# COMPREHENSIVE PLAN OF ALLEGHANY COUNTY, VIRGINIA



Cowpasture River Near Griffith



Adopted May 7, 2013

# Acknowledgements

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# **TABLE OF CONTENTS**

Introduction and Purpose	
History	2
Environment	Ç
Geology	
Soils	٠,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Topography	۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰
10p0graphy	۱۵ ۱۵ ۸۶
Climate	۱۵ ۱۵ ۸ د
Forested Land	
Groundwater	
Surface Water	
Water Quality	
Flooding and Floodplains	
Dams	20
Demographics	21
Population Trend:	21
Population by Race	22
Migration	23
Natural Increase	
Household Characteristics	
Income	
Poverty Statistics	25
·	00
Housing	
Housing Units	20
General Housing Characteristics	
Housing Type	
Housing Age	
Building Permits	28
Affordable Housing	30
Housing Needs, Strategies and Resources	31
Economy	34
Labor Force and Employment	
Wages	
Household Earnings	37
Industry of Employed Persons	38
Occupation of Employed Persons	
Major Employers	
Commuting Patterns	
Taxable Sales	
Agriculture	
Tourism	
Commercial and Industrial Development Sites	46
Community Utilities	48
Water and Wastewater Systems	48

· ·	
Eastern Portion of the County	48
Central Portion of the County	49
Western Portion of the County	49
Countywide Water and Wastewater Facilities Study	50
Future Water and Wastewater Needs	56
Eastern Area	56
Western Area	60
Central Area	სს
Water and Sewer Financial Assistance	
Individual Wells and Septic Systems	
Solid Waste Management	
Electric Service	
Communications	
Natural Gas	
Educational Facilities	66
Existing Facilities	
School Facility Needs	
Enrollment	
Education Statistics.	
Jackson River Technical Center	
Dabney S. Lancaster Community College	
Additional Educational Opportunities	75
Additional Educational Opportunition	
Recreation	76
Department of Parks and Recreation	
Community College Campus and National Guard Armory	
Private Recreation Opportunities	
Alleghany Highlands YMCA	77
Outdoor Water Recreation	77
Alleghany Highlands Chamber of Commerce and Tourism	80
US Forest Service Recreation Opportunities	81
Watchable Wildlife Areas	83
Virginia Birding and Wildlife Trail	
Douthat State Park	
Falling Spring State Park	
Jackson River Scenic Trail	
Rural Bikeway Plan	
•	
Transportation	86
Highway Networks	86
Federal Functional Classification	
Traffic Volumes	
Six-Year Improvement Program	
Secondary Road System Six-Year Plan	91
2035 Rural Long Range Transportation Plan	93
Rural Bikeway Plan	97
Rail Service	
Air Service	
Public Transit	
Future Highway Needs	102

Community Services	
Law Enforcement	
Fire Departments	110
Rescue Squads	110
E-911	111
Regional E-911 Communications / Emergency Operations Center	
Alleghany Highlands Emergency Notification System	
Emergency Operations and Hazardous Materials	112
Fire Safety Trailer	112
Libraries	
Healthcare Facilities	
Health Department	
Social Services	
Cooperative Extension Service	
Community Assistance Programs	
Community Services Board	116
Media	116
Arts, Culture and Historical Landmarks	
Alleghany Humane Society	
Government Services	117
	4.40
Land Use	
Existing Land Use	119
Future Land Use	122
Implementation	125
Zoning Ordinance	
Subdivision Ordinance	
Conservation Easements	
Wind & Solar Energy SB262	126
Goals and Objectives	127
Economic Development	127
Transportation	
Community Facilities and Services	
Land Use	
Housing	
Environmental	
Education	
[30067001]	

# **Tables**

Table 1 Alleghany County Soil Classifications and Acreages	10
Table 2 Peak Stream Discharges	16
Table 3 Alleghany County Flood Damage Estimates	17
Table 4 Town of Clifton Forge Flood Damage Estimates	18
Table 5 City of Covington Flood Damage Estimates	
Table 6 Town of Iron Gate Flood Damage Estimates	
Table 7 Population Change 1900 – 2010	
Table 14 Racial Composition of Population	
Table 15 Migration	
Table 16 Natural Increase 2000 - 2010	24
Table 17 Household Characteristics	
Table 18 Median Income 2000 - 2010	
Table 19 Median Income Comparison	
Table 20 Persons Living Below Poverty Level	25
Table 21 Housing Units by Occupancy Type	
Table 22 Housing Characteristics	27
Table 23 Housing Type	
Table 24 Housing Units by Year Built	
Table 25 Alleghany County Building Permits Issued	29
Table 26 Housing Problem Indicators	30
Table 27 Gross Rent 2010	
Table 28 Monthly Owner Costs	
Table 29 Annual Labor Force Characteristics 2000-2010	34
Table 30 Monthly Labor Force Characteristics	35
Table 31 Labor Force Data	35
Table 32 Employment and Wages	
Table 33 Average Weekly Wage	37
Table 34 Mean Household Earnings by Type	37
Table 35 Industry of Employed Persons	38
Table 36 Occupation of Employed Persons	39
Table 37 Major Employers in the Alleghany Highlands Region	40
Table 38 Means of Transportation to Work	
Table 39 Place of Work	
Table 40 Travel Time to Work	
Table 41 Annual Taxable Sales	
Table 42 Farm Characteristics	43
Table 43 Value of Agricultural Products	
Table 44 Farm Operators by Occupation	44
Table 45 Travel Impacts in Alleghany County	45
Table 46 Regional Travel Impacts 2011	45
Table 47 Excise Tax Collections in Alleghany County	46
Table 48 Regional Excise Tax Collections	46
Table 49 Available Industrial Buildings	41
Table 50 Available Office Buildings	47
Table 51 Available Sites / Land	
Table 52 Alleghany County Water and Wastewater Systems Total Customers	
Table 53 Alleghany County Water Use Calculations	52
Table 54 Alleghany County Water Projections	
Table 55 Alleghany County Wastewater Projections	54

