or roads and are used for transportation, education, recreation, and environmental protection, including protection of viewsheds. The designation of greenways promotes economic development, tourism, as well as increasing the beauty of neighborhoods and the value of surrounding properties. These corridors enhance the social and psychological well-being of citizens by providing them with enjoyable activities and settings in which to spend their leisure time. Greenways provide areas for hiking, biking, and picnicking and serve as automobile-free pathways connecting areas of interest. Conservation benefits are also derived from the preservation of greenway corridors through maintaining the integrity of scenic vistas and watersheds, protecting water quality in streams and underground aquifers, and preserving natural habitats and wildlife.



Blueways are navigable rivers and streams that provide water-based recreational opportunities for citizens. The James and Staunton Rivers follow west and east patterns as they leave their sources high up in the mountains and make their way along the edges of Bedford County. Classified as a 'navigable waterway' by the US Coast Guard, Smith Mountain Lake and its 500 miles of shoreline is the County's southern border, is a significant blueway.

These corridors enhance the social and psychological well being of citizens by providing them with enjoyable activities and settings in which to spend their leisure time. The development and use of the greenways and blueways system is an outgrowth of community interest in conservation of natural resources, exercise and outdoor recreation, and viable alternatives to motorized transportation. More information about greenways and blueways, including specific projects for their development, can be found in the Natural Environment section of this Plan.

Bedford County participated in the development of *the Region 2000 Greenways, Blueways, and Trails Plan* that was approved in November 2010. The plan was created to guide development of a system of linked trails, river and park connections within the Region 2000 area. The goals of this interconnected regional system include:

- Enhance natural and cultural areas
- Expand the alternative transportation network
- Increase access to recreation, exercise, and healthy lifestyle options

The Appalachian Trail (AT) and Blue Ridge Parkway

The Appalachian Trail is one of the nation's premier trail corridors and approximately 50 miles of it snakes along the western edge of Bedford and Amherst Counties. The Blue Ridge Parkway, like the AT is a major tourist destination that traverses the northwestern section of the County, annually bringing



thousands of tourists to the area. Though the County does not own, regulate or operate these resources, their impact on the economy and natural environment of the County must be factored into development in and around these resources.



Bicycle Trails & Roadway Network

The *Region 2000 Bicycle Plan* was developed to create an alternative transportation network that supports bicycling as a safe and viable transportation option. The bicycle network outlined in the plan would provide the community of Bedford County and the region with an alternative means of safe transportation to community destination points (Thomas Jefferson’s Poplar Forest, Sedalia Center, etc.).

Peaks of Otter

Located on the northern edge of Route 43 – one of the County’s Scenic Byways – and on the Blue Ridge Parkway, overlooking nearly all of Bedford County, the



Peaks may be the County's most dominant and popular viewshed, and as such attracts thousands of area visitors and tourists from all over the country. With overnight and restaurant facilities, the Peaks attraction is a source of tourism revenue for the County.

Smith Mountain Lake and Leesville Lake

As the southern border of the County and equidistant from Lynchburg to the northeast and Roanoke to the northwest, approximately 45 percent of Smith Mountain Lake's 500 miles of shoreline is in Bedford County and 45 percent in neighboring Franklin County, the remainder in Pittsylvania County. A small portion of the much smaller Leesville Lake is in Bedford County and remains largely undeveloped.

Since its construction amid forests and farmland in 1963 by American Electric Power, Smith Mountain Lake has since about 1990 has become one of the fastest growing residential segment of the County, its attraction being a large, clean and deep body of water with mountain views.

Smith Mountain Lake is also a growing tourist attraction for boaters, swimmers and fishermen, while also serving as a principal source of drinking water for Bedford and Franklin Counties. The



County is challenged with balancing the Lake's development potential with protection of its natural rural character and clean water.

The D-Day Memorial

Bedford is the site for the National D-Day Memorial. The County was chosen as this site due to the unfortunate distinction of being the community that sustained the highest per capita loss of lives during the WWII invasion at Normandy.

Thomas Jefferson's Retreat in the Poplar Forest

This facility was the second home and retreat of the famous statesman, President Thomas Jefferson. The eight-sided house begun by Jefferson in 1806 took 20 years to construct, is designated as a National Historic Site and annually attracts hundreds of visitors.

Future Land Use Designations

The Future Land Use Map (FLUM) is designed to guide future development of the County according to the goals and objectives laid out in the Comprehensive Plan. This is not a zoning map nor does it represent specific or detailed land uses today or into the future. The map is a broad-brush visual representation of the best understanding of the goals of the citizens as they apply to the use and protection of land resources of the County. The following definitions give context to the map included as an appendix to this document.

Agricultural/ Natural Resource Stewardship Areas

High resource value areas based on soil types, environmental sensitivity, or other unique land characteristics. Includes areas that are preserved from development through public or private conservation efforts. Clustering of housing units is supported in this district. The continued practice of land use assessment taxation is also considered a vital component in the conservation efforts of these areas.

Rural Residential

Small clusters of residential units with some low intensity agricultural uses. These areas are intended to preserve open spaces and the agricultural landscape while allowing clustered residential development that minimizes impervious surfaces across properties.

Residential

Residential areas located in close proximity to urban services and roads capable of handling higher traffic volumes. These are areas for single-family detached and attached units and apartments/condominiums. Small-scale neighborhood and/or lifestyle commercial (such as small convenience markets and marinas) is allowed where appropriate in this zone. Clustering of housing units is supported in this district.

Commercial

Areas designated for intensive commercial development with access to major roads and public utilities. Includes, but is not limited to, wholesale, retail, and service commercial uses.

Commercial/Light Industrial

Areas that include a mixture of commercial and light industrial uses. These areas are located adjacent to commercial and/or light industrial uses near major transportation facilities and access to all major utilities.

Industrial

Areas designated for manufacturing, fabricating, commercial and agricultural processing and other land uses which are often water intensive and generally characterized as having a greater impact on the surrounding land uses and the environment.

Mixed Use

Areas with a mixture of residential, commercial, light industrial and civic uses located along major transportation corridors. Intention of these areas is to provide convenient services for neighborhoods and prevent strip development and multiple access points along major and secondary transportation corridors.

Parks and Open Space

Public recreational spaces and dedicated public or private open space. Includes property desired by the County to be held in open space or recreational uses now and into the future.

Determining Factors

- Citizens of the County are strongly committed to maintaining agricultural areas and protecting the natural environment within and around the County.
- The County supports community center development in appropriate locations that provide housing, jobs, and community services to area residents.
- Watershed resources are crucial and protection of land areas that impact the quality of water in the County must be strongly considered in all development or redevelopment opportunities.
- The protection of quality groundwater in the County is a high priority for residents.
- Agricultural opportunities, scenic vistas and rural landscapes are an important asset to the County and merit special protection and preservation investment strategies.
- Protecting the natural environment through the regulation of development in mountaintops, foothills and steep slopes is a high priority of County residents.
- Areas that currently have developed lands and can support further development are primary targets for growth in housing, commercial, and industrial uses in the County.
- Preserving natural flora and fauna in the County is strongly supported by residents.
- The cost of providing services to residents must be factored into the overall costs of development for residential and commercial areas of the County so as to not unduly burden the tax liabilities of the general citizenry.
- Parks and other recreational areas are desired to be easily accessible to residents across the County.
- County residents desire high quality safety, emergency and human services and expect priority investment in necessary infrastructure to ensure future availability of services throughout the County.
- Attractive and well-designed housing development is an important value of the Bedford community.
- A large number of residents of the County out-commute to work, creating a bedroom community affect in some parts of the County.
- Coordination with the Town of Bedford and surrounding Counties is important to guiding appropriate development along these political boundaries that can be addressed through design standards, land use protections, and urban center concentration of development.

- Affordable housing that meets the federal guidelines of housing expenditures not exceeding 30 percent of gross income is an important criteria for new housing development in the County.
- Smith Mountain Lake is an important natural resource of the County and development impacts on this resource must be strongly considered.
- Development occurring in a planned district must be evaluated on the full cost impacts of each project along with projected revenues and resident benefits of the planned development.
- The County will continue to adhere to multiple review criteria outlined in Article I of the Zoning Ordinance related to need and justification, effects on properties and public services, and consistency in furthering the purposes of the County's Zoning Ordinance and planning program when evaluating and acting upon proposed amendments to the Zoning Ordinance.

Objectives and Strategies

- 9.1 Future development directed to areas already or proposed to be served with adequate public facilities that is compatible with and sensitive to the natural environment
- 9A. Future Land Use Map.** Review on an annual basis for possible amendments taking into consideration the Budget, CIP, and other factors. Coordinate master plans for public facilities with the FLUM.
 - 9B. Capital Improvements Program.** Develop a Capital Improvements Program (CIP) that identifies and funds future service needs in areas designated for development.
 - 9C. Service Areas.** Clarify in the Comprehensive Plan, Water & Sewer Master Plan, Zoning Ordinance, Subdivision Ordinance and BRWA guidelines, that agricultural and rural residential areas where utility lines cross to provide service to targeted development areas are not appropriate access points for these utilities.
 - 9D. Infill Development.** Encourage and develop incentives to have infill development take place in the County's growth areas.
 - 9E. Area Plans.** Develop Area Plans for mixed use areas on the FLUM including Big Island, Moneta, Goode, Glenwood, Stewartsville, and Montvale.
- 9.2 Preservation of farmland, forested land, open space, and rural character
- 9A. Future Land Use Map.**
 - 9C. Service Areas.**
 - 9D. Infill Development.**
 - 9F. Agricultural Economic Development.** Consider growth and preservation of agricultural and farm lands and natural areas as economic development opportunities, and develop plans and incentives for increasing agricultural economic development and eco-tourism.

Chapter Ten

Education

Goal and Intent

Exceptional educational programs for all citizens in facilities that enhance the learning process

Serving the educational needs of the community is an important quality of life issue. The Commonwealth of Virginia provides that the General Assembly will establish a system of free public elementary and secondary schools for all children of school age throughout the state and ensure that an educational program of high quality is continually maintained. Bedford County Public Schools are committed to excellence in education, equality of educational opportunity, and the recognition of each student's individuality. Providing life-long learning opportunities to all citizens is critical to the sustained development of the County and to the quality of life for all residents and visitors.

Background and Findings

The Bedford County community has been strongly committed to education of all citizens. Providing a strong academic and life skill base for children and adults is not only valuable to the development of the County, it is necessary for the development and quality of life for every individual resident of the County.

Primary and Secondary Education

Public Schools

The Bedford County Public School system began in August, 1846. It has been serving the needs of children and adults across the County ever since. The public system offers education to approximately 10,300 students enrolled in elementary, middle, high, vocational, and alternative schools. The Bedford County Public School system has 15 elementary schools,



three middle schools, three high schools, Bedford Science and Technology Center and the Alternative Education Center. Nearly 800 teachers serve children throughout the County's 23 schools and centers. There are preschool educational opportunities for children in the County (at several elementary schools).

The County participates in the Central Virginia Governor's School for Science and Technology (in Lynchburg) and the Roanoke Valley Governor's School (in Roanoke), CVCC's Early College program, and the Governor's STEM Academy (XLR8- Lynchburg) at the high school level. K-12 students may be served through the county's Gifted and Talented, Title I program (which provides supplemental reading instruction), or special education program (for eligible students with disabilities.)

Bedford Science and Technology Center is a career and technical school that serves students enrolled in each of the three county high schools. It is recognized as an extension of Liberty,

Jefferson Forest, and Staunton River High Schools. The Center was established in 1970 with an enrollment of 222 students in 11 programs. Enrollment has gradually increased to over 300 students who are presently enrolled in 18 programs. Students



enrolled in a career and technical program attend the Center for one-half the school day and are scheduled for other academic classes in their base high school the other one-half of the day.

Public School Enrollment

Enrollment in the public school system in Bedford County peaked in 2006 with 10,971 students in grades K-12 with nearly a decade and a half of steady growth. However, in 2007, the enrollment numbers began to decline steadily to 10,316 students enrolled in grades K-12 in 2012. Table 10.1 shows actual change in enrollment from 2000 to 2012.

Table 10.1
Public School Enrollment 2000-2012

Year	K-12 Enrollment
2000	10,437
2001	10,620
2002	10,562
2003	10,660
2004	10,747
2005	10,801
2006	10,971
2007	10,819
2008	10,714
2009	10,615
2010	10,374
2011	10,360
2012	10,316

Source: Virginia Dept. Of Education

Bedford County Public Schools’ Assessment and Planning office uses the cohort progression method to predict the number of students who will attend Bedford County Public Schools for the next five years. The cohort progression method involves applying an average growth rate over time to the current year’s membership by grade level cohort. The calculation is based on birth data, which is used to forecast kindergarten enrollment and student membership by grade. Birth data by place of residence is obtained from the Virginia Department of Health, Division of Health Statistics. The K-12 student membership numbers are obtained from the Virginia Department of Education (VDOE) fall membership (September 30) report.

The cohort-progression ratio is the number of students in a particular grade divided by the number of students in the previous grade in the previous school year. In other words, it is the rate of students in the cohort being “promoted” to the next grade level. This ratio varies by year and grade level based on families moving in and out of the county, students transferring to different schools within the division, student retention, and other factors. The cohort-progression ratio incorporates all the different factors affecting student enrollment, retention, and promotion in one number.

To develop the membership forecast, cohort-progression ratios are calculated between every pair of consecutive grades for the past 10 school years. Mathematical models are then applied to determine the cohort-progression ratio average. The average ratio is applied to the appropriate grade level to project that particular grade forward in time. Table 10.2 shows the overall enrollment projections for 2017 in Bedford County. All three projections for the 2017 are below the actual enrollment in the 2012-2013 school year.

Table 10.2
Bedford County Public School K-12 Enrollment Projections

	2012-13 Enrollment	2017 (low) Enrollment projection	2017 (median) Enrollment projection	2017 (high) Enrollment projection
All Schools	10,316	9,274	9,763	10,251

Source: Bedford County Public Schools Facility Plan, 2012

Reversion

Bedford City reverted to town status on July 1, 2013. The “Voluntary Settlement Agreement” between Bedford County and Bedford City/Town states the intent of Bedford County to construct a new middle school to serve the Liberty attendance zone. The siting and design of the school should provide a logical location and multi-purpose community use facility as with other public facilities. A site near Liberty High School has been identified for construction of this required facility with a slated completion date in the summer of 2016. The reversion agreement also permits Bedford County Public Schools to lease Bedford Middle School from the Town of Bedford for up to six years (through June 2019) until a new facility has been constructed.

Home Bound/School

According to the US Department of Education, 1.5 million (3%) students were being home schooled nationally in 2007. When compared to 1997 statistics (850,000, 1.7%), the percent of parents opting to home school their child has increased. For the 2012 school year, Bedford County had 817 students that were home schooled. Those that have chosen home schooling must notify their local superintendant of the “opt out” intentions and provide “proof of progress” to the superintendant at the end of the school year on a yearly basis.

Private Schools

Although Bedford County is home to only one private pre-kindergarten / kindergarten Montessori school, a growing number of students from the Bedford area do attend regional private schools. Even though there is only a slight percentage increase in these figures, the actual number of students attending private school from 1990 to 2010 almost tripled. Table 10.3 shows the change in private school enrollment from 1990 to 2010.

Table 10.3
Bedford County Private Education Enrollment (K-12)

	1990	2000	2010	Percent of Total Enrollment		
				1990	2000	2010
Number enrolled in private schools	541	1,151	1,556*	7.1%	10.7%	12.9%*

** 2010 Enrollment data are estimates from the 2006-2010 American Community Survey 5- year Estimates - S1401*

Source: US Census 1990 & 2000, 2006-2010 American Community Survey 5- year Estimates - S1401

Higher Education

Central Virginia Community College began offering classes in the Bedford Center for Business in January 2005. The Bedford Center offers financial aid and degree counseling as well as placement testing to assist students in determining their skill levels in math and English. Additionally, several higher education institutions are located in the adjacent metropolitan areas of Lynchburg and Roanoke. These institutions are listed in Table 10.4. In addition to these more local institutions, there are also a number of excellent colleges within a two-hour drive, including the University of Virginia and Virginia Tech.

Table 10.4
Higher Education Institutions Within 1-Hour Drive

School	Location	Type
Central Virginia Community College	Lynchburg	Public coed college (2-year)
Hollins College	Roanoke	Private woman's Liberal Arts College (4-year)
Liberty University	Lynchburg	Coed church affiliated Liberal Arts University (4-year)
Lynchburg College	Lynchburg	Coed church affiliated Liberal Arts College (4-year)
National College	Roanoke	Private business college (2-year)
Miller-Motte Technical College	Lynchburg	Private business college (2-year)
Randolph College	Lynchburg	Coed church affiliated Liberal Arts and Science College (4-year)
Roanoke College	Salem	Private coed Liberal Arts College (4-year)
Roanoke Higher Education Center	Roanoke	Includes over a dozen member institutions and agencies, currently offering more than 200 undergraduate, graduate, licensure, and certificate programs.
Sweet Briar College	Amherst	Private women's Liberal Arts and sciences college (4-year)
University of Virginia (Lynchburg Branch Ext.)	Lynchburg	Public coed Liberal Arts College and Graduate School (4-year)
Virginia University of Lynchburg	Lynchburg	Coed church affiliated Liberal Arts University (4-year)
Virginia Western Community College	Roanoke	Public coed college (2-year)

Adult Education

Adult Basic Education consists of instruction programs that provide basic skills for adults who are performing below the ninth grade level in reading, writing, English, computation, history, and other basic skills. There is no charge for the classes for adults qualifying for these services and all materials and books are provided. General Educational Development (GED) instructional programs and testing is also provided through the adult education system. As of 2013, Adult Basic Education programs are held at the Bedford Science and Technology Center, Forest Elementary School, Moneta Elementary School, Montvale Elementary School, New London Academy, and Stewartsville Elementary School.

Additional job training opportunities are available through training and skill development services at the Region 2000 Career Center. The Center, located in Lynchburg, provides a broad range of employment services for area employers. Potential employees are provided with job-search assistance and instructional programs to help improve job skills.

Lifelong Learning

The community facilities made available to residents through the public schools create a myriad of opportunities for learning and recreation. Maintaining these facilities for full community enjoyment is an important aspect of the local government. The cooperative and efficient use of these community assets is critical to getting the most benefit for all citizens from these significant facility investments.

In order to maintain the highest quality facilities that benefit the greatest number of citizens, the local government and staff must assess investment in the best cost-benefit scenarios. As with all community facilities, the initial investments are very large and the maintenance is an annual commitment that can often be costly. Creating facilities in areas that are accessible and convenient to a broad range of citizens is necessary to meet the needs of residents and create the highest cost-benefit situation.

All residents are contributors to the construction and maintenance of community facilities, the largest and most predominant of which are schools. Neighborhood schools can be the anchor to a community and create opportunities for citizen engagement and learning at all levels. Multi-generational access to these facilities are not only cost effective, they are community-building opportunities. Learning is a lifelong adventure and Bedford County supports that pursuit with programming and facilities for all residents.

Determining Factors

- The cost of providing services to residents must be factored into the overall costs of development for residential and commercial areas of the County so as to not unduly burden the tax liabilities of the general citizenry.
- The provision of high quality educational opportunities for children and adults must be maintained through appropriate investments in infrastructure and instruction.

- Parks and other recreational areas are desired to be easily accessible to residents across the County.
- Areas that currently have developed lands and can support further development are primary targets for growth in housing, commercial, and industrial uses in the County.
- Coordination with the Town of Bedford and surrounding Counties is important to guiding appropriate development along these political boundaries that can be addressed through design standards, land use protections, and urban development areas.
- A strong, viable, active and successful County economic development program—including workforce development--supported by regional programs is essential to a future healthy economy.

Objectives and Strategies

10.1 High quality education opportunities for all County residents

- 10A. Pockets of Need.** Research and evaluate “pockets” of need, (in terms of people and programs) and take educational opportunities to them so as to provide learning opportunities at locations and times that effectively meet the needs of non-traditional students.
- 10B. Multi-generational Learning.** Support educational opportunities for citizens and students to engage in learning opportunities together around local issues, history, and legacy.
- 10C. Personalized Learning.** Create personalized learning experiences for all citizens. Provide citizens the ability to master learning at their own pace, utilizing technology to improve quality and access to advanced educational software.
- 10D. Public Schools Strategic Plan and Amendments.** Support the Bedford County Public Schools Strategic Plan’s mission/vision, goals, measureable objectives and strategies for learning.

10.2 Shared community facilities by government agencies and/or private sector organizations

- 10E. Building Program.** Develop a building program plan for Bedford County that matches Land Use/Zoning Regulations and is consistent with growth patterns.
- 10F. Building Inventory.** Maintain an inventory of buildings in the County that are empty, may become empty, are in single or multiple use, and have possibilities for use as places of learning.
- 10G. Public/Private Use.** As plans for new school facilities are developed, incorporate space that will leased to appropriate private or public use.
- 10H. Capital Improvements Program.** Incorporate and fund education projects into the County’s Capital Improvements Program (CIP).

10.3 Facilities located in areas of high population density/growth areas consistent with land use mapping and the Zoning Ordinance

10E. Building Program.

10H. Capital Improvements Program.

10I. Impact Fees. Research and evaluate potential impact fees using a per-unit fiscal impact of development in the County.

Chapter Eleven

Public Safety and Community Services

Goal and Intent

Public safety facilities and programs that provide coordinated fire protection, police protection, rescue services, and emergency preparedness, as well as health and human services needs of the residents of the County

The County is committed to the health, safety and welfare of all citizens and visitors in the area. The provision of necessary services to meet the public safety and community services needs of the citizens of the County is a high priority and merits careful planning and investment in personnel and infrastructure.

Background and Findings

Community facilities and services such as schools, police and fire protection, libraries, open space and recreation, and medical facilities together with basic infrastructure are important indicators of the quality of life in a community. The provision of facilities and services are also among the major expenses of local government. Determining the community needs for services and coordinating the development of the delivery of these at a level both desired and affordable is critical for successfully managing community resources.

Bedford enjoys the benefits of a peaceful rural community. The crime rate in Bedford County is very low with respect to other counties in Virginia. The development and growth pressures of residing between two urban centers (Roanoke and Lynchburg) as well as surrounding one (Town of Bedford) impacts the desire for services of County residents and the geography and size of the land area also creates challenges for service provision. Many residents of the County that border the urban areas expect similar services as provided to those across the political borders. Additionally, the more rural areas of the County expect equal protection for the services that all citizens' tax dollars help support. Creating an equitable and sustainable balance between citizen desire for services and facilities and the need to pay for these services is a difficult but important role of County government and the staff that provide such services.

Hazard Mitigation and Emergency Preparedness

Bedford County maintains a County Emergency Operations Plan and participates under the Statewide Emergency Operations Plan. In the event of a major emergency the Local Director of Emergency Services may implement the County Emergency Operations Plan. The plan documents procedures to maintain public safety, health and security. It provides guidance in handling emergency evacuation, establishing emergency housing, emergency medical services and facilities for feeding displaced persons. The plan also allows for the expedited setup and operation of medical inoculation centers to deal with both natural and manmade pathogens that threaten the population. The Emergency Operations Plan specifies effective management practices for dealing with natural, manmade, terrorism and war events.

The plan charts actions for maintaining continuity of government, local recovery and restoring normalcy. The Emergency Operations Plan is reviewed and updated annually in cooperation with the Virginia Department of Emergency Management and with other local, state and federal offices.

A key element of the County Emergency Plan is the maintenance of formal Mutual Aid Agreements with adjoining jurisdictions. The Mutual Aid Agreements are legal documents that provide for the rapid and efficient sharing of resources to deal with any emergency. To carry-out the Emergency Operations Plan and the Mutual Aid Agreements, the County Emergency Operations Center has communication capabilities to effectively communicate and coordinate efforts of adjoining local governments and state agencies.

Police Protection

Law enforcement in Bedford County is provided by the fully-accredited Sheriff's Office. The department has a number of special programs to improve law enforcement in the County. Major programs include regular patrol, traffic safety and control, school resources officer program, prevention of internet crime, gang resistance training, anti-terrorism, a full Tactical Team, lake patrol, and a K-9 unit. These programs, along with the Citizens Police Academy, have been promoted to encourage greater citizen involvement in combating crime. Additionally, the Virginia State Police assigns officers to the area and the Park Service provides rangers for the extensive federal land in the Bedford area.



Sheriff substations locations (as depicted on Map 11.1) are located throughout the County as additional facilities that can be access by the Bedford County Sheriff's Office (BCSO). These unmanned substation locations are utilized by deputies to complete reports, make phone calls, and eat without having to leave a particular area of the County where they are patrolling 24/7.

Animal Control

Animal Control is a service offered under the Bedford County Sheriff's Office. Deputies in the Sheriff's Office are assigned the duty to enforce state and local animal control laws and respond to citizen calls and complaints. Animal control laws primarily target domestic

animals (dogs, cats) and not wild animals (deer, skunks, etc). Wild animals are governed by the Department of Game and Inland Fisheries. Some of the laws animal control deputies enforce include dog attacks/bites, dogs and livestock running at large, nuisance animals (ex. barking dogs) and rabies cases working with the Virginia Department of Health.

Citizens of the County are required by Animal Control to obtain a dog tag and a vaccination for any dog that is four months or older. Dog tags are purchased through the Treasurer's Office. Cats do not require a tag, but do require a vaccination. Animals that are found by

Animal Control without a tag are taken to the Bedford County Animal Shelter. The Animal Shelter is located beside the Bedford County Sheriff's Office. The Animal Shelter sponsors adoption programs for animals being kept at its facility.



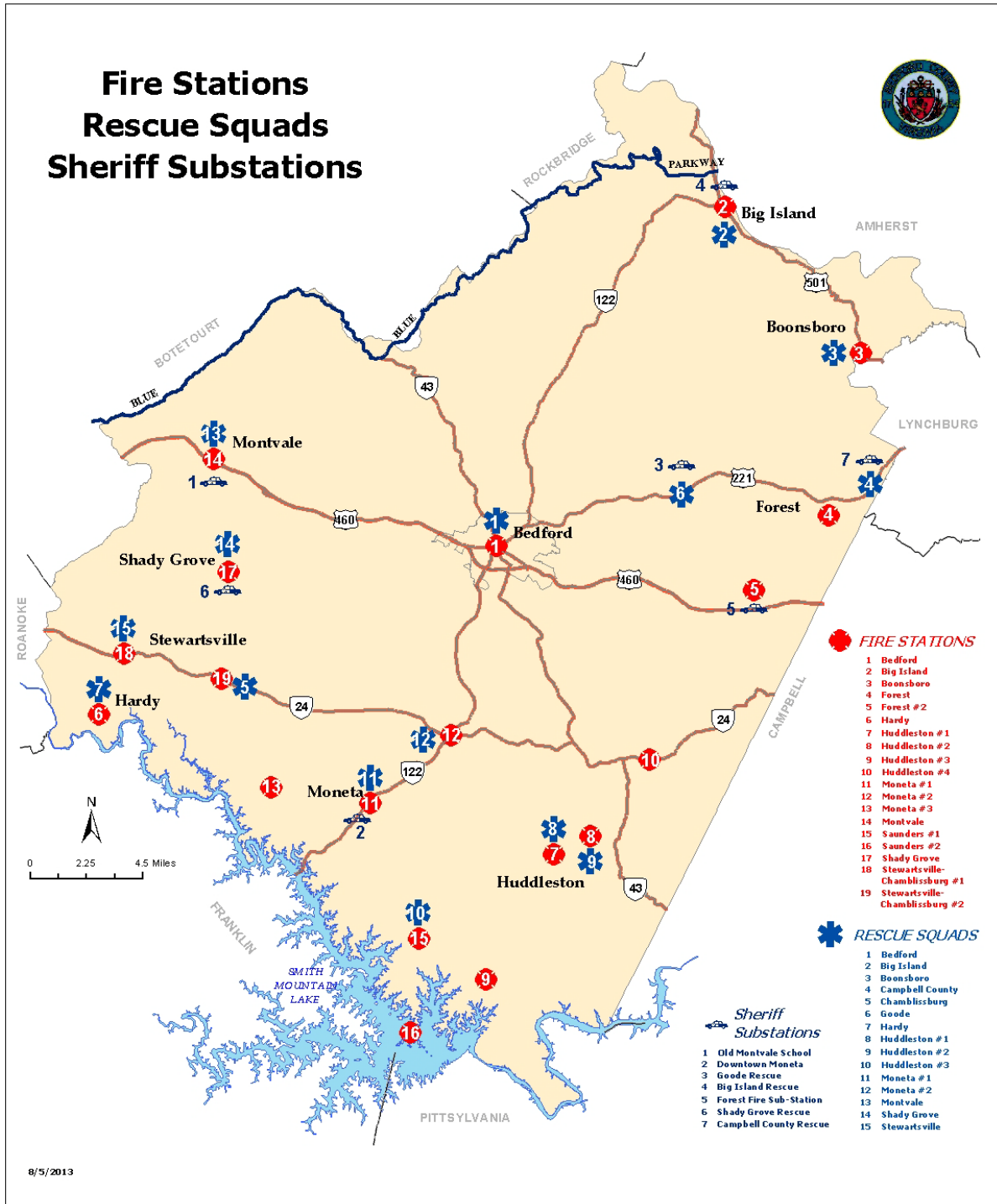
Fire Protection and Emergency Medical Rescue Services

There are twelve volunteer fire departments that serve Bedford County. Although the fire departments in Bedford County are volunteer fire departments, the County contributes funding for fire protection. In addition, the County contributes to the operating costs of the Bedford Volunteer Fire Company. The fire fighting resources in the County are coordinated by the County Fire Commission.

There are 15 rescue squads in the County (see Map 11.1) most of which are staffed by volunteers who provide emergency medical aid and transport. The County government has begun initiatives to selectively place career personnel where needed to supplement the volunteer providers. Currently, there are cross trained Firefighter/Medics staffing a number of locations in the County.



Map 11.1
Fire Station, Rescue Squad and Sheriff Substation Locations



Social and Community Services

Bedford County is committed to maintaining a high quality of life for all residents of the County. Evidence of this commitment is reflected in the number and quality of health and human service entities providing services to County residents. These agencies include those that serve youth, families and the elderly. They consist of non-profit entities, faith based organizations, local government, locally administered state agencies and others. Looking forward, it is vital that the County continue to assess the level of need within the community and, when necessary and feasible, to develop and coordinate programs to meet those needs. As the County population grows, and as the demographics change to reflect an increased number of residents aged 65 and over, health and human service demands will evolve and change accordingly.

Federal law mandates that an assortment of services aimed at helping the needy, elderly, and disabled be provided by localities throughout the nation. Bedford County's Department of Social Services offers these programs and services to county residents as well as to residents of the Town of Bedford. The department has 77 approved positions and routinely sees approximately 73 of these positions filled at all times. The Department of Social Services is located at 119 East Main St. in downtown Bedford and is the main access point for any resident that wishes to obtain information on offered services. The Bedford County Department of Social Services, under the leadership of a full-time director, offers eligible

residents access to a multitude of benefit programs. Table 11.1 breaks down the number of applications, cases under care, and expenditures that the department received in July of 2005 and 2012. Below is a list of the benefit programs that the department currently administers:



- Temporary assistance for needy families (TANF)
- Supplemental Nutrition Assistance Program (SNAP)
- Medicaid
- Auxiliary grants for the elderly and disabled
- Energy Assistance (Fuel, Crisis, Cooling)
- Nursing Home Screenings
- Domestic Violence Services
- Group home
 - Independent Living Services for Youth 18-21 years of age
 - Private Day School

**Table 11.1
Bedford County Department of Social Services
Applications for Services July 2005 & 2012**

Applications	City/Town		County		Total		Percent Change 2005-2012
	2005	2012	2005	2012	2005	2012	
Temporary Assistance for Needy Families	17	4	41	17	58	21	-176%
Temporary Assistance for Needy Families/Unemployed Parent	1	0	5	3	6	3	-100%
Supplemental Nutrition Assistance Program – SNAP (formerly “Food Stamp”)	19	21	118	146	137	167	18%
Medicaid	19	29	111	175	130	204	36%
Auxiliary Grants	1	0	3	2	4	2	-100%
State/Local Hospitalization	3	N/A	19	N/A	22	N/A	-
Total Applications	60	54	297	343	357	397	10%
Cases Under Care							
Temporary Assistance for Needy Families	58	44	141	145	199	189	-5%
Temporary Assistance for Needy Families/Unemployed Parent	2	0	8	7	10	7	-43%
Food Stamps	375	589	1,307	2,673	1,682	3,262	48%
Medicaid	874	955	3,909	5,120	4,783	6,075	21%
Auxiliary Grants	8	3	45	55	53	58	9%
State/Local Hospitalization	31	N/A	137	N/A	168	N/A	-
Total Cases Under Care	1,454	1,591	5,441	8,000	6,895	9,591	28%

The increased level of need measured in Table 11.1 (total applications/cases under care) between 2005 and 2012 indicated a shift in the citizens requiring assistance. The trend observed by the Department is one in which the “working poor” are now in need due to the economy. Bedford County’s Department of Social Services is currently capable of adequately handling its caseload as of 2012. However, the increase in fuel prices, legislation at the federal level, and Bedford County’s changing demographics of need will have a severe impact on the Department’s ability to meet the social service demands of coming years.