Table 57 Alleghany County Water Consumption by Service Area 6 Table 58 Alleghany County School System School Building Inventory 6 Table 59 Alleghany County School System Fall Membership by Grade 2011 6 Table 60 Alleghany County School System Fall Membership by Grade 2011 7 Table 61 Alleghany County School System Fall Membership Forecasts 7 Table 61 Alleghany County School System Fall Membership Forecasts 7 Table 62 Graduates by Continuing Education Plans 7 Table 63 High School Dropouts 7 Table 64 Education Attainment Level 7 Table 65 Daily Traffic Volume Estimates, Interstate and US Highways 8 Table 66 Daily Traffic Volume Estimates, Interstate and US Highways 8 Table 67 VDOT Six-Year Improvement Program 9 Table 68 Secondary Highway Projects 9 Table 69 Bikeway Plan Recommendations 9 Table 69 Bikeway Plan Recommendations 9 Table 70 Transportation Priority Projects 10  Maps 1 Historical and Cultural Sites 10 Map 4 Floodplains 11 Map 6 Potential Public Wastewater Service Areas 5 Map 8 Education and School Districts 7 Map 9 Recreation Sites 7 Map 10 Highway Network 8 Map 11 SYIP Interstate, Primary, and Secondary Projects 9 Map 12 Rural Long Range Plan Projects 9 Map 13 Proposed Pedestrian Network Improvements 10 Map 16 Fire Department Service Areas 11 Map 16 Fire Department Service Areas 11 Map 17 Rescue Service Areas 11 Map 16 Fire Department Service Areas 11 Map 17 Rescue Service Areas 11 Map 18 Fixture Land Use 12 Map 19 Future Land Use 12	Table 56 Alleghany County Sewer Flow Rates by Service Area	62
Table 58 Alleghany County School System School Building Inventory	Table 57 Alleghany County Water Consumption by Service Area	63
Table 59 Alleghany County School System Fall Membership by Grade 2011 6 Table 60 Alleghany County School System Fall Membership Trend 7 Table 61 Alleghany County School System Fall Membership Forecasts 7 Table 62 Graduates by Continuing Education Plans 7 Table 63 High School Dropouts 7 Table 64 Education Attainment Level 7 Table 65 Daily Traffic Volume Estimates, VA Primary and Secondary Highways 8 Table 66 Daily Traffic Volume Estimates, Interstate and US Highways 8 Table 67 VDOT Six-Year Improvement Program 9 Table 68 Secondary Highway Projects 9 Table 69 Bikeway Plan Recommendations 9 Table 70 Transportation Priority Projects 10  Map 3 Elevations 1 Map 4 Floodplains 1 Map 6 Potential Public Water Service Areas 1 Map 6 Potential Public Water Service Areas 5 Map 7 Potential Public Water Service Areas 5 Map 8 Education and School Districts 7 Map 10 Highway Network 8 Map 11 SYIP Interstate, Primary, and Secondary Projects 9 Map 12 Rural Long Range Plan Projects 9 Map 13 Proposed Pedestrian Network Improvements 10 Map 14 Mountain Express Route 10 Map 15 Transportation Priority Projects 10 Map 16 Fire Department Service Areas 11 Map 17 Rescue Service Areas 11 Map 18 Existing Land Use 12	Table 58 Alleghany County School System School Building Inventory	68
Table 60 Alleghany County School System Fall Membership Trend	Table 59 Alleghany County School System Fall Membership by Grade 2011	69
Table 61 Alleghany County School System Fall Membership Forecasts	Table 60 Alleghany County School System Fall Membership Trend	70
Table 62 Graduates by Continuing Education Plans	Table 61 Alleghany County School System Fall Membership Forecasts	70
Table 63 High School Dropouts	Table 62 Graduates by Continuing Education Plans	72
Table 64 Education Attainment Level	Table 63 High School Dropouts	72
Table 66 Daily Traffic Volume Estimates, Interstate and US Highways 8 Table 67 VDOT Six-Year Improvement Program 9 Table 68 Secondary Highway Projects 9 Table 69 Bikeway Plan Recommendations 9 Table 70 Transportation Priority Projects 10  Maps  Map 1 Historical and Cultural Sites  10 Map 2 Soil Classifications 11 Map 3 Elevations 11 Map 4 Floodplains 11 Map 6 Potential Public Water Service Areas 15 Map 7 Potential Public Wastewater Service Areas 15 Map 8 Education and School Districts 77 Map 9 Recreation Sites 77 Map 10 Highway Network 88 Map 11 SYIP Interstate, Primary, and Secondary Projects 99 Map 12 Rural Long Range Plan Projects 99 Map 13 Proposed Pedestrian Network Improvements 10 Map 14 Mountain Express Route 10 Map 15 Transportation Priority Projects 10 Map 16 Fire Department Service Areas 11 Map 17 Rescue Service Areas 11 Map 18 Existing Land Use 12	Table 64 Education Attainment Level	72
Table 67 VDOT Six-Year Improvement Program Table 68 Secondary Highway Projects		
Table 67 VDOT Six-Year Improvement Program Table 68 Secondary Highway Projects	Table 66 Daily Traffic Volume Estimates, Interstate and US Highways	89
Table 69 Bikeway Plan Recommendations 9 Table 70 Transportation Priority Projects 10  Maps  Map 1 Historical and Cultural Sites 11 Map 2 Soil Classifications 11 Map 3 Elevations 11 Map 4 Floodplains 11 Map 6 Potential Public Water Service Areas 15 Map 7 Potential Public Wastewater Service Areas 15 Map 8 Education and School Districts 15 Map 9 Recreation Sites 17 Map 10 Highway Network 18 Map 11 SYIP Interstate, Primary, and Secondary Projects 19 Map 13 Proposed Pedestrian Network Improvements 10 Map 14 Mountain Express Route 10 Map 15 Transportation Priority Projects 10 Map 16 Fire Department Service Areas 11 Map 17 Rescue Service Areas 11 Map 18 Existing Land Use 110	Table 67 VDOT Six-Year Improvement Program	90
MapsMap 1 Historical and Cultural SitesMap 2 Soil Classifications1Map 2 Floodplains1Map 4 Floodplains1Map 6 Potential Public Water Service Areas5Map 7 Potential Public Wastewater Service Areas5Map 8 Education and School Districts7Map 9 Recreation Sites7Map 10 Highway Network8Map 11 SYIP Interstate, Primary, and Secondary Projects9Map 12 Rural Long Range Plan Projects9Map 13 Proposed Pedestrian Network Improvements10Map 14 Mountain Express Route10Map 15 Transportation Priority Projects10Map 16 Fire Department Service Areas11Map 17 Rescue Service Areas11Map 18 Existing Land Use12		
Map 1 Historical and Cultural Sites  Map 2 Soil Classifications  Map 3 Elevations  Map 4 Floodplains  Map 6 Potential Public Water Service Areas  Map 7 Potential Public Wastewater Service Areas  Map 8 Education and School Districts  Map 9 Recreation Sites  Map 10 Highway Network  Map 11 SYIP Interstate, Primary, and Secondary Projects  Map 12 Rural Long Range Plan Projects  Map 13 Proposed Pedestrian Network Improvements  Map 14 Mountain Express Route  Map 15 Transportation Priority Projects  Map 16 Fire Department Service Areas  11 Map 17 Rescue Service Areas  11 Map 18 Existing Land Use  Map 18 Existing Land Use	Table 69 Bikeway Plan Recommendations	98
Map 1 Historical and Cultural SitesMap 2 Soil Classifications1Map 3 Elevations1Map 4 Floodplains1Map 6 Potential Public Water Service Areas5Map 7 Potential Public Wastewater Service Areas5Map 8 Education and School Districts7Map 9 Recreation Sites7Map 10 Highway Network8Map 11 SYIP Interstate, Primary, and Secondary Projects9Map 12 Rural Long Range Plan Projects9Map 13 Proposed Pedestrian Network Improvements10Map 14 Mountain Express Route10Map 15 Transportation Priority Projects10Map 16 Fire Department Service Areas11Map 17 Rescue Service Areas11Map 18 Existing Land Use12	Table 70 Transportation Priority Projects	103
Map 2 Soil Classifications1Map 3 Elevations1Map 4 Floodplains1Map 6 Potential Public Water Service Areas5Map 7 Potential Public Wastewater Service Areas5Map 8 Education and School Districts7Map 9 Recreation Sites7Map 10 Highway Network8Map 11 SYIP Interstate, Primary, and Secondary Projects9Map 12 Rural Long Range Plan Projects9Map 13 Proposed Pedestrian Network Improvements10Map 14 Mountain Express Route10Map 15 Transportation Priority Projects10Map 16 Fire Department Service Areas11Map 17 Rescue Service Areas11Map 18 Existing Land Use12		^
Map 3 Elevations1Map 4 Floodplains1Map 6 Potential Public Water Service Areas5Map 7 Potential Public Wastewater Service Areas5Map 8 Education and School Districts7Map 9 Recreation Sites7Map 10 Highway Network8Map 11 SYIP Interstate, Primary, and Secondary Projects9Map 12 Rural Long Range Plan Projects9Map 13 Proposed Pedestrian Network Improvements10Map 14 Mountain Express Route10Map 15 Transportation Priority Projects10Map 16 Fire Department Service Areas11Map 17 Rescue Service Areas11Map 18 Existing Land Use12		
Map 4 Floodplains1Map 6 Potential Public Water Service Areas5Map 7 Potential Public Wastewater Service Areas5Map 8 Education and School Districts7Map 9 Recreation Sites7Map 10 Highway Network8Map 11 SYIP Interstate, Primary, and Secondary Projects9Map 12 Rural Long Range Plan Projects9Map 13 Proposed Pedestrian Network Improvements10Map 14 Mountain Express Route10Map 15 Transportation Priority Projects10Map 16 Fire Department Service Areas11Map 17 Rescue Service Areas11Map 18 Existing Land Use12		
Map 6 Potential Public Water Service Areas5Map 7 Potential Public Wastewater Service Areas5Map 8 Education and School Districts7Map 9 Recreation Sites7Map 10 Highway Network8Map 11 SYIP Interstate, Primary, and Secondary Projects9Map 12 Rural Long Range Plan Projects9Map 13 Proposed Pedestrian Network Improvements10Map 14 Mountain Express Route10Map 15 Transportation Priority Projects10Map 16 Fire Department Service Areas11Map 17 Rescue Service Areas11Map 18 Existing Land Use12		
Map 7 Potential Public Wastewater Service Areas5Map 8 Education and School Districts7Map 9 Recreation Sites7Map 10 Highway Network8Map 11 SYIP Interstate, Primary, and Secondary Projects9Map 12 Rural Long Range Plan Projects9Map 13 Proposed Pedestrian Network Improvements10Map 14 Mountain Express Route10Map 15 Transportation Priority Projects10Map 16 Fire Department Service Areas11Map 17 Rescue Service Areas11Map 18 Existing Land Use12		
Map 8 Education and School Districts7Map 9 Recreation Sites7Map 10 Highway Network8Map 11 SYIP Interstate, Primary, and Secondary Projects9Map 12 Rural Long Range Plan Projects9Map 13 Proposed Pedestrian Network Improvements10Map 14 Mountain Express Route10Map 15 Transportation Priority Projects10Map 16 Fire Department Service Areas11Map 17 Rescue Service Areas11Map 18 Existing Land Use12		
Map 9 Recreation Sites7Map 10 Highway Network8Map 11 SYIP Interstate, Primary, and Secondary Projects9Map 12 Rural Long Range Plan Projects9Map 13 Proposed Pedestrian Network Improvements10Map 14 Mountain Express Route10Map 15 Transportation Priority Projects10Map 16 Fire Department Service Areas11Map 17 Rescue Service Areas11Map 18 Existing Land Use12		
Map 10 Highway Network8Map 11 SYIP Interstate, Primary, and Secondary Projects9Map 12 Rural Long Range Plan Projects9Map 13 Proposed Pedestrian Network Improvements10Map 14 Mountain Express Route10Map 15 Transportation Priority Projects10Map 16 Fire Department Service Areas11Map 17 Rescue Service Areas11Map 18 Existing Land Use12		
Map 11 SYIP Interstate, Primary, and Secondary Projects9Map 12 Rural Long Range Plan Projects9Map 13 Proposed Pedestrian Network Improvements10Map 14 Mountain Express Route10Map 15 Transportation Priority Projects10Map 16 Fire Department Service Areas11Map 17 Rescue Service Areas11Map 18 Existing Land Use12		
Map 12 Rural Long Range Plan Projects9Map 13 Proposed Pedestrian Network Improvements10Map 14 Mountain Express Route10Map 15 Transportation Priority Projects10Map 16 Fire Department Service Areas11Map 17 Rescue Service Areas11Map 18 Existing Land Use12		
Map 13 Proposed Pedestrian Network Improvements10Map 14 Mountain Express Route10Map 15 Transportation Priority Projects10Map 16 Fire Department Service Areas11Map 17 Rescue Service Areas11Map 18 Existing Land Use12	Map 12 Rural Long Range Plan Projects	96
Map 14 Mountain Express Route10Map 15 Transportation Priority Projects10Map 16 Fire Department Service Areas11Map 17 Rescue Service Areas11Map 18 Existing Land Use12	Map 13 Proposed Pedestrian Network Improvements	106
Map 15 Transportation Priority Projects	Map 14 Mountain Express Route	101
Map 16 Fire Department Service Areas	Map 15 Transportation Priority Projects	109
Map 17 Rescue Service Areas11 Map 18 Existing Land Use12	Map 16 Fire Department Service Areas	113
	Map 17 Rescue Service Areas	114
Map 19 Future Land Use12		
	Map 19 Future Land Use	124

# Introduction and Purpose

The development of this document, Alleghany County Comprehensive Plan, represents the joint efforts of the Alleghany County Planning Commission, the County Board of Supervisors, County Staff and the citizens of Alleghany County. The authority to develop this Plan is outlined in the Code of Virginia, Title 15.2, Subtitle II, Chapter 22, Article 3, Section 15.2-2223. The preparation of this plan involved: 1) researching statistical data on the County; 2) a review of previous plans, reports, and other material published by the County; 3) the review and editing of existing and future land use maps for the County; and 4) updating the County goals, objectives, and policies.

The Plan considers existing trends of development and probable future needs. The Plan is intended to serve as a guide for local officials in their decisions concerning land development, expansion (or development) of community facilities and the establishment of community related services. Since one major purpose of the Plan is to guide land use decisions, the maps and goals should be general in nature and should emphasize the long-range needs of the County. As such, the Plan can be utilized to examine future problems, and can be used to respond to these problems now. Section 15.2-2230 states that "at least once every five years the comprehensive plan shall be reviewed by the local planning commission to determine whether it is advisable to amend the plan."