Services for Senior Citizens

The greatest strain on Bedford County's Department of Social Services will be the shift from a focus on child services to elderly services. The United States is still observing a large shift in age demographics; the baby boomer generation has begun to reach retirement age and the percentage of the population age 65 and over has grown immense with the State average approximately 12.5 percent (2011). Bedford County's 65 and over population has grown to approximately 16.8 percent (2011). The County has grown in popularity over the past 30 years for those looking for an area in which to retire. Bedford County has had a 44% increase in the 65 and over population since 2000. With the current rate of growth in this population segment, it is estimated that 25% of the County will be 65 years and older by 2030, reflecting a 145% increase between 2000 and 2030. This and the inevitable aging of the baby boomer generation are the main causes for the exceedingly large percentage of individuals 65 and over in Bedford County. Considering that the current infrastructure of the social services department places such importance on the youth population, this shifting demographic will increase the demand for social services for the elderly. Increases in Auxiliary Grants for the elderly and disabled as well as sharp spikes in the need for medical assistance (which has already begun seeing large caseloads and high rates of growth) must be addressed.

Funding is going to be the greatest concern for the Bedford County Department of Social Services over the next 20 years. There will be continued demand for children's services even with the increasing demand for elderly services. The key is for the Department of Social Services to seek and allocate sufficient funds and infrastructure to meet the needs of both children and elderly services.

Court System

Bedford County is in the 24th Judicial Circuit and District court system in Virginia along with Amherst, Campbell, and Nelson Counties, as well as the City of Lynchburg. Bedford County's circuit, district, and juvenile and domestic relations courts are all located at 123 East Main St. in the Town of Bedford directly across from the County Administration building.



Comprehensive Services Act

The Comprehensive Services Act for At-Risk Youth and Families (CSA) is a piece of Virginia legislation that was put into effect in 1993. The formation of the CSA came about in response to a study conducted by the General Assembly in 1989 that analyzed the

residential treatment being provided to high-risk youth. The General Assembly mandated that locally based interagency teams would be responsible for the provision of services to high risk youth and families with the state providing matching funds. In basic terms, the CSA states that local management would be more efficient from both a service and cost standpoint, and that the state will match funds used by localities to provide higher quality services to troubled youth and families.

The demand for CSA services in Bedford County is exceedingly high. The demand for CSA services in general are highly correlated with levels of population growth; the larger the population, the larger the demand for CSA services. Bedford County's rate of growth has been significant over the past 20 years and thus the demand for CSA services has increased accordingly. The department's integrated team structure has worked well for the County and is expected to continue provided adequate staff is available to manage the consistently increasing demand for CSA services.

Medical Care

The Bedford Memorial Hospital provides 50 patient beds with 110 long-term care and skilled beds in its Oakwood Health and Rehabilitation Center. The Bedford County Health Department also provides public health services to the community. Additional services include an adult day care center, free medical and dental clinics. There are many private physicians providing general and specialized medical care and nine retirement and nursing homes provide intermediate and extended care for over 300 residents.

Bedford County Nursing Home

One of the unique medical care services offered in Bedford County is the County nursing home. The nursing home provides 24-hour professional nursing care with a staff of Registered Nurses, Licensed Practical Nurses and Certified Nursing Assistants where residents may select their own physician. A Registered Dietician consultant is available to provide therapeutic diets (as prescribed by a physician) with daily menus implemented by a Certified Food Services Manager. Additional services include therapy programs (physical, occupational and speech) and a full calendar of recreational activities for residents of the facility.

Art and Culture

Bedford County has diverse and lively cultural offerings for citizens across the County. In addition to the traditional theatre and musical programming, there are many regional art programs that center on the life and culture of the mountain and rural communities that founded the County.

Bedford Public Library System

The library system in the County was founded in 1900 and operates five modern libraries in Bedford County (as well as the central library in the Town of Bedford). The library has an annual circulation over 400,000 and offers a full range of information technology services including public internet access, wireless internet access, computer classes, faxing, scanning and other copier services as well as free access to online eBook, eAudiobook and

downloadable magazine collections. Educational programs are provided for children of all ages along with informational programs for adults at all six branch locations. The Bedford Public Library System’s website provides announcements for events along with links to the Library’s online catalog through which families can manage their accounts, place holds on items or pay fines/fees. Library materials can be delivered to County residents who cannot visit a library because of age or physical disabilities. Table 11.3 shows the square footage available in each library branch.

**Table 11.3
Bedford Public Library System Square footage**

Library	Size (sq. ft.)
Bedford Central Library	26,500
Big Island Library	2,245
Forest Library	10,220
Moneta/SML Library	10,220
Montvale Library	3,000
Stewartsville Library	3,220

Source: Bedford Public Library System

In addition to the budget allocated to the Bedford Public Library System, most branches have active groups called “Friends of the Library.” The foundations and these groups raise funds for projects or acquisitions in excess of the general library budget, help plan and execute special events and programs, and act as advocates for the libraries' value to the community.

The Bedford Academy for the Arts

The Bower Center is home to the Academy that provides opportunities for visual and performing arts through education, group and individual instruction, presentations, performances, and personal involvement.

The Little Town Players

This community theatre organization produces four plays annually. The organization’s mission is to “provide live theatrical productions for the education and enrichment of the community”.

The Sedalia Center

Located near Big Island, the Center is a private, non-profit organization that strives to “...promote, preserve, and enhance the arts and cultural heritage in our region” (Sedalia Center Mission Statement).

The Bedford Museum & Genealogical Library

The museum features exhibits on the history of Bedford through the mid 20th Century. A genealogy research library is available for visitors and residents to trace their cultural and ancestral lineage.

Determining Factors

- The County supports community center development in appropriate locations that provide housing, jobs, and community services to area residents.
- The cost of providing services to residents must be factored into the overall costs of development for residential and commercial areas of the County so as to not unduly burden the tax liabilities of the general citizenry.
- County residents desire high quality safety, emergency and human services and expect priority investment in necessary infrastructure to ensure future availability of services throughout the County.
- Coordination with the Town of Bedford and surrounding Counties is important to guiding appropriate development along these political boundaries that can be addressed through design standards, land use protections, and urban development areas.

Objectives and Strategies

11.1 Properly trained personnel to respond to public safety events in a prompt and effective manner

11A. Fire & Rescue Master Plan and Amendments. Amend and incorporate the recommendations of the Fire & Rescue Master Plan into the County's Comprehensive Plan.

11B. Federal/State Grants. Optimize the use of Federal and State grant monies to offset local cost of service provision.

11C. Staffing/Training Plan. Establish and implement a staffing and training plan for volunteer and paid fire, rescue and emergency services personnel.

11D. Reporting. The County's Fire & Rescue Operations Department will continue to report at least annually to the Board of Supervisors on the adequacies, needs and shortfalls of each of the County's fire & rescue departments, including recommendations for improvement.

11E. Impact Assessment. As determined and requested by the Department of Community Development, the County's Fire & Rescue Department shall provide an impact assessment for each proposed residential and commercial/industrial project.

11F. Level of Service. Determine acceptable levels of call volume/service and target response times as well as necessary health and preventative care levels to evaluate adequacy of service delivery.

11.2 Facilities and equipment that enable the prompt and effective response to public safety events

11A. Fire & Rescue Master Plan and Amendments.

11B. Federal/State Grants.

11D. Reporting.

11E. Impact Assessment.

- 11F. Level of Service.**
 - 11G. Capital Improvements Program.** Incorporate needed public safety and community services facilities, equipment and services in areas designated for development into the County’s Capital Improvements Program (CIP).
- 11.3 Coordinated response programs that ensure the prompt and effective response to public safety events
- 11A. Fire & Rescue Master Plan and Amendments.**
 - 11B. Federal/State Grants.**
 - 11C. Staffing/Training Plan.**
 - 11D. Reporting.**
 - 11E. Impact Assessment.**
 - 11F. Level of Service.**
 - 11H. Hazard Mitigation Planning.** Update and evaluate hazard mitigation plan in coordination with appropriate regional and state agencies to address deficiencies and necessary program improvements.
- 11.4 Preventive measures that reduce the likelihood of public safety and personal health emergencies
- 11A. Fire & Rescue Master Plan and Amendments.**
 - 11B. Federal/State Grants.**
 - 11D. Reporting.**
 - 11E. Impact Assessment.**
 - 11F. Level of Service.**
 - 11H. Hazard Mitigation Planning.**
 - 11I. Fire Prevention Code.** Explore adopting the Statewide Fire Prevention Code.
- 11.5 Adaptive and shared use/reuse of community facilities by two or more agencies
- 11F. Level of Service.**
 - 11G. Capital Improvements Program.**
 - 11J. Walking Facilities.** Plan joint community facilities with walking facilities in order to utilize land to promote health.
 - 11K. Facility Coordination.** Coordinate facilities and services with Parks and Recreation facilities.
 - 11L. Regional Cooperation.** Explore regional cooperation and sharing of buildings with adjacent jurisdictions.
 - 11M. Existing Buildings.** Explore utilizing existing vacant buildings as a first option to building new facilities.

Other Strategies:

- 11N. Annual Meeting.** Schedule an annual meeting between the Board of Supervisors and the Bedford County Welfare Board and the Director of the Health Dept. to review trends and future directions.
- 11O. Adult Services Center.** Investigate establishing an Adult Services Center modeled after the No Wrong Door program.

Chapter Twelve

Parks and Recreation

Goal and Intent

A system of parks and recreation facilities and programs that provide for and promote healthful and appropriate leisure desires of residents and attract visitors to the County

The County has a commitment to physical and social well-being of all residents. The provision of adequate and appropriate parks and recreational facilities and programming is an important service for the overall health of the community. Additionally, attractive park and recreational facilities and engaging programming are an economic development tool for attracting businesses and tourists to the County.

Background and Findings

Bedford County is rich in natural features that offer outdoor recreational opportunities for residents and visitors. The Jefferson National Forest covers approximately 18,500 acres of the northwestern portion of the County. The



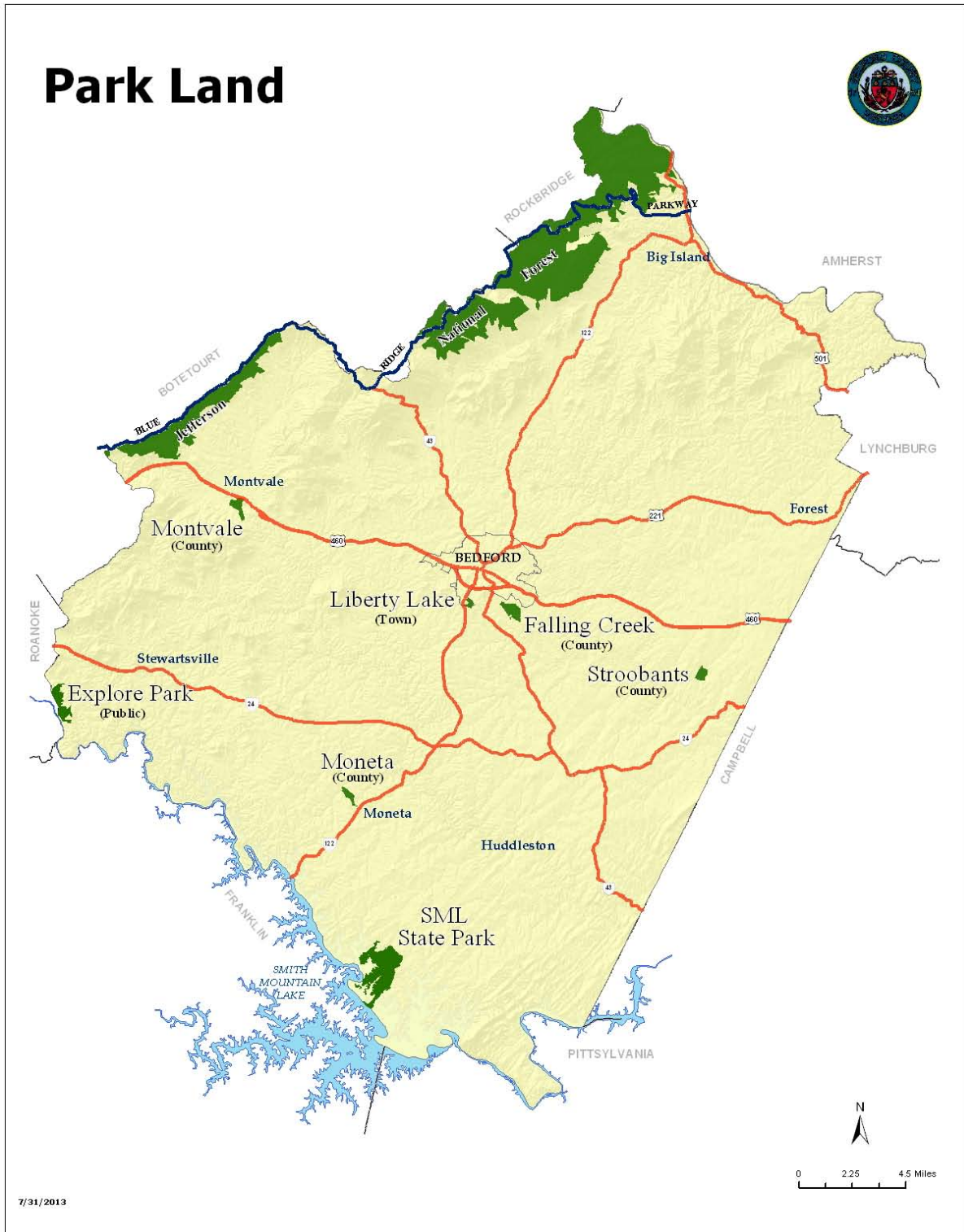
The Appalachian Trail and the Blue Ridge Parkway wind scenically through the forest providing hiking and sightseeing opportunities. Other recreational opportunities in the Jefferson National Forest include hunting, camping, and fishing.

On the southern boundary of the County are the Staunton River, Smith Mountain Lake, and Leesville Lake. These water bodies cover over 23,000 acres with approximately 600 miles of shoreline. The lakes and river provide opportunities and facilities for boating, swimming, fishing, and other water sports. Along the shores of Smith Mountain Lake in Bedford County is the 1,248-acre Smith Mountain Lake State Park. The park offers nature trails, campgrounds, a boat launch, cabins, public beach, and an educational center.

The Bedford County Parks and Recreation Department (BCPRD) was created by the Board of Supervisors in 1984. Since its creation, the BCPRD has addressed the leisure needs of the County with the available resources with the intent of providing a wide range of recreational activities for all aspects of Bedford County's population. The mission of the BCPRD is to ensure that all citizens of Bedford County are provided with well-balanced leisure opportunities through a variety of programs, facilities and open spaces designed to improve their social, mental, and physical development, and to provide these opportunities in safe and clean environments. Map 12.1 shows the County's land holdings that are current or committed lands for parks in the area.

The County has one developed recreational park: the Bedford Recreation Field. This recreational center is in the Town of Bedford and has a community center, a football field, three tennis courts, two baseball fields, a playground, and a health fitness course. As of January 1, 2014, all recreation programs within the Town of Bedford will be administered by the Bedford Central Recreation Association under the supervision of the BCPRD. Additionally, the BCPRD administers the Forest Recreation Center that is also owned by the County. This facility is available for rental uses including wedding receptions, dances, parties, family gatherings, and various meetings. It also has potential for greater programming offerings through the BCPRD in the future.