The major sections within this document are: 1) a brief history of the County; 2) an existing conditions inventory including population trends, housing analysis, economy, environment, transportation, utilities, and community services; 3) a description of the current and future land uses; and 4) a discussion of goals and objectives.

# History

Many changes over the years have made major impacts on the Alleghany Highlands. The history of the Highlands is the backbone of our area not only as far as industry and business are concerned, but our ancestral heritage as well. The following is a summary of some of the area's early history.

Alleghany County is located in the mountains of the western portion of the Commonwealth of Virginia. The word "Allegheny" is an old Indian word meaning "endless", and it is used to describe the mountain ranges of the Appalachians. The Alleghany Highlands was first settled around 1746. On January 5, 1822, Alleghany County was formed from parts of Bath, Botetourt, and Monroe Counties by an act of the Virginia Legislature. The Town of Clifton Forge, the Town of Iron Gate, and the City of Covington lie within the County's boundary. The County, City, and Towns are generally known collectively as the Alleghany Highlands.

Up to the mid-eighteenth Century, the area was mostly undeveloped with a few staggered homes. Most families were self-sufficient and required little trading with outside communities. A few Indian villages existed on the outskirts of the County. Many boundary adjustments over the years have changed the shape and area of the County. The population of the County in 1830 was 2,816 compared to the year 2000, when the population was 12,926. Early family names included Carpenter, McAllister, Wright, Merry, Persinger, Humphries, Jordan, Smith, and Pitzer, to name a few. Many descendants of these families still live in Alleghany County.

By 1760, roads and turnpikes were being constructed to connect the area to Warm Springs, Sweet Springs, Lexington, Fincastle, and Lewisburg. The James River and Kanawha Canal that was to connect Covington with Richmond by way of the James River, was formed in 1824. Freight and passengers would be boated up the James River to Iron Gate and then up the Jackson River to Covington where they would be hauled overland to the Greenbrier River. The Canal was only constructed as far as Eagle Rock and it never reached Covington. The railroad development caused the canal project to be abandoned.

Forts were built in the area to protect settlers from Indian raids. One of the first forts built in the area was Fort Young. By order of George Washington, Fort Young was built in 1756 in Covington. Some of the other known forts were Fort Mann in Falling Springs and Fort Carpenter in Low Moor.

In the first year of the Civil War, there were more soldiers enlisted from Alleghany County than there were voters. Some residents in the southern portion of the County were against the Confederate cause. In general, the soldiers from Alleghany County served in the famous Stonewall Brigade. The most noted of the local commands was Carpenter's Battery that fought at the battles of Manassas, 2nd Manassas, Winchester, Gettysburg, and Bloody Angle. Most were killed in battle and the few surviving soldiers surrendered with Robert E. Lee at the Appomattox Courthouse.

The Alleghany Highlands has always had a strong agricultural history. The backbone of the area is farming. Some of the chief agricultural products in the past have been cattle, corn, oats, wheat, orchards, garden products, and dairy. Water Cress was a primary agriculture product around 1907. The Virginia Cress Company had eight acres of cress located in the Falling Springs Valley. Cattle were a major industry for early residents due to the number of tanneries in the area. There were also many dairy farms in the area that bottled milk or produced milk in bulk, such as Evergreen Dairy, Rich Patch Dairy, Fork Farm Dairy, White Oak Dairy and

Peerless Dairy and Creamery. Today, many residents raise cattle on a smaller scale and there is still one dairy producer in the area, Watahala Dairy of Rich Patch.

Covington was designated as a town in 1818 and in 1833, it was incorporated as a city by the Commonwealth. Prior to that, the area was known as "Mouth of Dunlap" or "Merry's Store." For many years it was disputed as to whom the City of Covington was named for, either Peter Covington, who may have been a citizen of the area, or General Covington of the War of 1812. In 1986, Covington officially documented and adopted that General Leonard Covington was the individual that Covington was named for. In 1870, the railroad arrived in Covington and the first sidewalks and sewerage system were installed in 1892. As a result of the industrial boom, the population of Covington grew from 704 in 1890 to 5,632 in 1920.

Clifton Forge, originally known as Williamson, became a voting place in 1839. In 1837, the railroad came, making Clifton Forge the major division point on the railroad. Clifton Forge, named after one of the iron furnaces, became an incorporated City in 1884. Cutbacks and the closing of the C&O railroad shops in the late 1980's caused a drop in population for Clifton Forge. In July 2001, Clifton Forge reverted from a city to a town due to financial hardship.

Iron Gate was predicted to be one of the biggest cities in the Commonwealth. This did not happen, but today it is still an independent town. Iron Gate grew from the development of the iron industry, and in the late 1880's, a tannery was opened. The tannery operated until 1951. H. O. Canfield operated at the location in 1954 until it was bought by Acadia. Parker Hannifen, formerly known as Pryor & Clark Company, and Acadia, operated at the same location until it closed in 2007.

After the Civil War, Alleghany County began to grow. The earlier iron industry that was established prior to the war began to flourish. The earliest iron mines and furnaces were the ones owned and operated by John Jordan in the Longdale area of the County. These mines and furnaces were in operation as early as 1827. They were the Lucy Selina Furnace in Longdale (1827), Globe Forge, and the Clifton Furnace. Jordan also ran the Rumsey furnace and mines, Dolly Ann Furnace and mines, and the Mary-Martha Furnace. William Firmstone purchased the Longdale operations in 1869. By the early 1900s, the Longdale operations were shut down due to competition.

The Low Moor Iron Company was established around 1874 and was a major competitor for the Longdale Iron Company. The Low Moor Iron Company owned iron ore mines in Alleghany County and Craig County, and also owned the Kay Moor Coal Company in West Virginia. The site of the Low Moor Iron Company is now home to Alleghany Regional Hospital and the Brian Center. The communities surrounding the furnaces thrived and iron industry was the main source of economic support for Alleghany County until the end of the iron era. The iron ore industry began its demise when richer deposits of ore were found near the Great Lakes region of the United States where iron ore could be mined cheaper than in Alleghany County.

Iron ore was not the only mining in the area. Limestone, cement rock, marl, kaolin, slate, clay and marble were all mined products. Boxley Quarry Company continues to mine limestone and rock in the Rich Patch area of the county.

The West Virginia Pulp and Paper Company, now Mead-Westvaco, first operated in Covington in 1900 and is now one of the major employers of Alleghany County. There were a total of 300 employees in 1899 when the plant opened, and in 2007 there are over 1,400 people employed at the Covington Mill. By 1923, the plant covered over 30 acres. The Company began to focus

on the production of bleached folding carton paperboard in the 1950's. There were nine machines operating at the Covington mill by 1960. These machines produced folding cartons, food packaging, and corrugated envelopes. From the end of World War II to 1960, the company invested more than \$70 million in the Covington Mill. During the 1980s, an extruder plant, which converts the paper produced at the Covington Mill, was built in Low Moor and the No. 1 Paper Machine at the Covington Mill site was constructed. The Mill was purchased by the Mead Paper Company in the late 1990's and is now Mead-Westvaco. Over the years, many expansions and additions to the mill have allowed Mead-Westvaco to continue to thrive in Alleghany County.

C&O Railroad was and is a key element of growth for the Alleghany Highlands, especially for Clifton Forge. After the War Between the States, the expansion of the railroad systems toward the west resumed. In 1867, the Covington and Ohio Railroad and the Virginia Central Railroad were consolidated and the Chesapeake and Ohio (C&O) Railroad was formed. The first train departed from Covington on July 4, 1869. By 1878, Williamson (now Clifton Forge) had become the dividing point for the Eastern and Western Divisions of the railroad system. Around 1889, the rail yard in Clifton Forge was updated and designated as the major shop for C&O. C&O purchased land in Clifton Forge and sold it in individual lots. It also built a hotel, the Gladys Inn, which later became the location of the C&O Hospital. The Clifton Forge Division of the C&O was developed in 1901. By 1925, the rail yard had been expanded and a new bridge was built over the Jackson River. This would become the widest railroad bridge in the world. By the 1950s, diesel replaced steam and the shops were converted to accommodate diesel locomotives. Many years of adjustments and changes affected the City of Clifton Forge. In the 1980's, the closing of the C&O shops had a major negative impact on the area. The old canopy at the depot was demolished in the 1990's. A diesel fueling station was constructed in the 1990s at the rail yard with the hopes of bringing "life" back to the old railroad yard. The C & O Historical Society opened the C&O Heritage Center in 2008, which is a railway museum, interpretive, educational and visitor's center.

In Covington, the Industrial Rayon Plant was another key industry for the Alleghany Highlands. The plant operated from 1928 to 1960 when Hercules purchased the facility. A fire at the Hercules plant in 1980 caused layoffs within the plant. Hercules later sold their company to Applied Extrusion Technologies (AET). The plant closed their manufacturing facility in 2011, but continues to operate a research and development facility.

Over the years there have been many other industries that have thrived in Alleghany County. There was a Silk Mill (1921-1929), which later became Burlington and Klopman. The mill closed in 1955. The Dedford Tannery operated in Covington from 1892 to 1937. The Covington Machine Company, formed in 1892, was machine shop and foundry. The Covington Roller Mill owned by McAllister & Bell was established in 1797 and continued to operate for over 150 years. The Alleghany Milling Company ground flour and grain in Covington with the most modern machines at the time. EM Nettleton & Company Planning Mill was the prime provider of the finest grades of lumber in the area. The Alleghany Pin and Bracket Company operated in Covington around 1900 where they mass-produced locust pins used in the installation of electric lighting, telephone and telegraph systems. There were two brick manufacturers in the area, the Covington Brick Company (1890) and the Alleghany Brick Company (1906). The Coca Cola Bottling Company had facilities in both Covington and Clifton Forge for many years where they bottled and distributed their products. J. B. Salterini operated from 1958 to 1971 and made wrought iron furniture. H. O. Canfield (1954), commonly known as the "rubber plant" in the Town of Iron Gate has changed ownership and names many times over the years before its closing in 2007, from Acadia, Pryor & Clark Company to Parker Hannifin, There was a stave mill located in the Cliftondale Park area around 1907. The Mizzy Plant in Cliftondale Park operated from 1953 to the 1980's. J&D Pallets now occupies the building. Jane Colby and Apparel operated for many years in the Highlands with operations in Clifton Forge and Covington. Sonoco Products occupied the building until 2011 when Whole Sale Tire moved into the building. More recent industrial developments such as the Alleghany Regional Commerce Center in Low Moor have brought industries to the area such as BACOVA Guild, Jenfab Inc, Balchem and Alleghany Asphalt.