Map 12.1
County Park Land



The County has invested in four regional park sites in the Montvale, Moneta, and New London (Stroobants Park) areas and adjacent to the County Nursing Home (Falling Creek Park). The County plans to develop these properties over time by seeking grants and using capital improvement funds. These facilities, ranging in size from 120 to 250 acres, are targeted to include such amenities as recreation fields and courts, picnic shelters, playground equipment, trails, restrooms, and other facilities addressing the diverse leisure demands of the residents of Bedford County. Currently, the only park site where development has not begun is the New London (Stroobants Park) site that will be revisited in the near future.

There are ten private clubs that own and operate facilities. The Bedford County Recreation Commission (BCRC), a citizen group appointed by the Board of Supervisors, is the policy making body of the operation of these clubs. Table 12.1 lists the clubs and their respective signup location(s).

**Table 12.1
Recreation Organizations**

Organization	Usual Signup Location(s)
Big Island Youth Athletic Association	Big Island Elementary School
Boonsboro Ruritan Youth Athletic Association	Boonsboro Elementary School
Forest Youth Athletic Association	FYAA Offices
Goode Youth Athletic Association	Otter River Elementary School
Huddleston Youth Athletic Association	Huddleston Elementary School
Body Camp Youth Athletic Association	Body Camp Elementary School
Moneta Youth Athletic Association	Moneta Elementary School Staunton River Middle School Staunton River High School
Stewartsville Youth Athletic Association	Stewartsville Elementary School Staunton River Middle School Staunton River High School
Thaxton Youth Athletic Association	Thaxton Elementary School
Montvale Youth Athletic Association	Montvale Elementary School Old Montvale Elementary School

Source: Bedford County Parks and Recreation Department

These various organizations own varying portions of land and recreational facilities throughout the County (Bedford Moose Lodge fields shown below). These associations primarily target the needs of youth sports. Bedford County provides support for these organizations through such means as equipment procurement, event scheduling, and field maintenance. While County residents are required to register through the various recreation associations, the County is responsible for supplying the proper equipment, maintaining

quality playing conditions through field maintenance, and scheduling the time and place for recreational events. The athletic programs that are provided include baseball, basketball, cheerleading, t-ball, softball, football, soccer, tennis, wrestling, and swimming.



In addition to the youth athletic opportunities offered to Bedford County citizens, there are also numerous outdoor recreation facilities and programming provided by the County. A list of outdoor facilities can be found in Table 12.2. Special events are also offered throughout the year including an Easter Egg Hunt, Youth Fishing Clinic, Spooktacular, Breakfast with Santa, Elderfest, and bike races. Adult softball is offered in the spring and summer and there are a variety of activities targeting the County’s senior population. These include lunch, day, and overnight trips to points of interest, a senior softball team and bingo.

**Table 12.2
Outdoor Recreational Facilities**

<p><u>Campgrounds</u> Big Otter Campground Camp VA Jaycee Camp Karma Camp Ruthers Camp Paradise Eagle Eyrie Eagles Roost Peaks of Otter Pine Shores Family Camp Moorman’s Campground Poplar Forest Cottage Spring Valley Campground Sweetwater RV Park</p> <p><u>Race Tracks</u> New London Dragstrip</p> <p><u>Horsemanship</u> Bedford County Horsemen’s Association</p>	<p><u>Marinas</u> Beacons Marina Campers Paradise Craddock Creek Marina Crystal Shores Marina Eagles Roost Fisherman’s Cove Restaurant & Marina Gross Point Marina Lake Haven Marina Mitchell’s Point Marina Parkway Marina Virginia Dare Cruises and Marina</p> <p><u>Golf Courses</u> Bedford Country Club Colonial Hills Golf Club Ivy Hill Golf Club London Downs Golf Club Poplar Forest Golf Course Mariners Landing Golf and Country Club</p>
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Source: Bedford County Parks and Recreation Department

The abundance of natural open space coupled with the County's efforts in ensuring organized recreational activities have resulted in year-round opportunities for residents to participate in a wide variety of leisure related activities. The formation of local facilities was sought to improve recreation accessibility within the locality, preserve open space in developing areas, and provide opportunities for social contact. The BCPRD supports efforts to develop parks and to preserve open spaces. These efforts should include stewardship plans that illustrate sound environmental management plans and that serve to educate the public regarding the benefits of these open spaces. Management and maintenance of such open spaces and recreational facilities must be addressed and funding strategies for supporting the necessary staff and resources established along with facility and use plans.

Determining Factors

- Citizens of the County are strongly committed to maintaining agricultural areas and protecting the natural environment within and around the County.
- The County supports community center development in appropriate locations that provide housing, jobs, and community services to area residents.
- Watershed resources are crucial and protection of land areas that impact the quality of water in the County must be strongly considered in all development or redevelopment opportunities.
- Protecting the natural environment through the regulation of development in mountaintops, foothills and steep slopes is a high priority of County residents.
- The cost of providing services to residents must be factored into the overall costs of development for residential and commercial areas of the County so as to not unduly burden the tax liabilities of the general citizenry.
- The provision of high quality educational opportunities for children and adults must be maintained through appropriate investments in infrastructure and instruction.
- Parks and other recreational areas are desired to be easily accessible to residents across the County.
- Coordination with the Town of Bedford and surrounding Counties is important to guiding appropriate development along these political boundaries that can be addressed through design standards, land use protections, and urban center concentration of development.
- Smith Mountain Lake is an important natural resource of the County and development impacts on this resource must be strongly considered.

Objectives and Strategies

12.1 Parks and recreational facilities for citizens of all ages, economic standing and physical ability without compromising the quality of the resource

- 12A. Accessibility Plan.** Develop a plan to ensure that existing and new facilities are accessible to all Bedford County citizens, with special attention to the needs of differently-abled residents, by meeting the accessibility standards under the Americans with Disabilities Act (ADA).

- 12B. Community Pathways.** Explore creation of community-wide pathways, greenways, and linear parks that link targeted parks, schools, waterbodies, open space, cultural centers and trails in a safe and efficient manner.
 - 12C. Park Planning.** Plan parks and recreational facilities in conjunction with other public and private facilities. Plan community facilities with the capability of adaptive and shared use/reuse by two or more governmental, private and non-profit agencies.
 - 12D. Multi-modal Access.** Evaluate availability of multiple modes of transportation for most needed and desired community services and facilities.
 - 12E. Capital Improvements Program.** Incorporate and fund park and recreation projects into the County's Capital Improvements Program (CIP).
 - 12F. Proffer Guidelines.** Develop proffer guidelines which incorporates the per-unit fiscal impact of development for parks and recreation.
 - 12G. Greenway System.** Research and evaluate targeted streamways, natural resources and other environmentally-sensitive areas to develop an appropriate community-wide greenway system.
 - 12H. School Facilities.** Maximize the partnership with the Bedford County Schools' system in order to expand the opportunities to enhance community use of school assets when they are not being used for their primary mission of education.
 - 12I. Recreational Programs.** Develop recreational programs that maximize the use of recreational outdoor facilities available at the public school and public parks.
 - 12J. Parks and Recreation Master Plan.** Require timely updates to the County's Parks and Recreation Master Plan to allow for a clear echoing of the values and priorities that residents place on diverse leisure opportunities while recognizing economic and resource constraints.
- 12.2 Expansion of park and recreation facilities coordinated with other public and private agencies
- 12C. Park Planning.**
 - 12E. Capital Improvements Program.**
 - 12F. Proffer Guidelines.**
 - 12H. School Facilities.**
 - 12I. Recreational Programs.**
 - 12J. Parks and Recreation Master Plan. .**
 - 12K. Parks in New Developments.** Encourage the inclusion of private provisions for recreation and open space in new developments.
 - 12L. Facility Expansion.** Give priority to expanding facility units and activity types at existing County owned locations when deemed appropriate and practical. Coordinate expansion of recreation facilities with the County's Comprehensive Plan such that facilities and residential development coincide.
 - 12M. Public/Private Activities.** Plan community facilities, activities and programs that can be organized, funded and shared by public, private and non-profit

sectors. Work with local organizations to coordinate and sponsor special events, including festivals and concerts.

12N. Land Acquisition Policy. Research and evaluate a land acquisition policy that establishes criteria for evaluating acquisition opportunities and strategies for acquiring critical parcels of public space.

12O. Easements. Support easements where appropriate to establish or connect trails or to protect open space, heritage resources, scenic vistas, environmentally sensitive resources, and park and recreation facilities. Protect public parkland and lands already under easement by encouraging easements on adjoining properties. Favor the use of easements for the linking of natural areas and parks, the preservation of wildlife corridors and other environmentally sensitive areas such as land associated with the James River and its tributary streams, Smith Mountain Lake and other surface water resources.

12.3 Park and recreational facilities which take into consideration existing and planned facilities, natural resources and existing and future residential developments

12C. Park Planning.

12G. Greenway System.

12H. School Facilities.

12J. Parks and Recreation Master Plan.

12L. Parks in New Developments.

12M. Facility Expansion.

12P. Easements

12Q. Property Evaluation Program. Establish a program for the evaluation of properties that have potential as suitable sites for public use as access points to waterways, natural areas and scenic and historic sites.

12R. Natural Resources. Seek funding for the development of a County-wide database and rating program of natural resources.

12S. Recreational Programs. Develop recreational programs that maximize the use of recreational outdoor facilities available at the public school and public parks.

12T. Development Impacts. Consider the location and the possible impact(s) upon the County's parks and recreation facilities, and other associated assets, as growth and development impact the County.

Chapter Thirteen

Solid Waste

Goal and Intent

An efficient, safe, sanitary and comprehensive system of solid waste collection, disposal, and recycling facilities and programs

The County seeks to be a good steward of land resources and to manage the amount and type of waste created by the residents and businesses of the County. Seeking innovative and efficient ways of managing waste and reducing the waste stream are critical to this effort and high priorities for the County.

Background and Findings

The Bedford County Waste Management Facility was constructed during 1992-93 and began operating in November 1993. The Facility consists of a landfill disposal area, a transfer station operation, and a material recycling facility. These facilities are owned and operated by the County. The entire Waste Management Facility consists of 229 acres. Currently, 24.7 acres have been permitted, constructed, and are being utilized for waste disposal needs. An additional 50+ years of available space remains at the facility.

Bedford County currently manages its flow of solid waste through a hierarchical system of alternatives that is heavily regulated on both the state and federal level. This system is both logical and cost efficient. The central design is that solid waste is best managed in a sequential manner through source reduction, reuse, recycling, resource recovery, incineration, and lastly, landfill disposal.

As part of the Reversion Agreement between the Town of Bedford and Bedford County, the County took over waste disposal for the Town in the future as they continue their waste pickup service. The Town will have the right to deliver waste to any current or future County landfill or recycling facility for disposal.

Source Reduction and Reuse

Source reduction refers to the alteration of a service, process, design, or input material used for production and/or consumption of a good, thereby lessening the generation of a waste by-product. This is the most important aspect of any waste management strategy as the less waste you have, the easier it is to maintain and control. The County encourages citizens and businesses to reduce the quantities of waste generated by providing educational programs that encourage source reduction/reuse.

Recycling

The recycling of waste materials is the preferred management alternative after source reduction and reuse opportunities have been exhausted. Recycling is the separation of a material from the waste stream for processing so that it can be used as a raw material for a

product. Recycling is the public's waste management option of choice. Due to the lack of convenient recycling processors and poor commodity pricing, the County opened a material recycling facility in 2006 whereby recyclable materials generated within the County are sorted, baled, and sold to industrial users. Recycling not only generated revenues but also preserves the County's landfill for disposal of materials that are not easily recycled which ultimately will allow the facility to have a longer life.

Landfill Disposal

Landfill disposal of solid wastes has always been the management method of choice throughout the County. This form of waste management is the most common for localities and the most practical. Waste disposal in Bedford County has evolved from individuals and businesses dumping and burning waste on their own property, to several centralized dumps, to the creation of a primitive sanitary landfill 25-30 years ago, and finally, to the engineered facility of today. Nationwide and locally, the consistent trend is that the number of disposal locations has been reduced over time and there have been greater efforts to improve environmental protection.

Though not often thought as such, Bedford County has an important social and economic asset in the long-term stability of its landfill. Because it will not be necessary to site another facility for the foreseeable future, the County will not go through the turmoil of site selection. Additionally, because the County operates waste disposal services, service levels and costs are directly controlled. Existing and prospective residents and businesses can be assured of stable costs and flexible programs to meet the community's needs.

The need for landfill space has been an integral part of the solid waste management plan and the County has addressed this with the aforementioned phase expansion. Bedford County's rapid growth over the past 30 years has necessitated this need for sufficient landfill space in order to handle the inevitable influx of solid waste.

As the population in the County continues to rise, the solid waste tonnage generated will undoubtedly increase. Since waste streams depend on a multitude of variables, it is difficult to accurately predict future waste streams. The use of historical figures and trends does provide some insight into the patterns of waste stream growth, though assumptions must be made. Historically, a 1.0% to 2.0% annual increase in tonnage provides a general guideline for future anticipated waste tonnages. Table 13.1 below illustrates forecasted solid waste to be put in the landfill through 2025 assuming an annual growth rate of 2.0%.

**Table 13.1
Quantity of Solid Waste Generated by Source: Forecasts**

Calendar Year	Industrial Waste	Commercial Waste	County Collection System	Commercial Hauling of Res. Waste	Residential Hauling of Res. Waste	Total-In	Total Facility Recycling	Total Land filled
2013 (Actual)	32	15,428	25,498	1,554	2,024	44,536	3,590	40,946
2015 (Estimated)	33	16,051	26,528	1,617	2,106	46,335	3,735	42,600
2020 (Estimated)	37	17,222	29,289	1,785	2,325	51,158	4,123	47,035
2025 (Estimated)	41	19,566	32,338	1,971	2,567	56,483	4,552	51,931

Notes: Assumes 2.0% growth per year from 2013 data.

Collection and Storage

As the residential waste stream grew over time, the County’s previous collection system became inadequate. In the mid-nineties, the collection problems prompted the Board of Supervisors to establish a Citizens Advisory Committee (CAC) to recommend an improved method. The result was a recommendation by the CAC that the County begin purchasing land for staffed convenience centers with services that included compactors to increase hauling efficiency and improve environmental protection. Since 1996, the County has been developing and improving on this type of convenience center system.

The County now operates a network of 25 convenience centers. The County is continuously looking for ways to improve these centers and the services provided within. As new or expanded services become necessary, the County explores expanding or relocating these centers. The County will need to relocate and expand the County’s existing Stewartsville center within the next 12 months. In addition, future expansions and/or relocations are necessary at Bunker Hill, Falling Creek, and Shady Grove.

Determining Factors

- Citizens of the County are strongly committed to maintaining agricultural areas and protecting the natural environment within and around the County.
- Watershed resources are crucial and protection of land areas that impact the quality of water in the County must be strongly considered in all development or redevelopment opportunities.
- The protection of quality groundwater in the County is a high priority for residents.
- Protecting the natural environment through the regulation of development in mountaintops, foothills and steep slopes is a high priority of County residents.
- County residents desire high quality safety, emergency and human services and expect priority investment in necessary infrastructure to ensure future availability of services throughout the County.
- Coordination with the Town of Bedford and surrounding Counties is important to guiding appropriate development along these political boundaries that can be

addressed through design standards, land use protections, and urban development areas.

- Smith Mountain Lake is an important resource of the County and development impacts on this resource must be strongly considered.
- All policies and programs of the County should be designed to be fiscally sustainable.
- Seek an appropriate balance between individual property rights and the community's goals.

Objectives and Strategies

13.1 Increased landfill density and prolonged landfill life

- 13A. Solid Waste Management Plan.** Review and update annually the Solid Waste Management Plan, including revenue-generating targets. Report annually to the Board of Supervisors the results of the years efforts compared to the Plan.
- 13B. Telephone Hot-Line.** Implement a telephone hot-line for citizens to report violations, inadequate facilities and health/safety issues.
- 13C. Program Development.** Develop programs to address specific needs/issues in brush, leaf, and hazardous waste disposal.
- 13D. Public Information.** Develop a public information and awareness program through the media, schools, citizens groups and private industry.
- 13E. Adopt-A-Highway Program.** Revitalize the County's Adopt-A-Highway program and develop specific road targets for implementation.
- 13F. Capital Improvements Program.** Incorporate and fund solid waste projects into the County's Capital Improvements Program.
- 13G. Impact Fees.** Research and evaluate potential impact fees using a per-unit fiscal impact of development for solid waste.