In August of 1897, the Clifton Forge Mutual Telephone Company was organized by Newman Watts. It served Clifton Forge and Covington. In 1929, the Clifton Forge Mutual and the Waynesboro Mutual Telephone companies merged to form the Clifton Forge-Waynesboro Telephone (CFW) Company. In the late 1990's the company became part of nTelos until 2011 when they changed their name to Lumos. This company has grown from providing basic telephone services to providing Internet, DSL, broadband, cell phone, digital cable and paging services. The primary cable TV provider for the area was CFW, which merged with Rapid Cable. Rapid Cable sold to Shentel in 2010.

Many of the locally owned "Mom and Pop" shops were around for many years, and some continue to operate today. These businesses are the backbone to the economic stability of the area. These types of businesses are numerous and only a handful are listed below. Downer's Hardware (1953 to 2004), Arritt's Funeral Home (1952 to present), Fridley's Pharmacy (1950's to 1990's), Snead Buick (1923 to 1990's), Dyke's Funeral Home (1945 to 1990's), R. M. Loving Funeral Home (1913 to present), Nicely's Funeral Home (1940's to present), Rooklin's Department Store (1915 to present), Covington National Bank (1891 to 1982), Farrar's Drug Store (1884 to late 1990's), Woody's Auto Parts (1945 to 2004), Nicely's Exxon (1955 to 2006), E A Snead Furniture (1907 to 1987), and Averill's Store (1942 to 2009).

Several newspapers have served the area over the years. The *Alleghany Centennial* and the *Covington Dispatch* were among the early papers. In 1914, Colonel Beirne established the *Covington Virginian*. The *Daily Review* serviced the Clifton Forge area of the County until 1988. In 1988, the *Covington Virginian* and the *Daily Review* were merged to form the *Virginian Review*. Today, the *Virginian Review* is the local paper serving the Alleghany Highlands with a circulation of more than 9,000 readers.

One of the greatest attractions and a source of pride to the residents of the Highlands is the natural beauty of the area. Once defined as "perfect sublimity", the County is comprised of almost 50% National and State Forest lands. The U.S. Forest Service has a long history within the Highlands. During the 1930's and 1940's, when the large iron companies had gone out of business, the U.S. Forest Service began purchasing land in Alleghany County to become National Forest Land. In 1936, the Jefferson National Forest and the George Washington National Forest were created. Today, the National Forest lands of the County fall within the James River District of the George Washington and Jefferson National Forests.

One of the greatest undiscovered resources in the area is the water supply. Two major water sources, the Jackson River and the Cowpasture River, meander through the County. Other major water sources include Potts Creek, Dunlap Creek, Smith Creek and Wilson Creek. Many large capacity wells and natural springs also dot the Alleghany Highlands.

Like other areas of the Country, the Depression was hard felt in the Alleghany Highlands. The two iron companies had closed, which were among the major employers of the area. President Roosevelt established a program called the Civilian Conservation Corps (CCC). These camps lasted from 1933 to 1942. The enrollees fought fires, built roads, planted trees, placed

telephone lines, and built lookout towers. The Dolly Ann CCC camp was located in the Covington area at Fore Mountain. They were responsible for constructing roads on Horse Mountain and Peters Mountain and converting the old railroad grade at Dolly Ann for passenger vehicles. They also constructed fire trails and lookout towers, and planted trees. The Dolly Ann Camp closed in the 1940's. Other CCC Camps in the area are responsible for the construction of Douthat State Park and the Longdale Recreation area (formerly known as Green Pastures).

Humpback Bridge was built in 1857. The bridge was constructed in conjunction with Midland Trail Road to cross Dunlap Creek. For many years the bridge stood abandoned until a local women's club began a campaign to restore the bridge. The Humpback Bridge area is now a wayside park and is maintained by the Virginia Department of Transportation. Although you cannot cross the bridge with vehicles, it is open year round for site seers. There are picnic facilities on both sides of the bridge. Humpback Bridge is one of a few known humped-back bridges in the world. It has been an attraction for many photographers over the years and has appeared in many magazines.

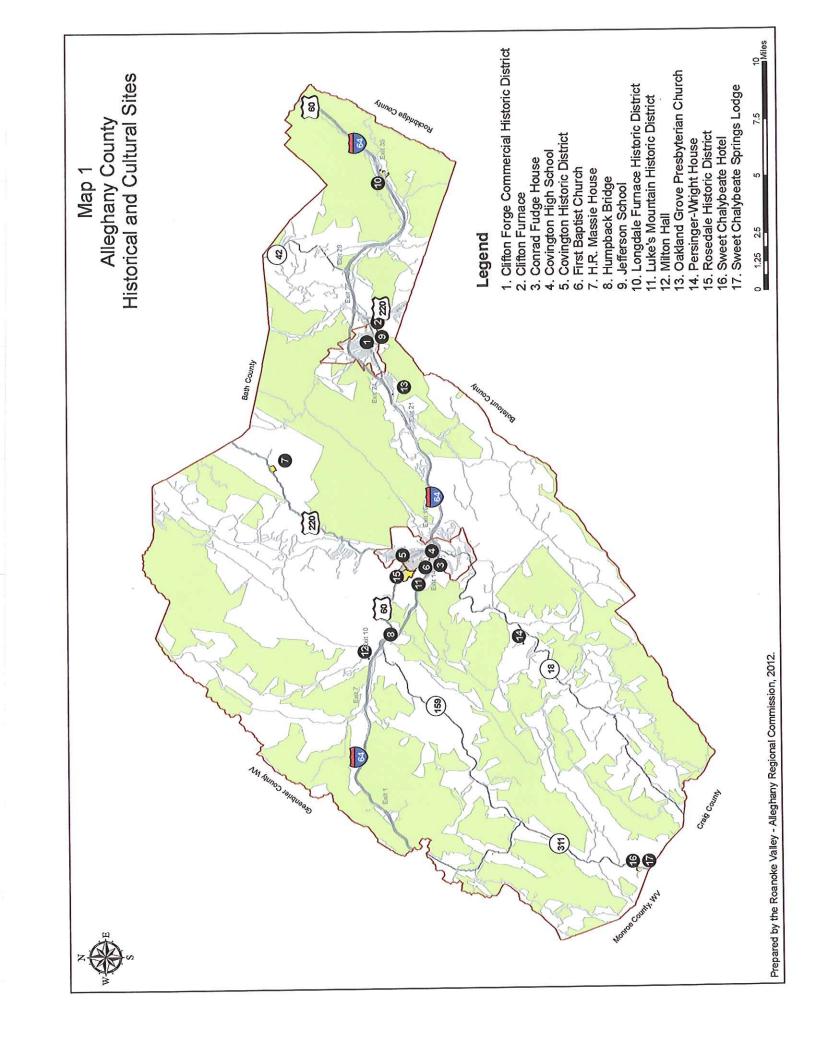
Medical services in the area have played an important role in the overall development and stability of the area especially in the early years with the iron industry and railroad. There were many "country doctors" in the area that had small offices or made house calls. The Chesapeake and Ohio (C&O) Hospital was established in Clifton Forge in 1897 in the old "Gladys Inn". It was a 50-bed facility with one surgeon, an intern and five nurses. Covington soon grew to where the need for a hospital was considered necessary. In 1931, a 12-bed facility was opened in Covington and was later named Alleghany Memorial Hospital. Changing needs for medical care in the Alleghany Highlands led to the expansion of both hospitals over the years. In 1976, the two hospitals were merged to one facility, Alleghany Regional Hospital Corporation which is now part of the Lewis-Gale Hospital system. This merger also resulted in the establishment of the non-profit organization, The Alleghany Foundation. In 1977 ground was broken for the new hospital in Low Moor and it opened in 1979. This facility too has grown and experienced many changes over the years due to the growing needs of the community. The old C & O Hospital is now the Scott Hill Retirement Complex and the old Alleghany Memorial Hospital houses the Alleghany-Covington Social Services offices.

Cultural activities and civic organizations are an essential part of the Alleghany Highlands. The Alleghany Highlands Arts Council was formed over 50 years ago and provides an environment that nurtures and supports the arts. The Alleghany Highlands Arts and Craft Center is located in Clifton Forge and provides a center for exhibits, crafters shop, and educational opportunities. The Alleghany Highlands Center for the Performing Arts is located in the historic Masonic Theater in Clifton Forge. The Center offers programs ranging from plays to musical concerts. Many civic organizations have been a part of the Alleghany Highlands for many years. Some of these clubs and organizations include Ruritan Clubs, Lions Clubs, Kiwanis Clubs, 4-H, Boys and Girl Scouts, American Legion, American Red Cross, Garden Clubs, Women's Clubs, Masonic organizations, and IOOF. The Clifton Forge School of the Arts opened in 2011 offering classes in many artistic venues.

The educational system in the Highlands has grown from several one-room schoolhouses and multi school systems to a more efficiently operated school system. In 1983, the City of Clifton Forge and the Alleghany County School systems were merged into one system. In 2001 the school system became a consolidated school system when Clifton Forge reverted to Town status. There are five elementary schools, one middle school, and one high school that serves Alleghany County, the Town of Clifton Forge and the Town of Iron Gate. Covington continues to operate its own school system.

The Alleghany Highlands continues to recognize and pursue recognition of its historic significance and resources. Over the past several years, many homes in the area have been placed on the Virginia and Federal Historic Registers, and there are now several recognized historic districts in the area.

The residents of the Alleghany Highlands are proud of their history and are optimistic about the future in that the area will continue to grow and change to become an even better place to live, work and play.



#### Environment

The natural resource base of a locality should be taken into consideration when planning for the future. The natural environment influences development patterns, quality of life, and the economy. The following information on Alleghany County's natural environment was obtained from numerous sources including: the Virginia Division of Mineral Resources, the USDA Soil Conservation Service, and the Virginia Department of Environmental Quality.

## Geology

The following minerals are found in the County: sandstone, clay, limestone, shale, gravel, sand, dolomite, and iron ore. Quantities of limestone and dolomite have been utilized in the past for major construction projects such as Interstate 64 and Gathright Dam. Iron mining and processing held an important place in Alleghany County's history, from the production of Confederate Cannons during the Civil War through iron processing during World War I.

#### Soils

The Natural Resources Conservation Service (NRCS) is responsible for soil survey activities of the U.S. Department of Agriculture (USDA). A soil survey provides (1) an orderly, on the ground, scientific inventory of soil resources according to their potentialities and problems of use, and (2) information about each kind of soil in sufficient detail to meet reasonable needs of farmers, agricultural technicians, community planners, engineers, and scientists in planning and transferring the finding of research and experience to specific land areas.

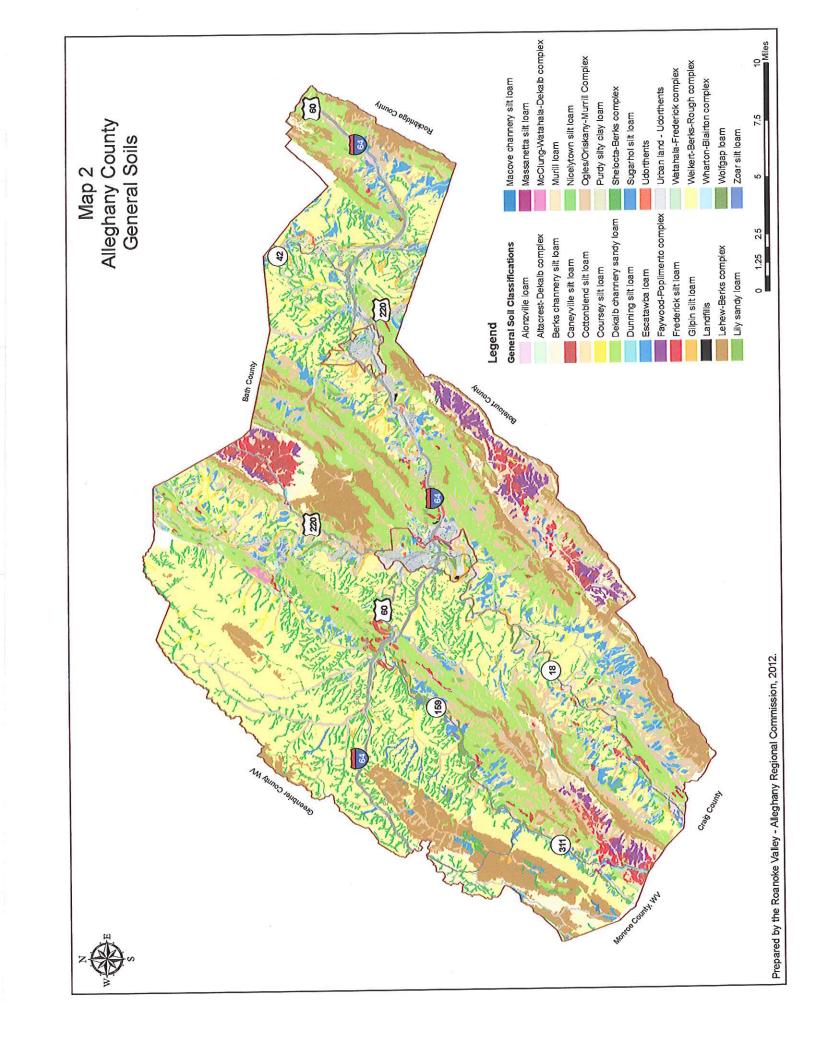
Soil surveys are used by states and other public agencies in connection with community planning and resource development for protecting and improving the quality of the environment, meeting recreational needs, conserving land and water resources, providing for multiple uses of such resources, and controlling and reducing pollution from sediment and other pollutants in areas of rapidly changing uses. Soil surveys seldom contain detailed site specific information and are not designed to be used as primary regulatory tools in permitting or citing decisions, but may be used as reference sources.

The Natural Resource Conservation Service performed soil testing and mapping for Alleghany County. The staff of the NRCS has prepared a soils map and detailed analysis of soils within the County. Soil series for Alleghany County are listed below and illustrated on Map 2. Complete descriptions and characteristics of each of the 34 soil classifications can be found in the Alleghany County Soil Survey.

Table 1 Alleghany County Soil Classifications and Acreages

Soil Series	Acreage
Alonzville loam	2,251
Alticrest-Dekalb complex	303
Berks channery silt loam	9,229
Caneyville silt loam	4,169
Cottonbend silt loam	5,101
Coursey silt loàm	2,385
Dekaib channery sandy loam	40,945
Dunning silt loam	180
Escatawba loam	9,835
Faywood-Poplimento complex	4,101
Frederick silt loam	1,632
Gilpin silt loam	2,761
Landfills	54
Lehew-Berks complex	34,746
Lily sandy loam	1,340
Macove channery silt loam	484
Massanetta silt loam	93
McClung-Watahala-Dekalb complex	331
Murrill loam	5,101
Nicelytown silt loam	3,737
Ogles very cobbly loam	35,067
Purdy silty clay loam	962
Shelocta-Berks complex	15,776
Sugarhol silt loam	350
Udorthents	2,401
Urban land-Udorthents	1,526
Watahala-Frederick complex	189
Weikert-Berks-Rough complex	97,876
Wharton-Blairton complex	866
Wolfgap loam	1,831
Zoar silt loam	2,318

Source: Alleghany County Soils Survey, USDA Natural Resources Conservation Service, 2006.



# **Topography**

Slopes in the County range from 0 to 80 percent. Slopes are often over 25 percent due to mountainous terrain. Elevations range from 1,025 feet above sea level at the Town of Iron Gate to 4,072 feet at Big Knob on Warm Springs Mountain in the northern section of the County. The County's total land area is 444.5 square miles. The valleys are relatively level, attracting development such as the concentration of population along the valley of the Jackson River.

## Climate

Alleghany County is located in a very temperate region, with hot summers and cold winters. The County's prevailing winds are from the southwest. The average annual temperature is approximately 55 degrees Fahrenheit, with the average July temperature being 74 degrees Fahrenheit, and an average January temperature of 34 degrees Fahrenheit. Typical annual rainfall is 36 to 38 inches with the wettest month being May (3.87 inches) and the driest month in February (2.32 inches). Average annual snowfall is 10 inches.

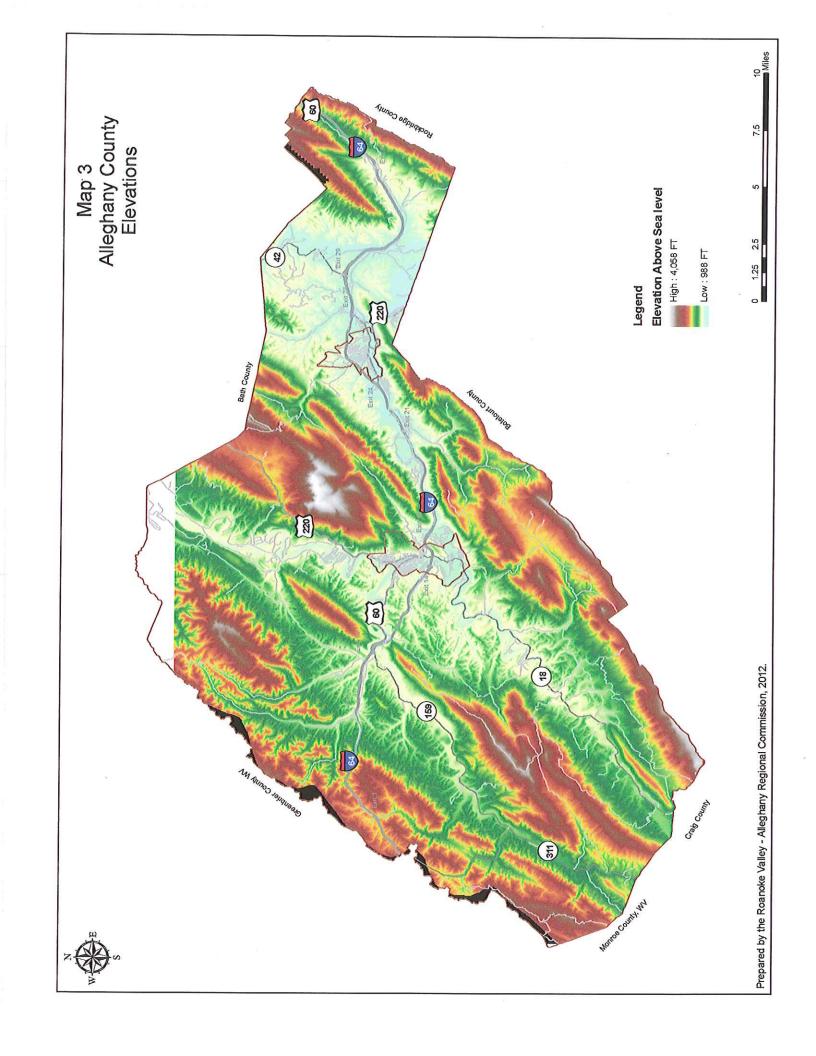
#### Forested Land

Alleghany County contains approximately 281,816 acres of land of which 237,026 is considered forested land. National Forest comprises about 117,705 acres or 51% of the forested land in the County. The remainder of the forested land, 119,321 acres, is privately owned. Alleghany County is in the James River District of the George Washington and Jefferson National Forests. Much of the forested land lies within the "Rural" land use areas of the County. Citizens and property owners should be encouraged to develop Forest Management Plans through the Virginia Department of Forestry to help preserve and protect our forests and farmlands.

Because so much of the forested land in the County is privately owned, tree harvesting and timbering provides a tremendous economic impact in the County. According to the IMPLAN Model of the Virginia Department of Forestry, the forest industry, in 2003, accounted for 18.79% of direct employment and over 53% of direct total economic input. Indirect employment and output account for an additional 9.63% and 5.4% respectfully. The forest industry is responsible for over 62% of the total economic output and 37% of the jobs in Alleghany County.

Not only does our forested land provide beauty and recreation, it also contains a vast wildlife population. Wildlife related recreation such as hunting, fishing, bird, and animal watching are popular. Wildlife, such as deer, turkey and bear are prominent in this area of Virginia. Approximately 86% of the wildlife-related recreation was associated with forestland, according to the 2001 National Survey of Fishing, Hunting and Wildlife-Associated Recreation conducted by the U.S. Fish and Wildlife Service.