13.2 Reasonable access to waste collection sites

- 13A. Solid Waste Management Plan.**
- 13F. Capital Improvements Program**
- 13G. Impact Fees.**
- 13H. Convenience Sites.** Provide additional convenience sites or expand existing sites and services to handle increasing volumes in high-growth areas and areas that experience seasonal increases in population.
- 13I. Land Acquisition.** Develop a future land purchase or leasing plan for siting disposal facilities in high growth areas
- 13J. Program Development.** Develop programs to address specific needs/issues in brush, leaf, and hazardous waste disposal.
- 13K. Automated Compactors.** Develop plans to convert all satellite collection sites to automated compactors.
- 13L. Screening.** Ensure that all satellite disposal sites are adequately positioned and screened from public view and do not adversely impact adjacent of surrounding properties.

13M. Visitors/Tourists. Encourage proper trash disposal and recycling by visitors and tourists.

13.3 Self-supporting solid waste system

13A. Solid Waste Management Plan.

13N. Regional/Private Sector Options. Continually evaluate regional and private sector options and feasibility for waste collection and disposal; and recommend alternates as appropriate.

Chapter Fourteen **Bedford City/Town Reversion**

Background

In 2008 the City of Bedford notified the County of its intent to revert from a city to a town, as allowed under Virginia Law. The “Voluntary Settlement of Transition to Town Status and Other Related Issues Between the City of Bedford and the County of Bedford” (Reversion Agreement) was finalized July 23, 2012 and passed after public hearings were held in both jurisdictions in August 2012. The effective date of the City’s reversion to a town was July 1, 2013. The agreement requires each locality to amend their Comprehensive Plan to account for the provisions in the agreement.

Upon reversion, all residents of the new Town also became citizens of the County. The County will receive tax revenues from all parcels within the Town boundaries. These revenues will be applied toward the provision of County services. The County areas included in the reversion will be provided the same services from the County that they received before reversion, plus additional services that the Town may choose to provide, such as solid waste collection or Town police protection. The Town may levy a Town tax for urban services they seek to provide “over and above” those offered by the County.

Growth Management Areas

The agreement calls for certain political boundary adjustments, which will increase the land area and population of the Town of Bedford. These are split into three phases. Phase I adjustments were made immediately upon the effective date of reversion with Phases II and III boundary adjustments contingent upon select criteria including the development of a Joint Water and Sewer Authority, which became an entity on July 1, 2013 as well. Phase II adjustments will be fully realized in 2023. Phase III adjustments would be realized after that, dependent upon the nature and timing of development in six designated target areas.

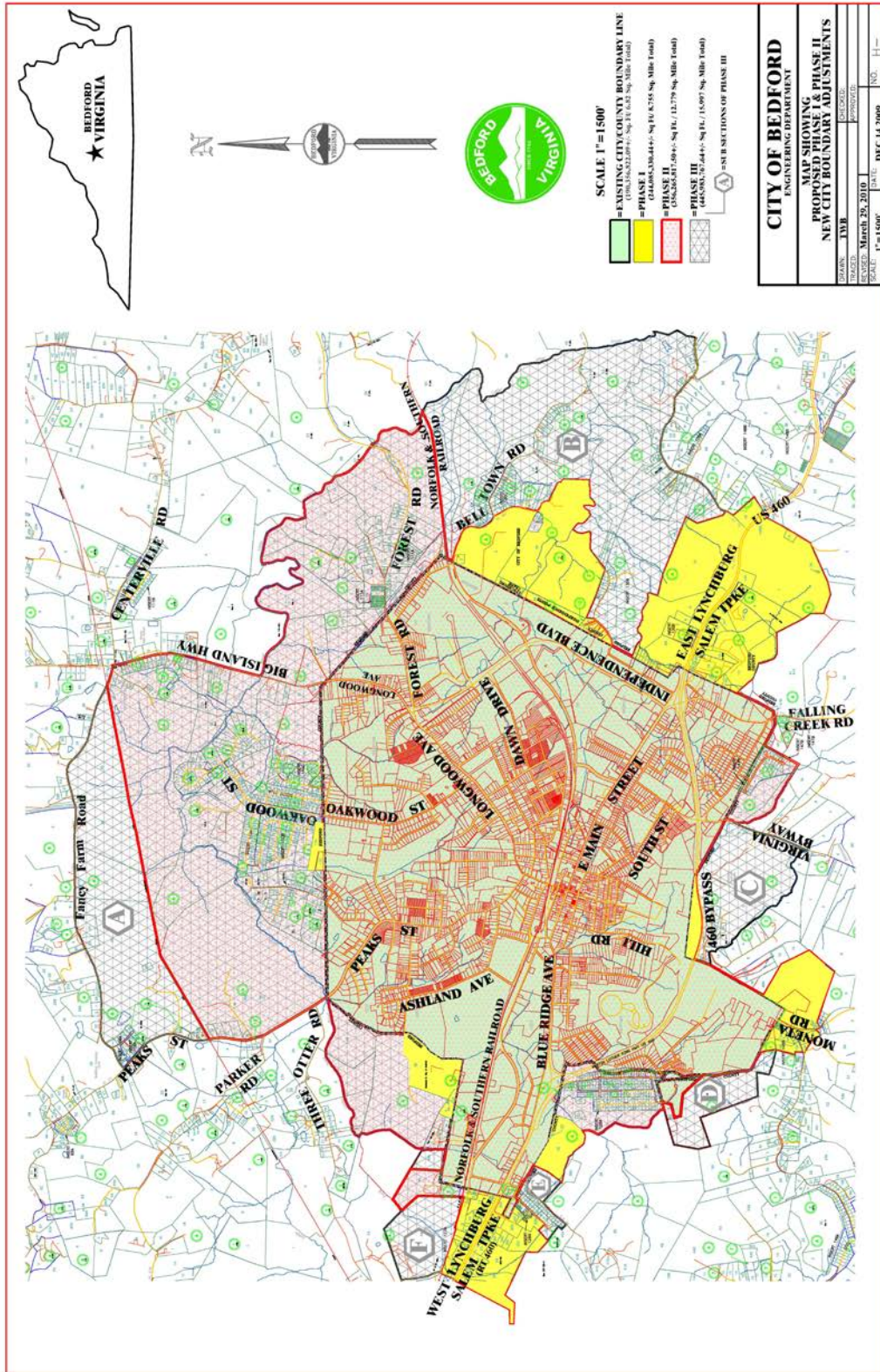
Boundary adjustments for Phases II and III are outlined in Map 15.1 below as “Growth Management Areas”. The Phase II Areas are comprised of areas that are already developed in an urban fashion and additional areas which are likely to develop in the near future and which may all be incorporated into the Town boundaries no later than ten years after the effective date of town status. The Phase III Boundary Adjustment Areas are comprised of six possible urban or suburban development areas that may be incorporated into the Town limits only if and when development occurs.

Urban and suburban growth is to be directed to the Growth Management Areas, as well as within the Town, which grew to include the Phase I areas on the date of reversion. Development in the Growth Areas will be compatible with the density and quality of development within the Town. Land uses within the reversion areas will be subject to those shown on the Future Land Use Map for the Town.

Population

The estimated number of new Town residents included in the Phase I adjustment area is 320 persons (2010 estimate). When the new residents are added with the 2010 Census figure of 6,222, the Town population on July 1, 2013 was estimated at 6,542 people. The number of people estimated to be in the Phase II and III boundary areas is predicated on a number of variables that will be more accurately estimated when either phase occurs.

Map 15.1 Growth Management Areas (from Reversion Agreement)



March 23, 2015

Appendices

Goals, Objectives and Strategies

Consolidated List

Community Character, Design and Aesthetics

Preservation of the scenic beauty, pastoral character, and historic resources of the County

- 3.1 Preservation of prime farmland, agricultural lands, forested lands, and other open spaces that maintain and enhance the County's rural character
 - 3A. **Conservation Subdivisions.** Revise the Zoning Ordinance, Subdivision Ordinance, and other appropriate ordinances to allow conservation subdivisions (clustering) in agricultural, residential and planned districts. In 2013, the County adopted permitting regulations and standards for Cluster Development in agricultural zoning districts.
 - 3B. **Agricultural/Forestal Districts.** Support the development of Agricultural/Forestal districts throughout the County.
 - 3C. **Private/State/Federal Programs.** Encourage rural property owners and farmers to participate in private, State and Federal programs designed to conserve land resources.

- 3.2 Preservation of scenic vistas, viewsheds, and community character along roadways
 - 3B. **Agricultural/Forestal Districts.**
 - 3C. **Private/State/Federal Programs.**
 - 3D. **Historic Registers.** Support and assist property owners in nominating sites to the National Register of Historic Places and the Virginia Landmarks Register.
 - 3E. **Design Guidelines.** Research and evaluate design guidelines for industrial, commercial and large-scale residential uses.

- 3.3 Preservation of historically significant sites and their surrounding areas
 - 3C. **Private/State/Federal Programs.**
 - 3D. **Historic Registers.**
 - 3F. **Local Preservation Districts.** Research and evaluate the development of locally developed and regulated districts for the preservation of historic and cultural properties and sites in the County.

- 3.4 Preservation and enhancement of the distinct identities and character of existing neighborhoods and dwellings that complement the pastoral character of the County
 - 3A. **Conservation Subdivisions.**
 - 3B. **Agricultural/Forestal Districts.**
 - 3C. **Private/State/Federal Programs.**
 - 3D. **Historic Registers.**

- 3G. **Neighborhood Master Planning.** Support neighborhood planning through research and evaluation of tools for the preservation of existing neighborhoods in the County and the creation of neighborhoods in areas of redevelopment and new development.
- 3.5 New development (residential, commercial and industrial) that has visually appealing architectural elements and complements the pastoral character of the County
 - 3C. **Private/State/Federal Programs.**
 - 3E. **Design Guidelines.**
- 3.6 Planned residential and commercial development that is compatible with adjacent and surrounding neighborhoods
 - 3C. **Private/State/Federal Programs.**
 - 3E. **Design Guidelines.**
- 3.7 Revise the Zoning Ordinance to address community character goals and objectives for the County
 - 3A. **Conservation Subdivisions**
 - 3C. **Agricultural/Forestral Districts**
 - 3E. **Design Guidelines.**

Housing

A variety of safe, sanitary and affordable housing for all County residents

- 4.1 A variety of dwelling units in all price ranges
 - 4A. **Design Guidelines.** Research and evaluate design guidelines and standards that provide community enhancing and environmental sensitivity factors for all new large-scale development.
 - 4B. **Zoning Ordinance Revisions.** Revise the Zoning Ordinance to address housing issues including, but not limited to, encouraging workforce and targeted-income affordable housing dwelling units through density bonuses in all residential areas served by adequate infrastructure, and allowing flexibility in the types of housing units allowed in all residential areas served by adequate infrastructure.
 - 4C. **Annual Report.** Staff will provide an annual report to the Planning Commission and Board of Supervisors describing population and housing trends and issues with recommended corrective actions as appropriate.
 - 4D. **Grant Programs.** Utilize grant programs to improve substandard housing conditions and assist residents with low to moderate incomes. Grant requests that do not require County money shall be given preference.

- 4C. **Annual Report.**
- 4D. **Grant Programs.**
- 4E. **Mixed Use Housing.**
- 4F. **Affordable Housing Guidelines.**

Natural Environment

Protection and enhancement of the environmental quality and natural resources of the County

- 5.1 Surface water that meets or exceeds the appropriate state and federal water quantity and quality standards, consistent with the general needs for the County's residents, wildlife and livestock
 - 5A. **Zoning Ordinance Revisions.** Research and revise the Zoning Ordinance to address the County's natural resource goals and objectives.
 - 5B. **Incentives.** Research and propose incentives for landowners to voluntarily protect the natural habitat on their property and maintain and re-establish riparian buffers on the County's streams, creeks, lakes and ponds.
 - 5C. **Low Impact Development (LID) Standards.** Administer and evaluate alternative storm water management solutions, including LID standards to be defined and regulated through code updating and enforcement.

- 5.2 A reliable source of contaminant free ground water to meet the general needs of County residents
 - 5A. **Zoning Ordinance Revisions.**
 - 5D. **Septic Pump-out Program.** Research and implement a voluntary pilot septic pump-out program in the Smith Mountain Lake district in partnership with the County Health Department.
 - 5E. **Groundwater Monitoring.** Research, evaluate and implement a groundwater monitoring program.

- 5.3 Land within the County maintained at a sustainable level to support the native and harvested flora and fauna
 - 5A. **Zoning Ordinance Revisions.**
 - 5C. **Low Impact Development (LID) Standards.**
 - 5F. **Livestock Grazing.** Support appropriate grazing practices to protect wetlands and flowing creeks or creek beds and seek funding and support for landowners to voluntarily implement best management practices where grazing practices are in conflict with preservation of these resources.

- 5.4 Natural and scenic assets of the County shall be preserved
 - 5A. Zoning Ordinance Revisions.**
 - 5G. Dark Sky Initiative.** Research and evaluate a program for protecting rural evening character.

- 5.5 Stable, comprehensive, sustainable populations of native flora and fauna Countywide
 - 5A. Zoning Ordinance Revisions.**
 - 5B. Incentives.**

Transportation

Safe and accessible transportation systems that provide for the effective and efficient movement of people and goods

- 6.1 Roadway improvements that support and enhance the Comprehensive Plan and Future Land Use Map
 - 6A. Transportation Plan.** Develop and adopt a County-wide Transportation Plan with regional links that can include rail and other alternative transportation options based on the densities reflected on the Future Land Use Map.
 - 6B. Bicycle/Pedestrian Plan.** May develop and adopt a County Bicycle and Pedestrian Facilities Plan.
 - 6C. Greenways/Blueways Plan.** May develop an appropriate and achievable County Greenways and Blueways Plan in cooperation and support of the Region 2000 plan.
 - 6D. Impact Fees.** Research and evaluate potential impact fees using a per-unit fiscal impact of development for transportation.
 - 6E. Corridor Studies.** Conduct Corridor Studies that assess the impacts, benefits and overall costs to citizens along the following roadways: Forest Road (Route 221 – Graves Mill Road area), Route 122, Thomas Jefferson Road (Route 811), Perrowville Road (Route 663), and Waterlick Road (Route 622).
 - 6F. Transportation Systems Management Study.** Coordinate with appropriate regional agencies and organizations to conduct a Transportation Systems Management Study to maximize efficiency of the existing transportation system including consideration of public transportation.
 - 6G. Access Management.** Incorporate appropriate access management guidelines into the County’s Zoning Ordinance and Subdivision Ordinance.
 - 6H. Pedestrian Facilities.** Recommend sidewalks/pedestrian facilities in all new industrial, commercial and residential developments.
 - 6I. Alternative Funding Sources.** Identify and pursue alternative funding sources for transportation projects.
 - 6J. Hales Ford Bridge.** Coordinate with VDOT, Franklin County and AEP to expedite the location, design and construction of the Hales Ford Bridge expansion/replacement.

- 6K. **Bedford Ride.** Evaluate impact and appropriately support Bedford Ride and other similar programs that provide transportation to the elderly and other at-risk populations within the County.
 - 6L. **Scenic By-ways.** Identify and nominate County roads to the scenic byway program such as Rte 122 between Bedford City and Big Island.