According to the Virginia Department of Forestry, Virginia experiences forest fire seasons in the spring and fall. The spring fire season begins in mid February and extends through April. The fall fire season usually covers a period of a few weeks in late October to mid November. A five-year *average* for the total number of wildfires, total acres burned, and average size of fire was calculated by the Virginia Department of Forestry. In Alleghany County from the years 2002 to 2006, the total number of wildfires was 23; total acres burned were 90.5; and average size fire was 18.1 acres.



#### Groundwater

There are 12 natural springs in Alleghany County with a flow rate greater than 450 gallons per minute. Four of these 12 springs are thermal springs. Falling Spring is the fourth largest natural spring in the state with a discharge of over 7,000 gallons per minute. The average depth to groundwater in the County is 200 feet. Most outlying rural residents of the County rely on individual groundwater wells for their water supply. The average yield from groundwater is 5 to 20 gallons per minute.

## **Surface Water**

Alleghany County is located in the James River Watershed Basin. The Jackson River and Cowpasture River are the main tributaries that form the James. They flow through the County and join just south of the Alleghany/Botetourt County line to form the James River. The James River Watershed Basin is one of the most westerly watershed basins that form the Chesapeake Bay Watershed area.

Surface waterbodies flowing into the Jackson River includes Falling Springs Creek, Indian Draft Creek, Hoover Creek, Dry Run, Dunlap Creek, Harmon Run, Pounding Mill Creek, Potts Creek, Karnes Creek, Smith Creek, and Wilson Creek. Major contributors to the Cowpasture River include Pads Creek and Simpson Creek. There are also several contributors to the major streams listed above that flow to the two rivers.

The Jackson River has a drainage area of 904.8 square miles and a length of 95.7 miles. Its elevation is 3,980 feet above sea level at the source to 990 feet at the outlet. The Cowpasture River has a drainage area of 464.1 square miles and a length of 83.6 miles. Its elevation is 2,990 feet at the source and 990 feet at the mouth.

Another significant body of water is Lake Moomaw, which was created by the Gathright Dam project in 1979 on the Jackson River. It covers 2,530 acres, of which approximately one half lies in Alleghany County, with the remainder of the lake located in Bath County. The lake is managed by the Norfolk District US Army Corps of Engineers and surrounded by a 13,400 acre recreation area managed by the US Forest Service.

## **Water Quality**

Section 303(d) of the Clean Water Act and EPA regulation 40 CFR Section 130.7(d)(1) promulgated in July 1992 requires each state to submit a Total Maximum Daily Load (TMDL) Priority list to the Environmental Protection Agency (EPA) by April 1st of even numbered years.

The purpose of the impaired waters list is to report those waters needing a TMDL. A TMDL is the amount of pollutant, which a water body can assimilate without causing violations of a water quality standard. Sources of the impairments have been grouped into eight categories: NPS agriculture, NPS urban/suburban, NPS urban and agriculture, mineral extraction, other, combined sewer overflows and NPS urban, point source, and unknown.

In 2012, the Virginia Department of Environmental Quality (DEQ) released the <u>Draft 2012 305(b)/303(d) Water Quality Assessment Integrated Report</u>. The Virginia Department of Environmental Quality develops this report with assistance from the Department of Conservation and Recreation. EPA water quality management regulations define "water quality limited" as follows: "waters that do not meet Virginia's numeric and narrative water quality

standards or criteria." These are the waters that partially support or do not support one or more of the EPA's six designated uses (aquatic life, fish consumption, shellfishing, swimming, public water supply and wildlife use). These waters are defined as "impaired and listed in the 303(d) report" and "waters where water quality standards are not expected to be met with the application of technology based effluent control technology or secondary treatment and best practice treatment."

In 2012, portions of the following water bodies were listed in the report as impaired: Cedar Creek, Falling Spring, Smith Creek, Jackson River, and Potts Creek. Fact sheets providing detailed information for each water segment on the TMDL listing are available from DEQ.

# Flooding and Floodplains

The susceptibility of areas to frequent flooding during periods of heavy or prolonged precipitation is an important factor in determining the locations of future development in the County. The construction of public and private structures in floodplains presents the potential loss of lives and property. As the floodplain is covered by development, the normal flow of water is retarded and the area susceptible to flooding is enlarged.

In 1986, the Federal Emergency Management Agency completed the <u>Flood Insurance Study for Alleghany County</u>. In 1992, the study was updated and provided detailed data on Wilson Creek and its tributaries. FEMA Flood Boundary and Floodway Maps were updated and made available in digital format in 2010. These maps show flood insurance zones, and base flood elevation lines. The reports and maps should be consulted before any land use/development change is made near a free flowing stream or intermittent stream channel. The information will aid a developer in determining the locations on a parcel that will be floodprone. More important, the maps show zones in which building is prohibited without special structural designs. The floodplains along the Jackson River are areas of intensive development and should be noted as possible hazardous areas.

Floods have occurred during all seasons of the year in the County. However, the main flooding seasons are generally in the winter or in the spring. Flooding may occur in the summer or fall due to intense local thunderstorms or tropical storms. In some cases flooding may last for a couple of days, while floods occurring from short duration summer thunderstorm usually rise and subside in less than a day.

Potentially, the flooding problem is along the Jackson River. Gathright Dam is the only flood protection structure in the County. Since the completion of the dam, there has been widespread belief that flooding should not occur. This belief helps lead to increased pressure for development along the floodplain of the Jackson River. Though the dam will reduce flooding, it will not eliminate flooding. Although the reduction in flood stages provided by the dam is substantial, it will not completely eliminate the flood hazards downstream of Potts Creek and Dunlap Creek. Gathright Dam only controls approximately 38 percent of the Jackson River watershed, and has no control over the watersheds of Potts and Dunlap Creeks.

Alleghany County has recorded floods since the early settlement of the area. The largest floods occurred in November 1877, March 1913, and March 1936. Other large floods took place in March 1867, August 1969 (Hurricane Camille), June 1972 (Tropical Storm Agnes), March 1973, December 1973, and most recently November 1985 and January 1996. Flood damage was concentrated in and near Covington and Clifton Forge. The remaining damages were widespread throughout the County. Major damage resulted in loss of homes and the washout of

bridges and roads. The County high school, located in Valley Ridge, has been flooded many times.

The U.S. Geological Survey (USGS) has recorded stages of area streams. Records of river stages and discharges on the Jackson River at Falling Spring gage, located approximately 10 miles upstream from Covington, have been maintained since April 1925. To supplement the Falling Spring records, data is recorded from the USGS gaging stations at Dunlap Creek and Potts Creek. The Dunlap gage, located 4.3 miles above its confluence with the Jackson River, has been recording data since October 1928. Records of river stages and discharges at the Potts Creek gage, 7.5 miles upstream of its mouth, have been maintained from October 1928 to September 1956, and October 1965 to present. There is also a USGS stream gage on the Cowpasture River. The peak discharges at the mouth of the stream are given in the following table.

Table 2
Peak Stream Discharges

	1 Car	Cucam Discharg	00	
	Drainage	10-Year	50-Year	100-Year
Source	Area (sq. mi.)	Peak	Peak	Peak
		Discharge	Discharge	Discharge
Jackson River	907	20,000	34,000	41,000
Dunlap Creek	164	10,500	16,400	19,100
Potts Creek	173	8,470	12,600	14,500
Cowpasture River	461	19,200	29,400	34,600
Simpson Creek	24.3	3,790	5,890	6,870
Smith Creek	18	7,410	11,000	12,000
Wilson Creek	33.5	4,700	7,390	8,530
				1000

Source: Flood Insurance Study, Alleghany County, Virginia, U.S. Geological Survey, 1992.

Alleghany County adopted its most recent Floodplain District in December 2010. The regulation requires new residential buildings to be elevated to or above the base flood elevation. The floodplain district is an overlay that applies to all other zoning districts. Additional requirements prevent the obstruction of the floodway. In addition to Federal Regulations, the County has established guidelines for development within flood hazard areas. They can be found in Chapter 66-Zoning, of the Code of the County of Alleghany, Virginia. No construction or development, including fill, can be done in a designated floodway. Development can occur in the 100-year floodplain, however the first floor elevation of a structure must be at least one foot above the designated flood elevations shown on the Flood Insurance Rate Maps. Also, structures in the 100-year floodplain must be in compliance with building code requirements for structures in flood hazard areas. Development can occur in the 500-year floodplain with compliance of building code requirements for structures in flood hazard areas.

The County participates in, and is in good standing with, the National Flood Insurance Program (NFIP) by enforcing floodplain management regulations that meet federal requirements. This program allows property owners to purchase flood insurance from NFIP. There are currently 182 NFIP policies in force in the County. The County also participates in a flood warning system developed by the National Weather Service called Integrated Flood Observing and Warning System (IFLOWS). Through the use of radio-transmitted information, this system provides

advanced flood forecasting to the County Emergency Operation Center. There are 8 IFLOWS stations located in the County.

The Disaster Mitigation Act of 2000 requires that local governments, as a condition of receiving federal disaster mitigation funds, must have a mitigation plan that describes the process for identifying hazards, risks and vulnerabilities, identifies and prioritizes mitigation actions, encourage the development of local mitigation and provide technical support for those efforts. Alleghany County adopted the Regional Plan in 2005 and is currently being updated in 2012. The Regional Pre-Disaster Mitigation Plan affects unincorporated areas, towns, cities and counties within the Roanoke Valley-Alleghany Regional Commission service area. While the plan does not establish any legal requirements for the localities, it does provide a framework for natural hazard mitigation planning.

The region has experienced nearly all types of natural disasters, the major ones being flooding, landslides, winter storms, and wildfires. Other disasters that might occur in the region include earthquakes, hurricanes, and tornadoes. The natural hazard most likely to affect the region is widespread flooding or flash flooding. Watersheds in the region are typical of the Blue Ridge region in which smaller streams collect water which then flows through steep terrain, picking up velocity, and into the valleys and flatlands along major rivers where development has occurred.

As part of the development of the Regional Pre-Disaster Mitigation Plan, loss estimates were calculated for flooding only. Other disasters are too variable and widespread to determine any useful loss estimates. The methodology for determining flood losses varied depending on the data available for each locality. Structure losses were assumed to be 100 percent. Content losses for residential structures were estimated to be 50 percent of the structure value. Content losses for commercial structures were estimated to be 100 percent of the structure value. The average number of people per household, from the 2000 US Census, was used to estimate the number of people affected by residential structure loss. Data was not available to estimate other losses relating to roads or other infrastructure.