- 6.2 Existing transportation facilities maintained and/or improved to meet increased demand and economic development opportunities
 - 6A. **Transportation Plan.**
 - 6B. **Bicycle/Pedestrian Plan.**
 - 6C. **Greenways/Blueways Plan.**
 - 6D. **Proffer Guidelines.**
 - 6E. **Corridor Studies.**
 - 6F. **Transportation Systems Management Study.**
 - 6G. **Access Management.**
 - 6H. **Pedestrian Facilities.**
 - 6I. **Alternative Funding Sources.**
 - 6J. **Hales Ford Bridge.**
 - 6K. **Bedford Ride.**
 - 6L. **Scenic By-ways.**

- 6.3 Appropriate through and local connector transportation infrastructure
 - 6A. **Transportation Plan.**
 - 6D. **Proffer Guidelines.**
 - 6E. **Corridor Studies.**
 - 6G. **Access Management.**
 - 6H. **Pedestrian Facilities.**
 - 6I. **Alternative Funding Sources.**

- 6.4 Opportunities for greater use of the County and region's rail and airport facilities
 - 6A. **Transportation Plan.**
 - 6D. **Proffer Guidelines.**
 - 6I. **Alternative Funding Sources.**

- 6.5 Targeted mixed-use development areas with pedestrian facilities that decrease the need for motorized transportation
 - 6A. **Transportation Plan.**
 - 6B. **Bicycle/Pedestrian Plan.**
 - 6C. **Greenways/Blueways Plan.**
 - 6H. **Pedestrian Facilities.**

- 6.6 Transportation programs for the elderly, handicapped and indigent populations
 - 6A. Transportation Plan.**
 - 6B. Bicycle/Pedestrian Plan.**
 - 6H. Pedestrian Facilities.**
 - 6I. Alternative Funding Sources.**
 - 6K. Bedford Ride.**

- 6.7 Bikeway and pedestrian access between and within targeted developed areas of the County
 - 6A. Transportation Plan.**
 - 6B. Bicycle/Pedestrian Plan.**
 - 6C. Greenways/Blueways Plan.**
 - 6D. Proffer Guidelines.**
 - 6E. Corridor Studies.**
 - 6H. Pedestrian Facilities.**
 - 6I. Alternative Funding Sources.**

- 6.8 Improved public access to and around Smith Mountain Lake
 - 6A. Transportation Plan.**
 - 6B. Bicycle/Pedestrian Plan.**
 - 6C. Greenways/Blueways Plan.**
 - 6D. Proffer Guidelines.**
 - 6E. Corridor Studies.**
 - 6F. Transportation Systems Management Study.**
 - 6G. Access Management.**
 - 6H. Pedestrian Facilities.**
 - 6I. Alternative Funding Sources.**
 - 6J. Hales Ford Bridge.**
 - 6M. Tourist Facilities.** Support the development of tourism infrastructure, such as hotels and other facilities necessary to attract and serve tourist.

Utilities

Quality public utility systems and services that support the County's planned land use

- 7.1 Public water and sewer facilities located in areas of high population density/growth areas
 - 7A. Water and Sewer Master Plans and Amendments.** Amend and adopt the Water and Sewer Master Plan based on the land uses designated on the County's Future Land Use Map.
 - 7B. Water and Sewer Hookups.** Restrict water and sewer hookups to designated service and growth areas.

- 7C. **Agricultural/Rural Residential Areas.** Severely limit hookups to public water and sewer lines in agricultural and rural residential areas where transmission lines exist only to transfer service from the treatment source to the intended service area(s) to prevent sprawl and undesired subdivision development.
 - 7D. **Capital Improvements Program.** Continue to incorporate and fund water and sewer projects into the County's Capital Improvements Program.
- 7.2 Public water and sewer facilities strategically developed and constructed in a fiscally sound manner
- 7A. **Water and Sewer Master Plans and Amendments.**
 - 7D. **Capital Improvements Program.**
- 7.3 Adequate availability of drinking water sources
- 7A. **Water and Sewer Master Plans and Amendments.**
 - 7E. **Zoning Ordinance Revisions.** Revise the Zoning Ordinance to address utility issues including, but not limited to, protecting drinking reservoirs.
 - 7F. **Septic Pump-out Program.** Develop and regulate a voluntary pilot septic pump-out program in cooperation with the BCPSA targeting the Smith Mountain Lake district.
 - 7G. **Groundwater Monitoring.** Facilitate a groundwater monitoring program. Review finding and take action based on results from program.
 - 7H. **Wellhead Protection.** Continue and support the wellhead protection program within the County through education and voluntary inspection of private and public well facilities.
- 7.4 Improved or expanded utility services (electricity, natural gas, propane, cable television, internet access, fiber optics, etc.) that meet the general needs of County residents and businesses
- 7I. **Broadband Committee.** Continue to support a committee to study improving high-speed Internet service as a basic utility and economic development tool throughout the County.

Economic Development

A healthy, diversified economy that is environmentally sensitive and results in business opportunities and quality jobs

- 8.1 Business retention, business expansion, and growth in new businesses
- 8A. Economic Development Authority Strategic Plan.** Keep the Economic Development Master Plan (“EDA Strategic Plan”) up-to-date with specific new business, employment, and County net income targets, and report achievements, shortfalls, corrective actions and revised targets to the Board of Supervisors.
 - 8B. Target Market Plan.** Maintain an up-to-date Target Market Plan which includes categories of desired business categories with specific site and infrastructure requirements. Integrate the plan into the overall Economic Development Master Plan and aggressively market to the defined segments.
 - 8C. Information Program.** Maintain an up-to-date information program that will include a listing of all incentives available from local, state and federal sources for attracting and retaining employers.
 - 8D. Existing Business Program.** Maintain Existing Business Program to initiate action plans to address developing problems, issues, and needs.
 - 8E. Regional/State Programs.** Implement business recruitment activities in cooperation with regional and state economic development programs.
 - 8F. Agricultural Economic Development.** Consider growth and preservation of agricultural and farm lands, and natural areas as economic development opportunities, and develop plans and incentives for increasing agricultural economic development and eco-tourism.
 - 8G. Tourist Facilities.** Support the development of tourism infrastructure, such as hotels and other facilities necessary to attract and serve tourist.
- 8.2 Commercial/industrial development that is consistent with the preservation of the scenic beauty, pastoral character, and historic resources of the County
- 8A. Economic Development Authority Strategic Plan.**
 - 8B. Target Market Plan.**
 - 8E. Regional/State Programs.**
 - 8F. Agricultural Economic Development.**
- 8.3 Priority given to infrastructure (roads, water, sewer, fiber optic networks, etc.) in areas designated for future industrial and commercial development
- 8E. Regional/State Programs.**
- 8.4 Commercial and industrial development that provides employment for local workers at a pay scale that results in family-supporting wages and benefits, provides a balanced mixture of goods and services, and produces recurring net incomes

- 8A. **Economic Development Authority Strategic Plan.**
 - 8B. **Target Market Plan.**

 - 8C. **Information Program.**
 - 8D. **Existing Business Program.**
 - 8E. **Regional/State Programs.**
 - 8H. **Labor Force Monitoring.** Identify and monitor any shortages or gaps in the available labor pool and implement corrective action with area educational institutions, workforce services, and the private sector, as appropriate.
- 8.5 A work force that is of the quantity and quality that will readily attract and retain quality employers
- 8A. **Economic Development Authority Strategic Plan.**
 - 8B. **Target Market Plan.**
 - 8C. **Information Program.**
 - 8D. **Existing Business Program.**
 - 8H. **Labor Force Monitoring.**
- 8.6 Tourism/travel related development which complements the rural, scenic, and historic qualities of the County
- 8A. **Economic Development Authority Strategic Plan.**
 - 8B. **Target Market Plan.**
 - 8D. **Existing Business Program.**
 - 8F. **Agricultural Economic Development.**
 - 8G. **Tourist Facilities.**
- 8.7 Agricultural and equine industries remain vital elements of the County’s economy
- 8A. **Economic Development Authority Strategic Plan.**
 - 8B. **Target Market Plan.**
 - 8C. **Information Program.**
 - 8D. **Existing Business Program.**
 - 8F. **Agricultural Economic Development.**

Land Use

An orderly, efficient, and compatible growth and land use pattern that is sensitive to the natural environment

- 9.1 Future development directed to areas already or proposed to be served with adequate public facilities that is compatible with and sensitive to the natural environment

- 9A. **Future Land Use Map.** Review on an annual basis for possible amendments taking into consideration the Budget, CIP, and other factors. Coordinate master plans for public facilities with the FLUM.
- 9B. **Capital Improvements Program.** Develop a Capital Improvements Program (CIP) that identifies and funds future service needs in areas designated for development.
- 9C. **Service Areas.** Clarify in the Comprehensive Plan, Water & Sewer Master Plan, Zoning Ordinance, Subdivision Ordinance and PSA guidelines, that agricultural and rural residential areas where utility lines cross to provide service to targeted development areas are not appropriate access points for these utilities.
- 9D. **Infill Development.** Encourage and develop incentives to have infill development take place in the County's growth areas.
- 9E. **Area Plans.** Develop Area Plans for mixed use areas on the FLUM including Big Island, Moneta, Goode, Glenwood, Stewartsville, and Montvale.

9.2 Preservation of farmland, forested land, open space, and rural character

- 9A. **Future Land Use Map.**
- 9C. **Service Areas.**
- 9D. **Infill Development.**
- 9F. **Agricultural Economic Development.** Consider growth and preservation of agricultural and farm lands, and natural areas as economic development opportunities, and develop plans and incentives for increasing agricultural economic development and eco-tourism.
- 9G. **Zoning Ordinance Revisions.** Revise the Zoning Ordinance to address land use issues including, but not limited to, decreasing densities as indicated by the FLUM, allowing conservation subdivisions (clustering), allowing Low Impact Development (LID) concepts, preserving trees and existing vegetation in developments, and increasing landscaping and buffer standards.
- 9H. **Subdivision Ordinance Revisions.** Revise the Subdivision Ordinance to address land use issues including, but not limited to, promotion of conservation subdivisions and Low Impact Development (LID) concepts, and preserving trees and existing vegetation in developments.
- 9I. **Agricultural/Forestral Districts.** Support the development of Agricultural/Forestral districts throughout the County.
- 9J. **Land Use Assessment Taxation.** Continue the County's Land Use Assessment Taxation program for agricultural, horticultural, forest or open space uses.

9.3 Well designed subdivisions, centers, and parks with a minimum impact on the environment

- 9A. **Future Land Use Map.**
- 9B. **Capital Improvements Program.**

- 9D. **Infill Development.**
 - 9G. **Zoning Ordinance Revisions.**
 - 9H. **Subdivision Ordinance Revisions.**
- 9.4 Commercial and industrial development compatible with existing and planned residential development
- 9A. **Future Land Use Map.**
 - 9E. **Area Plans.**
- 9.5 Develop a process for each new development to pay its fair-share of the costs associated with the increased demand on existing public facilities and services
- 9K. **Impact Fees.** Research and evaluate potential impact fees using a per-unit fiscal impact of development in the County.
 - 9L. **Fiscal Impact Analysis/Assessment.** Develop a Fiscal Impact Analysis/Assessment model to utilize in reviewing development proposals.
- 9.6 Plans and policies coordinated with the City of Bedford and adjacent jurisdictions
- 9A. **Future Land Use Map.**
 - 9B. **Capital Improvements Program.**
 - 9M. **Regional Meetings.** Participate and/or conduct meetings with adjacent cities, towns, and counties on a regular basis.

Education

Exceptional educational programs for all citizens in facilities that enhance the learning process

- 10.1 High quality education opportunities for all County residents
- 10A. **Pockets of Need.** Research and evaluate “pockets” of need, (in terms of people and programs) and take educational opportunities to them so as to provide learning opportunities at locations and times that effectively meet the needs of non-traditional students.
 - 10B. **Multi-generational Learning.** Support educational opportunities for citizens and students to engage in learning opportunities together around local issues, history, and legacy.
 - 10C. **Personalized Learning.** Create personalized learning experiences for all citizens. Provide citizens the ability to master learning at their own pace, utilizing technology to improve quality and access to advanced educational software.
 - 10D. **Public Schools Strategic Plan and Amendments.** Support the Bedford County Public Schools Strategic Plan’s mission/vision, goals, measurable objectives and strategies for learning.

- 10.2 Shared community facilities by government agencies and/or private sector organizations
- 10E. Building Program.** Develop a building program plan for Bedford County that matches Land Use/Zoning Regulations and is consistent with growth patterns.
 - 10F. Building Inventory.** Maintain an inventory of buildings in the County that are empty, may become empty, are in single or multiple use, and have possibilities for use as places of learning.
 - 10G. Public/Private Use.** As plans for new school facilities are developed, incorporate space that will be leased to appropriate private or public use.
 - 10H. Capital Improvements Program.** Incorporate and fund education projects into the County's Capital Improvements Program (CIP).
- 10.3 Facilities located in areas of high population density/growth areas consistent with land use mapping and the Zoning Ordinance
- 10E. Building Program.**
 - 10H. Capital Improvements Program.**
 - 10I. Impact Fees.** Research and evaluate potential impact fees using a per-unit fiscal impact of development in the County.

Public Safety and Community Services

Public safety and community facilities and programs that provide coordinated fire protection, police protection, rescue services, and emergency preparedness, as well as health and human service needs of the residents of the County

- 11.1 Properly trained personnel to respond to public safety events in a prompt and effective manner
- 11A. Fire & Rescue Master Plan and Amendments.** Amend and incorporate the recommendations of the Fire & Rescue Master Plan into the County's Comprehensive Plan.
 - 11B. Federal/State Grants.** Optimize the use of Federal and State grant monies to offset local cost of service provision.
 - 11C. Staffing/Training Plan.** Establish and implement a staffing and training plan for volunteer and paid fire, rescue and emergency services personnel.
 - 11D. Reporting.** The County's Fire & Rescue Operations Department will continue to report at least annually to the Board of Supervisors on the adequacies, needs and shortfalls of each of the County's fire & rescue departments, including recommendations for improvement.
 - 11E. Impact Assessment.** As determined and requested by the Department of Community Development, the County's Fire & Rescue Department shall provide an impact assessment for each proposed residential and commercial/industrial project.

- 11F. Level of Service.** Determine acceptable levels of call volume/service and target response times as well as necessary health and preventative care levels to evaluate adequacy of service delivery.
- 11.2 Facilities and equipment that enable the prompt and effective response to public safety events
 - 11A. Fire & Rescue Master Plan and Amendments.**
 - 11B. Federal/State Grants.**
 - 11D. Reporting.**
 - 11E. Impact Assessment.**
 - 11F. Level of Service.**
 - 11G. Capital Improvements Program.** Incorporate needed public safety and community services facilities, equipment and services in areas designated for development into the County's Capital Improvements Program (CIP).
- 11.3 Coordinated response programs that ensure the prompt and effective response to public safety events
 - 11A. Fire & Rescue Master Plan and Amendments.**
 - 11B. Federal/State Grants.**
 - 11C. Staffing/Training Plan.**
 - 11D. Reporting.**
 - 11E. Impact Assessment.**
 - 11F. Level of Service.**
 - 11H. Hazard Mitigation Planning.** Update and evaluate hazard mitigation plan in coordination with appropriate regional and state agencies to address deficiencies and necessary program improvements.
- 11.4 Preventive measures that reduce the likelihood of public safety and personal health emergencies
 - 11A. Fire & Rescue Master Plan and Amendments.**
 - 11B. Federal/State Grants.**
 - 11D. Reporting.**
 - 11E. Impact Assessment.**
 - 11F. Level of Service.**
 - 11H. Hazard Mitigation Planning.**
 - 11I. Fire Prevention Code.** Explore adopting the Statewide Fire Prevention Code.

11.5 Adaptive and shared use/reuse of community facilities by two or more agencies

11F. Level of Service.

11G. Capital Improvements Program.

11J. Walking Facilities. Plan joint community facilities with walking facilities in order to utilize land to promote health.

11K. Facility Coordination. Coordinate facilities and services with Parks and Recreation facilities.

11L. Regional Cooperation. Explore regional cooperation and sharing of buildings with adjacent jurisdictions.

11M. Existing Buildings. Explore utilizing existing vacant buildings as a first option to building new facilities.

Other Strategies:

11N. Annual Meeting. Schedule an annual meeting between the Board of Supervisors and the Bedford County Welfare Board and the Director of the Health Dept. to review trends and future directions.

11O. Adult Services Center. Investigate establishing an Adult Services Center modeled after the No Wrong Door program.

Parks and Recreation

A system of parks and recreation facilities and programs that provide for and promote healthful and appropriate leisure desires of residents and attract visitors to the County

12.1 Parks and recreational facilities for citizens of all ages, economic standing and physical ability without compromising the quality of the resource

12A. Accessibility Plan. Develop a plan to ensure that existing and new facilities are accessible to all Bedford County citizens, with special attention to the needs of differently-abled residents, by meeting the accessibility standards under the Americans with Disabilities Act (ADA).

12B. Community Pathways. Explore creation of community-wide pathways, greenways, and linear parks that link targeted parks, schools, waterbodies, open space, cultural centers and trails in a safe and efficient manner.

12C. Park Planning. Plan parks and recreational facilities in conjunction with other public and private facilities. Plan community facilities with the capability of adaptive and shared use/reuse by two or more governmental, private and non-profit agencies.

12D. Multi-modal Access. Evaluate availability of multiple modes of transportation for most needed and desired community services and facilities.

12E. Capital Improvements Program. Incorporate and fund park and recreation projects into the County's Capital Improvements Program (CIP).

12F. Proffer Guidelines. Develop proffer guidelines which incorporates the per-unit fiscal impact of development for parks and recreation.

- 12G. Greenway System.** Research and evaluate targeted streamways, natural resources and other environmentally-sensitive areas to develop an appropriate community-wide greenway system.
 - 12H. School Facilities.** Maximize the partnership with the Bedford County Schools' system in order to expand the opportunities to enhance community use of school assets when they are not being used for their primary mission of education.
 - 12I. Recreational Programs.** Develop recreational programs that maximize the use of recreational outdoor facilities available at the public school and public parks.
 - 12J. Parks and Recreation Master Plan.** Require timely updates to the County's Parks and Recreation Master Plan to allow for a clear echoing of the values and priorities that residents place on diverse leisure opportunities while recognizing economic and resource constraints.
- 12.2 Expansion of park and recreation facilities coordinated with other public and private agencies
- 12C. Park Planning.**
 - 12E. Capital Improvements Program.**
 - 12F. Proffer Guidelines.**
 - 12H. School Facilities.**
 - 12I. Recreational Programs.**
 - 12J. Parks and Recreation Master Plan.**
 - 12K. Parks in New Developments.** Encourage the inclusion of private provisions for recreation and open space in new developments.
 - 12L. Facility Expansion.** Give priority to expanding facility units and activity types at existing County owned locations when deemed appropriate and practical. Coordinate expansion of recreation facilities with the County's Comprehensive Plan such that facilities and residential development coincide.
 - 12M. Public/Private Activities.** Plan community facilities, activities and programs that can be organized, funded and shared by public, private and non-profit sectors. Work with local organizations to coordinate and sponsor special events, including festivals and concerts.
 - 12N. Land Acquisition Policy.** Research and evaluate a land acquisition policy that establishes criteria for evaluating acquisition opportunities and strategies for acquiring critical parcels of public space.
 - 12O. Easements.** Support easements where appropriate to establish or connect trails or to protect open space, heritage resources, scenic vistas, environmentally sensitive resources, and park and recreation facilities. Protect public parkland and lands already under easement by encouraging easements on adjoining properties. Favor the use of easements for the linking of natural areas and parks, the preservation of wildlife corridors and other environmentally sensitive areas such as land associated with the James River and its tributary streams, Smith Mountain Lake and other surface water resources.

12.3 Park and recreational facilities which take into consideration existing and planned facilities, natural resources and existing and future residential developments

12C. Park Planning.

12G. Greenway System.

12H. School Facilities.

12J. Parks and Recreation Master Plan.

12L. Parks in New Developments.

12M. Facility Expansion.

12P. Easements.

12Q. Property Evaluation Program. Establish a program for the evaluation of properties that have potential as suitable sites for public use as access points to waterways, natural areas and scenic and historic sites.

12R. Natural Resources. Seek funding for the development of a County-wide database and rating program of natural resources.

12S. Recreational Programs. Develop recreational programs that maximize the use of recreational outdoor facilities available at the public school and public parks.

12T. Development Impacts. Consider the location and the possible impact(s) upon the County's parks and recreation facilities, and other associated assets, as growth and development impact the County.

Solid Waste

An efficient, safe, sanitary and comprehensive system of solid waste collection, disposal, and recycling facilities and programs

13.1 Increased landfill density and prolonged landfill life

13A. Solid Waste Management Plan. Review and update annually the Solid Waste Management Plan, including revenue-generating targets. Report annually to the Board of Supervisors the results of the years efforts compared to the Plan.

13B. Telephone Hot-Line. Implement a telephone hot-line for citizens to report violations, inadequate facilities and health/safety issues.

13C. Program Development. Develop programs to address specific needs/issues in brush, leaf, and hazardous waste disposal.

13D. Public Information. Develop a public information and awareness program through the media, schools, citizens groups and private industry.

- 13E. Adopt-A-Highway Program.** Revitalize the County’s Adopt-A-Highway program and develop specific road targets for implementation.
- 13F. Capital Improvements Program.** Incorporate and fund solid waste projects into the County’s Capital Improvements Program.
- 13G. Impact Fees.** Research and evaluate potential impact fees using a per-unit fiscal impact of development for solid waste

13.2 Reasonable access to waste collection sites

- 13A. Solid Waste Management Plan.**
- 13F. Capital Improvements Program.**
- 13G. Impact Fees.**
- 13H. Convenience Sites.** Provide additional convenience sites or expand existing sites and services to handle increasing volumes in high-growth areas and areas that experience seasonal increases in population.
- 13I. Land Acquisition.** Develop a future land purchase or leasing plan for siting disposal facilities in high growth areas
- 13J. Program Development.** Develop programs to address specific needs/issues in brush, leaf, and hazardous waste disposal.
- 13K. Automated Compactors.** Develop plans to convert all satellite collection sites to automated compactors.
- 13L. Screening.** Ensure that all satellite disposal sites are adequately positioned and screened from public view and do not adversely impact adjacent of surrounding properties.
- 13M. Visitors/Tourists.** Encourage proper trash disposal and recycling by visitors and tourists.

13.3 Self-supporting solid waste system

- 13A. Solid Waste Management Plan.**
- 13N. Regional/Private Sector Options.** Continually evaluate regional and private sector options and feasibility for waste collection and disposal; and recommend alternates as appropriate.

Glossary

The following definitions are relevant to the use of the specific terms and concepts in this document. If a term is not included here, then the conventionally-understood definition is to be used.

Act for the Special Assessment for Land Use Preservation – Virginia Code Section 58.1-3229 et seq. permits a locality to adopt a program of preferential treatment for lands devoted to agricultural, horticultural, forestry, and open space uses.

Accessibility – facilities and programs that provide information and location access to citizens by taking into account varying physical, economic, and educational abilities of the population.

Adopt-a-Highway Program - The Adopt-a-Highway program is an anti-litter and roadside clean up campaign intended to promote pride and local ownership in the locality. Signs are located on roadways statewide, recognizing the volunteers that spend time picking up litter on the roadside.

Adult Services Center – A local resource where individuals can turn for information on the full range of long-term support options and entry to public long-term support programs and benefits for adult health and human services (See No Wrong Door Program).

Affordable Housing – housing and the associated costs (including utilities, taxes, and maintenance) no greater than 30 percent of the occupant’s gross income.

Agricultural and Forestal Districts (AFD) – a tax relief district established to promote the preservation, protection, and improvement of agricultural and forestal lands for the production of food and other products.

Alley – a narrow service street, not intended for heavy traffic, but specifically for access to adjacent businesses or homes.

Alternative Transportation – transportation by means other than automobile-based; walking, riding a bike, or taking the bus, for example.

American Association of Retired Persons (AARP) – a nonprofit, nonpartisan membership organization for people 50 and over.

Americans With Disabilities Act (ADA) – provides civil rights protections to individuals with disabilities and guarantees them equal opportunity in public accommodations, employment, transportation, state and local government services, and telecommunications. (1990)

Arterial Streets – roads that connect outer suburban communities with the central part of a community.

Best Management Practices (BMPs) – land management technique designed to reduce non-point source pollution inputs into receiving waters to improve water quality; actions, which are required by law, to keep soil and other pollutants out of streams and lakes to protect water quality and to prevent new pollution.

- Blueway – A system of water trails along rivers and lakes that combine recreation and environmental awareness, allowing users to travel between access points, camping and enjoyment of land-based attractions in the vicinity.
- Broadband – high speed, digital data communications. Requires special digital telephone lines.
- Buffer – a physical barrier or designated open space that moderates the influence that one land use has on another land use. Can apply to riparian areas as well.
- Capital Improvements Plan (CIP) – five- to ten-year plans that show where facilities (such as roads and schools) will be provided; allows local governments to match their capital expenditures with development needs and to guide development to intended areas.
- Cluster Development – A residential subdivision grouped together on smaller lots to create expanses of common open space and to preserve steep slopes, floodplains, and other environmentally sensitive areas. Also called “compact development”.
- Co-location – the use, or construction, of a structure that accommodates more than one telecommunication or broadcasting facility such as antennas or other sending/receiving equipment.
- Collector Streets – roads designed to carry moderate flows of traffic from between arterial streets and local roads.
- Community Pathways - surface area designed for multi-purpose uses, for example, bikes and pedestrians,
- Comprehensive Plan – the document that localities are legally required to produce, according to law, outlining policies the locality plans to implement to achieve a future state or vision related to growth, public services, infrastructure, etc.
- Conservation Subdivision – offers the full development potential of a parcel while minimizing environmental impacts and protecting desirable open spaces. The developed portion of the parcel is concentrated on those areas most suitable for development, such as upland areas or areas with well-drained soils. The undeveloped portion of a conservation subdivision can include such ecologically or culturally-rich areas as wetlands, forest land, agricultural land/buildings, historical or archeological resources, riparian zones (vegetated waterway buffers), wildlife habitat, and scenic viewsheds.
- Conservation Easements – a non-possessory interest in real property imposing limitations or affirmative obligations, the purposes of which include retaining or protecting natural, scenic or open space values of real property; assuring the availability of the property for agricultural use, protecting natural resources, or maintaining air or water quality.
- Contributing Structure – a site that is designated as significant; it is at least 50 years old and reflects the historic, cultural, or archaeological features of the Town, or region.

Convenience Sites – locations throughout the County that provide waste collection for residents.

Cost-Share Program – a public / private venture by which the County provides the equipment, labor, and professional services and the private entity provides funding for the material cost.

Cul-de-sac – street or passage open at only one end; blind alley. Generally found in suburban style residential areas and designed to eliminate through traffic.

Dark Sky Policies – compliance practices that reduce glare and light pollution to eliminate wasted energy involving exterior lighting. For example, lights are set to glare down rather than up.

Density bonuses – allocation of development rights that allow a parcel or tract of land to accommodate additional building square footage or additional residential units beyond the maximum for which the tract of land is zoned. These are usually in exchange for the provision or preservation of an amenity at the same site or at another location.

Design Guidelines – coordinate and orchestrate the overall development of the locality, so that projects and developments mutually support a character and vision for the area. This may include commercial and residential guidelines for new large-scale developments that are mindful of the rural character and lifestyle goals of neighborhoods, districts, and critical features of the area.

Distance Learning – an educational program where a field of expertise is pursued in which the learner and the teacher are separated in time, space or both.

Dwelling Unit – a room or group of connected rooms containing cooking, bathroom and sleeping facilities, constituting a separate, independent housekeeping unit, physically separated from any other dwelling unit in the same structure. Examples include houses, apartments, townhouses, duplexes, etc.

Easement – an interest in real property that is held by someone other than the property owner, which limits all or part of the property to a specific use or condition.

Education Committee – a coordinated group of educational administrators, teachers, parents, and representatives of private industry developed to monitor the public education’s programs as they relate to the needs of the students of the system and the employers in the area.

Fiber-Optic Technology – strands of glass, yet stronger than steel designed to carry vast amounts of data that can be transmitted by means of light-tightly focused laser beams.

Fiscal Impact Analysis or Assessment – “a projection of the direct, current, public costs and revenues associated with residential or nonresidential growth to the local jurisdiction(s) in which this growth is taking place”¹

¹ Burchell and Listokin.

Fiscal Year – an accounting period of any twelve months as established by the locality (October 1st to September 30th, April 1st to March 31st, July 1st to June 30th, etc.)

Floodplain, Natural – relatively flat land adjoining a river, creek, or stream subject to regular flooding.

Floodproofing – any combination of structural and nonstructural additions, changes, or adjustments to structures that reduce or eliminate flood damage to real estate or improved real property, water and sanitary facilities, structures and their contents.

Floor area – The gross floor area is the sum of the horizontal areas of the several stories of a building, measured from the exterior faces of exterior walls, or in the case of a common wall separating two buildings, from the centerline of such common wall. Gross floor area excludes basements and attics.

Future Land Use Map (FLUM) – a generalized map of a locality that supports and visually represents the goals, objectives and general themes of the comprehensive plan.

Gateways – entrances into a community or specific areas of a community typically along major transportation corridors.

Geographic Information Systems (GIS) – A system for creating, storing, analyzing, and managing spatial data and associated attributes..

Grandfather Clause – provisions made in the zoning ordinance that allows nonconforming uses to continue legally if they were in effect prior to the passage of laws which then prohibit the use.

Grass Pavers – a somewhat pervious surface of pavement material that is designed to allow grass to grow up and through the pavement surface. They can significantly reduce water runoff. Brick and concrete are the most common materials used as grass pavers.

Green Infrastructure – an interconnected network of waterways, wetlands, woodlands, wildlife habitats, greenways, parks, conservation lands, working farms and other open space areas that supports native species, maintains natural ecological processes, sustains air and water resources and contributes to the health and quality of life for communities and people.

Greenway – linear stretches of open space that is used as public or private spaces, usually in the form of parks or trails. Serve as environmental buffers as well.

Groundwater – underground water that feeds stream base flows, wells and springs.

Hazard Mitigation Planning – advance planning to protect against natural and manmade hazards that includes sustained action taken to reduce or eliminate long-term risk to life and property.

Historic District – a collection of sites, structures, and landmarks that are of unique architectural, historic and cultural significance to the Town, Commonwealth, or Nation.

Historic Overlay District – a zoning classification applied to an existing Historic District where specific design guidelines are developed and a public review process established to regulate alterations to the character of the Historic District.

The National Register of Historic Places – the Nation's official list of cultural resources worthy of preservation. Authorized under the National Historic Preservation Act of 1966, the National Register is part of a national program to coordinate and support public and private efforts to identify, evaluate, and protect our historic and archeological resources. Properties listed in the Register include districts, sites, buildings, structures, and objects that are significant in American history, architecture, archeology, engineering, and culture.

Homeowners' Association – a nonprofit organization governed by its own bylaws, operating by land agreements generally through a specific subdivision. Each lot is subject to an automatic charge for a proportionate share of the expenses for the organization's activities, which, if unpaid, become a lien against the property.

Housing Stock – conditional principles of housing in a community (i.e., cost, age, current condition, conformance to surrounding areas, etc.).

Impervious Surface – surface that water is not able to pass through, such as asphalt in a parking lot and roofs.

Infill Development – the practice of building homes, businesses, and public facilities on unused and underutilized lands within existing developed areas; development or redevelopment of land that has been bypassed, remained vacant, and/or is underused as a result of the continuing urban development process.

Infiltration – pass through by a filtering process.

Infrastructure – basic facilities such as roads, schools, power plants, transmission lines, and transportation and communications systems on which the continuance and growth of a community depends.

Internet – the network of computer networks around the world, it is growing by leaps and bounds. There are many sources and providers of information on the "Net", and almost as many ways to access them.

Karst Terrain – areas that are underlain by soluble carbonate rock, such as limestone or dolomite. These areas are susceptible to dissolution that can result in sinkholes, caves, and underground streams.

Land Banking Funds – appropriations for the purchase of land by a local government for use or resale at a later date.

Land Use Intensity – how differing types of development impact a community.

Levels of Service – an accepted measured quality and quantity of public services. For example, there are nationally accepted levels of service grades, A, B, C, D & F for signalized intersections that engineers use to describe how well the intersection operates at given time by measuring the number of minutes and/or the number of light cycles it takes to drive through a particular intersection.

Light Pollution – unwanted light that occurs as a result of lighting parking lots, etc.

Local Preservation District – locally controlled and regulated system of preserving and supporting identified cultural and historic properties and areas.

Local Streets – residential streets, not intended for heavy traffic flows.

Lot – parcel of land owned separately, and independently.

Lot Coverage – the portion of a lot that is covered by any building or structure, parking and loading areas, or any other impervious surface.