Table 3
Alleghany County (does not include Clifton Forge and Iron Gate)

	ranogramy county (	accorner moraci	o chitoti i orgo c	and mon date,	
			Structure	Contents	
		Value of	Damage at	Damage at	Total
	Parcels/Structures	Structures in	3 ft Flood	3 ft Flood	Estimated
7,711	in Floodplain	Floodplain	depth	Depth	Damage
Residential	630	\$38,966,900	\$12,859,077	\$7,014,142	\$19,873,119
Commercial	34	\$7,342,600	\$2,423,058	\$1,468,520	\$3,891,578
Total	664	\$46,309,500	\$15,282,135	\$8,482,562	\$23,764,697

Source: Regional Pre-Disaster Mitigation Plan, Roanoke Valley-Alleghany Regional Commission, 2012.

Table 4
City of Covington Flood Loss Estimate

	Parcels/Structures	Value of Structures in	Structure Damage at 3 ft Flood depth	Contents Damage at 3 ft Flood Depth	Total Estimated Damage
Residential	in Floodplain 305	Floodplain \$33,550,000	\$11,071,500	\$6,039,000	\$17,110,500
Commercial	52	\$13,000,000	\$4,290,000	\$2,600,000	\$6,890,000
Total	357	\$46,550,000	\$15,361,500	\$8,639,000	\$24,000,500

Table 5
Town of Clifton Forge

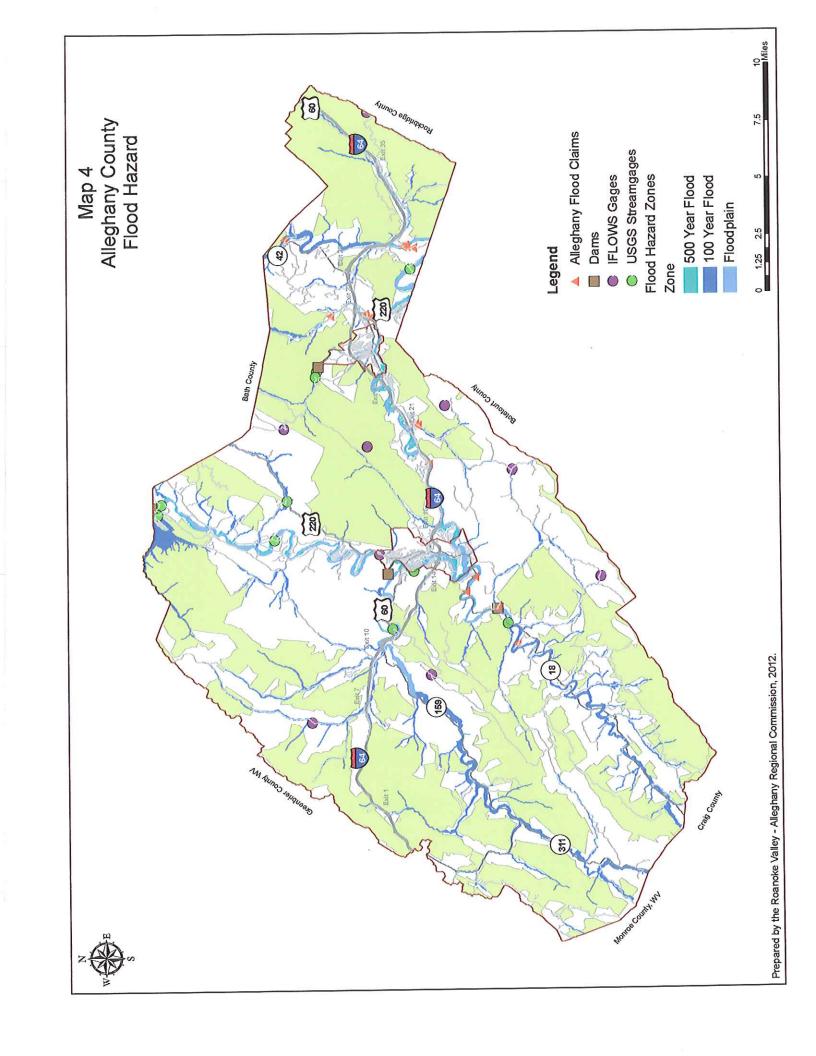
		1 Office Office	0.90		
			Structure	Contents	
		Value of	Damage at	Damage at	Total
	Parcels/Structures	Structures in	3 ft Flood	3 ft Flood	Estimated
	in Floodplain	Floodplain	depth	Depth	Damage
Residential	57	\$2,624,700	\$866,151	\$472,446	\$1,338,597
Commercial	16	\$2,661,300	\$878,229	\$532,260	\$1,410,489
Total	73	\$5,286,000	\$1,744,380	\$1,004,706	\$2,749,086

Source: Regional Pre-Disaster Mitigation Plan, Roanoke Valley-Alleghany Regional Commission, 2012.

Table 6
Town of Iron Gate

		TOWIT OF HO	ii Oato		
			Structure	Contents	
		Value of	Damage at	Damage at	Total
= 1.11	Parcels/Structures	Structures in	3 ft Flood	3 ft Flood	Estimated
	in Floodplain	Floodplain	depth	Depth	Damage
Residential	1	\$254,000	\$83,820	\$45,720	\$129,540
Commercial	0	\$0	\$0	\$0	\$0
Total	1	\$254,000	\$83,820	\$45,720	\$129,540

Source: Regional Pre-Disaster Mitigation Plan, Roanoke Valley-Alleghany Regional Commission, 2012.



#### Dams

There are four dams in Alleghany County. These are the Clifton Forge Dam (owned and maintained by the Town of Clifton Forge), Gathright Dam (owned and maintained by US Army Corps of Engineers), Pond Lick Branch Dam (privately owned) and MeadWestvaco #2 Flyash Lagoon Dam (owned and maintained by MeadWestvaco). Gathright Dam was completed in 1979 and is operated for flood control. The facility is managed by the Army Corps of Engineers. The dam controls the runoff from a 345 square mile drainage area and reduces the effects of flooding along the Jackson and James Rivers. The Corps of Engineers estimates that the project has prevented more than \$70 million in flood damages.

All of these dams are subject to the National Dam Safety Program Act of 1996 and the resulting 1998 Federal Guidelines for Dam Safety. FEMA requires all dam owners to develop an Emergency Action Plan for warning, evacuation and post-flood by the Department of Conservation and Recreation and Dam Safety Regulations enacted by the Virginia Soil and Water Conservation Board. All dams in the County are in good standing with State and Federal regulatory agencies at this time.

# **Demographics**

Alleghany County's population statistics are an important component in local planning. These statistics indicate where needs exist for public and human services, housing, health care, utilities, and recreation. This chapter contains data from the 2000 and 2010 Census of Population as well as other federal and state sources.

The Town of Clifton Forge surrendered its status as a city in July 2001. In order to accurately represent the demographics of Alleghany County following this event, Clifton Forge statistics have been incorporated into the data for Alleghany County. For example, in 2000 the population of Alleghany County was 12,926 and the population of the City of Clifton Forge was 4,289. After Clifton Forge became a town, the population of Alleghany was adjusted to 17,215. Data availability for Clifton Forge was further impacted in that many state and federal agencies no longer maintain data for towns. This has resulted in many gaps in data for Clifton Forge for topics such as labor force, poverty estimates and population projections. This data is now included in the statistics for Alleghany County.

## **Population Trend**

Alleghany County's population has fluctuated over the past century with the greatest change occurring during the period of 1910-30 and 1940-60. From 1910 to 1930 there was a 24 percent decrease in population while during the decades of 1940-60 there was an 11 percent decrease. Covington became an independent city in 1952 accounting for the 47.6% population decline between 1950 and 1960.

The County population increased from 1960 to 1990, growing from 12,128 to 13,176 persons. The population decreased during the 1990s by 1.9 percent. A boundary adjustment by the City of Covington in 1991 resulted in a loss of approximately 200 persons. The reversion of Clifton Forge to town status resulted in an increase of 4,289 persons in 2001. In 2001, the population of Alleghany was adjusted to 17,215 to include the Town of Clifton Forge. In 2010, Alleghany County's population was 16,250. The population is projected to decrease 2% by 2020.

Table 7
Population Change, 1900 - 2010

Year	Population	Change
1910	14,173	-
1920	15,332	8.2%
1930	20,188	31.7%
1940	22,688	12.4%
1950	23,139	2.0%
1960	12,128	-47.6%
1970	12,461	2.7%
1980	14,333	15%
1990	13,176	-8.1%
2000	12,926	-1.9%
2001	17,215	33.2%
2010	16,250	-5.6%
2020	15,922	-2.0%
2030	15,920	0.0%

Data for 2001 to 2030 includes Town of Clifton Forge. Source: Census of Population, U.S. Bureau of the Census, 1910- 2010 and Population Projections, Virginia Employment Commission, 2011.

# Population by Race

Alleghany County differs from the Commonwealth and the United States in terms of its racial composition. The county has a significantly higher concentration of persons classifying themselves as White as the following comparison table shows.

Table 8
Racial Composition of Population, 2010

Racial Category	Alleghany County	Virginia	United States
White	93.2	68.6	72.4
Black or African-American	4.7	19.4	12.6
American Indian or Alaskan Native	0.2	0.4	0.9
Asian	0.2	5.5	4.8
Hawaiian or Pacific Islander	0.1	0.1	0.2
Other Race	0.3	3.2	6.2
Two or More Races	1.4	2.9	2.9
Hispanic (any race)	1.1	7.9	16.3

Source: Census of Population, US Census Bureau, 2010.

# Migration

The Census Bureau's American Community Survey provides migration data for 2010. Table 15 provides geographical mobility for persons relative to their residence at the time they were surveyed. According to the survey, a total of 823 people moved to Alleghany County from a different locality in 2010. Included in that total were 211 people from a different state and 20 from abroad that moved to the county in 2010.

Table 15 Migration in 2010

Category	Persons
Total:	15,846
Householder lived in owner-occupied housing units	13,405
Householder lived in renter-occupied housing units	2,441
Same house 1 year ago:	14,544
Householder lived in owner-occupied housing units	12,697
Householder lived in renter-occupied housing units	1,847
Moved within same county:	479
Householder lived in owner-occupied housing units	334
Householder lived in renter-occupied housing units	145
Moved from different county within same state:	592
Householder lived in owner-occupied housing units	264
Householder lived in renter-occupied housing units	328
Moved from different state:	211
Householder lived in owner-occupied housing units	101
Householder lived in renter-occupied housing units	110
Moved from abroad:	20
Householder lived in owner-occupied housing units	9
Householder lived in renter-occupied housing units	11

Source: 2006-2010 American Community Survey, U.S. Census Bureau, 2012.