Lot, Depth of – average horizontal distance between front and rear lot lines.

Low Impact Development Standards (LIDS) – an innovative stormwater management approach with a basic principle to manage rainfall at the source using uniformly distributed decentralized micro-scale controls. The goal is to mimic a site's predevelopment hydrology by using design techniques that infiltrate, filter, store, evaporate, and detain runoff close to its source.

Low-Moderate Income (LMI) – households earning at least the full-time minimum wage (nationally \$10,712) up to 120% of the local area median income

Management of Development Rights (MDR) – general guidelines for the promotion of good land use management and preservation practices (See also Transfer and Purchase of Development Rights).

Master Plan – conceptual plan or projected progress indicating interrelationships between uses and facilities on a development site or within an established neighborhood that sets goals, objectives and/or development staging plans, which may be adopted by an institution, business, neighborhood association, or other organization.

Manufactured Housing – a structure, transportable in one or more sections, which in the traveling mode is 8 body feet or more in width or 40 body feet or more in length, or, when erected on site, is 320 or more square feet, and which is built on a permanent chassis and designed to be used as a dwelling with or without a permanent foundation. Manufactured homes are built in accordance with Federal standards known as the HUD Code, and include mobile homes, park trailers, travel trailers, and similar structures. Modular Homes are not a type of Manufactured Housing and are regulated differently.

Median Family Income – income level at which 50% of families earn more and 50% of families earn less than this income.

Mixed Use – development or structure containing more than one type of use; i.e. a combination of residential, commercial, and recreational uses in a development or area designed for the integrated uses by both residents and outside users of the facilities and businesses.

Mobile Home – see Manufactured Housing

Multifamily Development – housing unit that provides accommodations for three or more (families) housing units.

Multi-Modal – more than one mode of transportation at a location. A bus stop and a train stop, for example could be located at the same city intersection.

No Wrong Door Program –The program is designed to have Resource Centers in every community serving as highly visible and trusted places where individuals can turn for information on the full range of long-term support options and entry to public long-term support programs and benefits for adult health and human services.

Nonattainment – the condition of not achieving a desired or required level of performance or quality; often in reference to environmental factors such as air and water quality.

Non-point Source Pollution – pollution that cannot be attributed to a specific industry thus not susceptible to monitoring and regulation; this include such things as chemical runoff from a parking lot.

Occupancy – the period during which one owns, rents, uses, or occupies a certain premises or land. Often refers to the number of persons allowed by law to live in a dwelling unit.

Open Space – land and water areas retained for use as active or passive recreation areas or for resource protection in an essentially undeveloped state.

Overlay District – a district established by ordinance in order to prescribe special regulations to be applied to a site in combination with the underlying or base district.

Planned Unit Development (PUD) – planned development that allows more leeway in the application of the zoning ordinance to a tract of land (may allow mixed uses, flexibility of development standards, etc.).

Population Density – the number of persons living in a given geographic area such as a town, neighborhood, or locality. This statistic is usually given in terms of persons per square mile.

Porous – full of pores through which liquids, light, or air can pass. Sandstone is a porous rock and can therefore absorb water well.

Proffer – a developer provides public services in exchange for right to develop land. (Developing parks and greenways, for example).

Purchase of Development Rights (PDRs) – payment for land development rights and densities associated with a parcel of land and the recordation of that purchase in the land records of the locality.

Radon – a colorless, odorless gas that occurs naturally and can be deadly. Radon comes from the natural (radioactive) breakdown of uranium in soil, rock, and water.

Reforestation – replanting or planting of forest plant materials. Also includes planting in areas not originally forested for mitigation purposes.

Regionalism – pertaining to projects, issues and mutually beneficial relationships that cross multiple legal jurisdictions or localities.

Renter vs. Owner-Occupied Housing – the ratio between rented housing units versus units where the property owner lives on-site.

Ridgeline – a line connecting the highest points along a ridge and separating drainage basins, or small-scale drainage basins, or small-scale drainage systems from one another.

Right of Way – legally established area or strip of land, publicly or privately-owned, intended to be occupied by a street, utility service, water main, sanitary or storm sewer main, or similar use.

Riparian – streamside and stream

Runoff – precipitation leaving a site due to the force of gravity.

Sanitary Sewer – wastewater collection system that relies on gravity or pumps for the movement of the waste from its source to a treatment facility.

Screening – manmade or natural features such as fencing, trees, and ridges that address visual impacts of dissimilar adjacent land uses (See also Buffer)

Sedimentation – deposits of soil, sand, pebbles, and stone fragments by water, which can create a flooding hazard when it fills rivers or streams, reducing the capability of a river channel to carry water.

Septic System – a waste treatment system that is generally for an individual user and involves both a septic tank for sludge and drainfield for affluent.

Septic Pump-Out Program – assessment and remediation program for maintenance of public and private septic systems.

Service Areas – geographic boundaries of service provided by utilities, governmental services (such as fire and police protection), or other regional service providers (such as transportation planning).

Service Level Demand – the amount of community services that are demanded from a certain service radius.

Setback – a legally enforceable buffer zone between properties that requires that a minimum space remain between the property line and any building construction.

Sewershed – an area in which sewer flows by gravity.

Signage – the placement of informational or directional signs, indicating traffic patterns for drivers, for example.

Single Family Occupancy – a dwelling unit designed and intended for one family.

Sprawl – low-density land-use patterns that are automobile dependent, requiring high ratios of road surface to the development served.

Stormwater Management – physical improvements and other techniques that control the rate of release of water runoff from a site into the surrounding areas or downstream.

Stormwater Mitigation – physical improvements and other techniques that reduce the impact of water runoff from a site into the surrounding areas or downstream.

Strip Development – commercial, retail, or industrial development, usually one lot deep that fronts on a major street.

Surface Water – water on the earth’s surface exposed to the atmosphere such as rivers, lakes and creeks.

Total Maximum Daily Load (TMDL) Implementation Plan – a framework for reducing fecal coliform (FC) levels to achieve water quality goals for impaired stream segments in the Reed Creek area.

Telecommuting – employees who are able to work out of their homes rather than physically commuting to a job everyday.

Traditional Neighborhood Concept – approach to land-use planning and urban design that promotes the building of neighborhoods with a mix of uses and housing types, architectural variety, a central public gathering place, interconnecting streets and alleys, and edges defined by greenbelts or boulevards. The basic goal is to integrate various activities to a particular location (i.e., shopping, housing, work, recreation, etc.).

Transfer of Development Rights (TDRs) – movement/transfer of land development rights and densities to another parcel of land and the recordation of that conveyance among the land records of the locality.

Unbuilt Right-of-Way – an area where construction of a road, utility, or other public venture is planned or authorized, but not yet built.

Urban Development Area – an area designated by a locality that is (i) appropriate for higher density development due to its proximity to transportation facilities, the availability of a public or community water and sewer system, or a developed area and (ii) to the extent feasible, to be used for redevelopment or infill development (Section 15.2-2223.1 – Code of Virginia; 2007).

Viewshed – area within view from a defined observable point.

Virginia Conservation Easement Act – Virginia Code Section 14.1-1009, authorizes the creation of conservation easements whereby the easement is held by a charitable organization.

Virginia Natural Heritage Program – a program dedicated to the identification, protection, and stewardship of Virginia's biodiversity.

Wastewater System – any system that involves the movement and treatment of effluent from its source to where it is discharged.

Watershed – an area in which water flows by gravity downstream to a specific location.

Wetlands – lands submerged underwater frequently, or long enough to support habitats suitable for saturated conditions.

Workforce Housing – housing stock that is priced and targeted for the labor sources and those desired of the area.

Zoning – parcels of land set aside for certain types and intensities of development in a way that is compatible with surrounding real estate and in conformance with the comprehensive plan.

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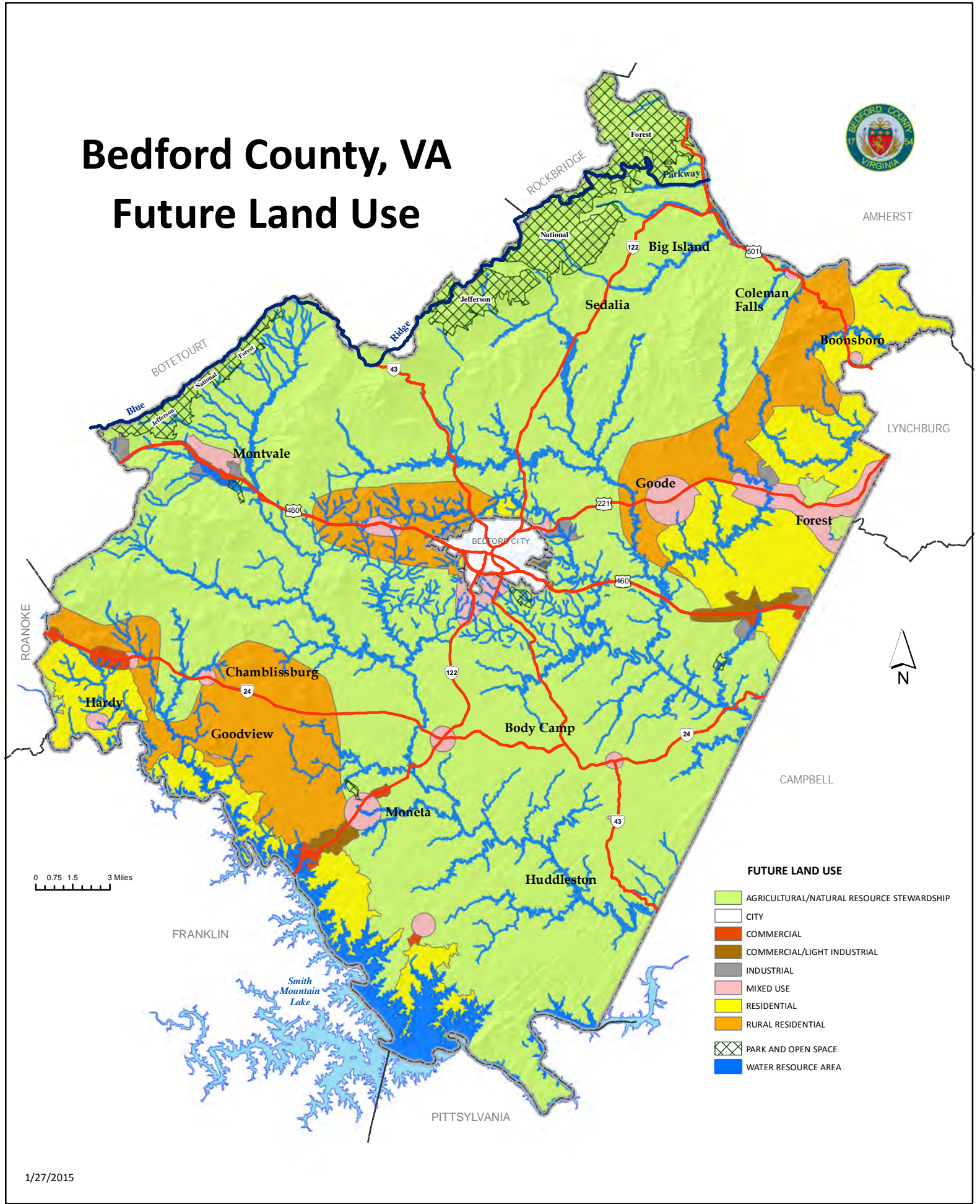
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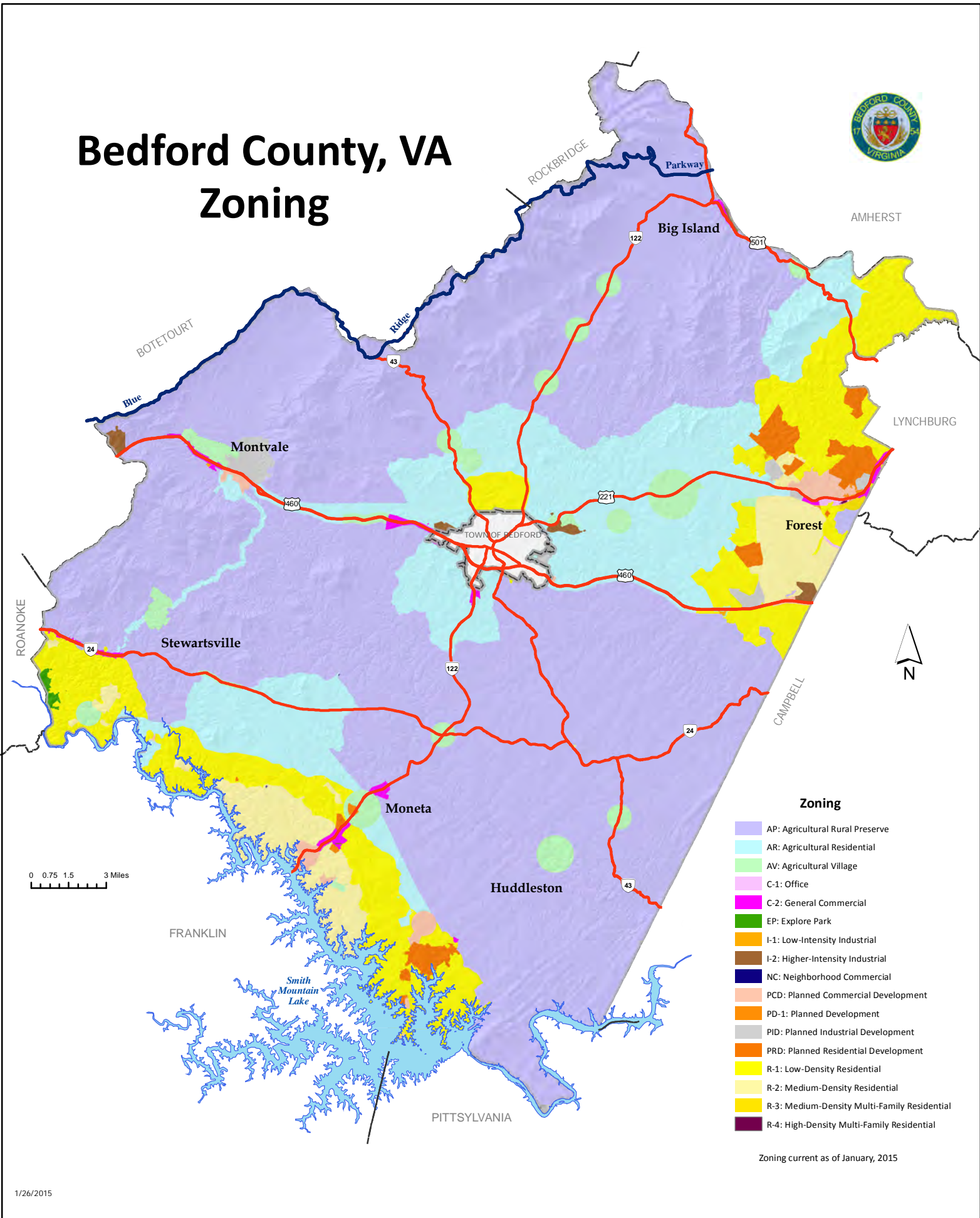
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Bedford County, VA Future Land Use



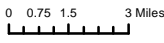
- FUTURE LAND USE**
- AGRICULTURAL/NATURAL RESOURCE STEWARDSHIP
 - CITY
 - COMMERCIAL
 - COMMERCIAL/LIGHT INDUSTRIAL
 - INDUSTRIAL
 - MIXED USE
 - RESIDENTIAL
 - RURAL RESIDENTIAL
 - PARK AND OPEN SPACE
 - WATER RESOURCE AREA

Bedford County, VA Zoning



Zoning

- AP: Agricultural Rural Preserve
- AR: Agricultural Residential
- AV: Agricultural Village
- C-1: Office
- C-2: General Commercial
- EP: Explore Park
- I-1: Low-Intensity Industrial
- I-2: Higher-Intensity Industrial
- NC: Neighborhood Commercial
- PCD: Planned Commercial Development
- PD-1: Planned Development
- PID: Planned Industrial Development
- PRD: Planned Residential Development
- R-1: Low-Density Residential
- R-2: Medium-Density Residential
- R-3: Medium-Density Multi-Family Residential
- R-4: High-Density Multi-Family Residential



Zoning current as of January, 2015