## **Natural Increase**

Natural increase is a measure of the population change calculated from the number of births and deaths that have occurred based on place of residence over a period of time. Natural decrease in Alleghany County from 2000 to 2010 was 582 persons. The increase in births and deaths from 2001 to 2002 forward is attributed to the inclusion of the Town of Clifton Forge numbers into the Alleghany County total.

Table 16 Natural Increase, 2000-2010

****************	natural increa	se, 2000-2010	
			Natural
Year	Births	Deaths	Increase
2000	122	123	-1
2001	173	166	7
2002	156	239	-83
2003	170	264	-94
2004	197	245	-48
2005	189	239	-50
2006	178	228	-50
2007	190	258	-68
2008	173	233	-60
2009	154	244	-90
2010	162	207	-45

Source: Virginia Vital Statistics Annual Reports, Virginia Department of Health, 2000-2010.

## **Household Characteristics**

The number of households increased by 35.3% from 2000 to 2010. The average household size has decreased by 6.9%.

Table 17
Household Characteristics

Category		2000	2010	Change
Total Households		5,149	6,964	35.3%
Average Househo	old Size	2.46	2.29	-6.9%

Source: Census of Population, U.S. Census Bureau, 2000 and 2010.

#### Income

Although the median household income in Alleghany County increased by 52% from 2000 to 2010, this amount was equal to only 71% of the state median in 2010. Family median income was also only 73.4% of the state median family income. Per capita income was approximately 70% of the state median per capita income.

Table 18 Median Income 2000-2010

1110	alali 111001110 20	00 2010	
Category	2000	2010	Change
Household	\$28,545	\$43,160	52.0
Family	\$45,843	\$53,205	16.1
Per Capita	\$19,635	\$22,013	12.1

Source: Census of Population 2000 and 2006-2010 American Community Survey, U.S. Census Bureau, 2012.

Table 19
Median Income Comparison, 2010

medicii medine	Companioni, more	
Category	Alleghany County	Virginia
Household	\$43,160	\$60,674
Family	\$53,205	\$72,476
Per Capita	\$22,013	\$31,313

Source: 2006-2010 American Community Survey, U.S. Census Bureau 2012.

## **Poverty Statistics**

Alleghany County's percentage of persons below the poverty level increased between 2000 and 2010. The percent of person age 65 and over decreased from 10.8% to 7.7%. The percentage of families and families with children increased.

Table 20 Persons Living Below Poverty Level

Category	2000	2010
Persons	7.1%	10.9%
Persons Age 65 and Over	10.8%	7.7%
Families	4.9%	6.6%
Families with children under 18 years old	7.5%	9.6%
Female Householder Families	30.3%	20.2%

Source: Census of Population 2000 and 2006-2010 American Community Survey, U.S. Census Bureau 2012.

# Housing

Alleghany County's housing inventory, trends, projections, and problems are discussed in this chapter of the Comprehensive Plan. In developing background data, statistical information from the 2000 and 2010 Census of Housing, local building permit data, and recent housing studies was used.

# **Housing Units**

The number of housing units in Alleghany County increased almost 39% for the period 2000 to 2010 with the addition of Clifton Forge units. The number of vacant housing units increased by 67.4% during the same period. The number of owner-occupied units increased 35.3% from 2000 to 2010. The number of renter occupied units increased by 54.2%.

Table 21
Housing Units by Occupancy

	2000	2010	Percent Change	Percent of Total Units in 2010
Total Housing Units	5,812	8,074	38.9	100.0
Vacant Units	663	1,110	67.4	13.7
Occupied Units	5,149	6,964	35.3	86.3
Owner-Occupied	4,367	5,758	31.9	71.3
Renter-Occupied	782	1,206	54.2	14.9

Source: Census of Housing, 2000 and 2006-2010 American Community Survey, U.S. Census Bureau, 2012.

## **General Housing Characteristics**

The median house value increased by 34% from 2000 to 2010. The median rent increased 40 percent. The Census figures which best reflect the condition of housing units in the County are percent of occupied units with more than 1.01 persons per room and percent of occupied units lacking complete plumbing for exclusive use. The percent of overcrowded units was less than 1% and the percent of units lacking complete plumbing decreased from 2000 to 2010.

Table 22 Housing Characteristics

,		
Characteristic	2000	2010
Median Value	\$77,500	\$104,000
Median Contract Rent	360	504
Percent of Housing 30 Years or Older	53.0	74.8
Percent of Occupied Units with More than 1.01 Persons / Room	0.9	0.3
Percent of Occupied Units Lacking Complete Plumbing for Exclusive Use	1.5	0.9

Source: Census of Housing, 2000 and American Community Survey, U.S. Census Bureau, 2012.

# **Housing Type**

Single-family units are the main type of housing in Alleghany County. The number of multi-family units, including duplexes, increased with the addition of Clifton Forge units in 2001. The number of mobile homes in the county decreased from 2000 to 2010.

Table 23 Housing Type

		<i>/</i> /1		
	20	00	20	10
Type	Number	Percent	Number	Percent
Single-Family	4761	82.0	6,684	82.8
Multi-Family	188	3.1	613	7.6
Mobile Homes	832	14.3	777	9.6
Other	31	0.5	0	0.0

Source: Census of Housing, 2000 and 2006-2010 American Community Survey, U.S. Census Bureau, 2012.

# **Housing Age**

Almost 32% of Alleghany County's housing stock was built prior to 1950 compared to 13.6% in Virginia. In general, pre-WWII urban housing stock consists, in large part, of multi-story construction tailored to relatively narrow lots, thereby allowing more square-footage on a smaller lot. While many of the county's older homes could be classified as historic, these units will require additional attention from their owners. Beyond accessibility issues often associated with an aging housing stock, repair, maintenance, and high utility cost can also negatively impact affordability and general quality of life for elderly and/or disabled residents.

Table 24
Housing Units by Year Structure Built, 2010

Time Period	Number	Percent
Built 2005 or later	158	2.0
Built 2000 to 2004	196	2.4
Built 1990 to 1999	944	11.7
Built 1980 to 1989	736	9.1
Built 1970 to 1979	1,478	18.3
Built 1960 to 1969	1,182	14.6
Built 1950 to 1959	844	10.5
Built 1940 to 1949	687	8.5
Built 1939 or earlier	1,849	22.9

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

Bureau, 2012.

# **Building Permits**

Building permit data is shown in Table 25. The total number of new residential dwelling permits decreased by 44 percent. The total value of new residential building permits decreased by 23 percent. The average unit value in 2010 was \$121,227, an increase of 38% over the ten-year period. The average residential unit permit vale for the period was \$100,699.

The number of double-wide mobile/manufactured home permits decreased by 88 percent. The average unit value was \$84,667 in 2010, an increase of 52% for the period. The number of single-wide mobile/manufactured home permits decreased by 55 percent. The average unit value was \$19,000 in 2010, an increase of 97% for the period.

Average per unit commercial permit value decreased from \$2,057,386 in 2000 to \$447,000 in 2010. Average value of permits per year for the period was \$853,735. The County averages 6.5 new commercial permits per year.

Table 25
Alleghany County
Building Permits Issued 2000-2010

				and foliations	11115 ISSUE	Duilding Permis Issued 2000-2010				
	N	New Residential Dwellings*	2	Mobile/Manufactured Housing**	tured Hous	ing**	New C	New Commercial	Demolitions	litions
			Dol	Double-wide	Sing	Single-wide			Residential	Commercial
Year	Number	Estimated	Number	Estimated	Number	Estimated	Number	Estimated	Number	Number
	Issued	Value	Issued	Value	penss	Value	penssi	Value	Issued	penssl
2000	27	\$2,367,909	25	\$1,395,100	29	\$279,940	11	\$22,631,246	6	0
2001	29	\$2,209,000	24	\$1,170,250	27	\$125,360	9	\$1,266,000	8	0
2002	32	\$2,511,150	20	\$827,856	17	\$238,033	27	\$1,767,426	10	4
2003	33	\$2,580,248	18	\$1,052,381	14	\$110,750	5	\$3,541,975	15	က
2004	32	\$2,667,460	19	\$1,111,750	19	\$191,325	4	\$1,267,000	21	2
2005	29	\$3,248,693	5	\$354,500	15	\$218,500	3	\$1,710,000	24	2
2006	30	\$3,253,553	တ	\$826,957	30	\$264,550	_	\$5,739,000	11	~
2007	21	\$2,447,295	10	\$574,597	23	\$225,337	0	\$0	24	ო
2008	28	\$4,207,710	က	\$120,700	15	\$120,945	4	\$3,073,555	12	4
2009	17	\$2,193,473	4	\$225,847	9	\$42,050	3	\$14,049,600	17	0
2010	15	\$1,818,400	က	\$254,000	13	\$247,000	1	\$447,000	တ	2
Totals	293	\$29,504,891	140	\$7,913,938	208	\$2,063,790	65	\$55,492,802	160	21
	A 11 1.		2	0.000			1 5:10			

Source: Alleghany County Building Permit Records, 2000-2010 (includes the Town of Clifton Forge and the Town of Iron Gate) \* Includes Modular Homes \*\*Includes Relocation and Replacement units.

# Affordable Housing

The Code of Virginia, Sec. 15.2-2223, under the scope and purpose of the comprehensive plan, states that "The plan shall include: the designation of areas and implementation of measures for the construction, rehabilitation and maintenance of affordable housing, which is sufficient to meet the current and future needs of residents of all levels of income in the locality while considering the current and future needs of the planning district within which the locality is situated." Housing affordability should be monitored by local governments to ensure that all citizens are capable of meeting this basic need.

# Summary of Affordable Housing Needs

The Census Bureau's *Comprehensive Housing Affordability Strategy* database definition of housing problems includes the following criteria "any occupied units lacking a complete kitchen, lacking complete plumbing, having more than 1.01 persons per room, or costing more than 30 percent of the occupant households (monthly) income."

Table 26
Housing Problem Indicators

Criteria	2000*	2010
Units Lacking Complete Kitchen	14	29
Units Lacking Complete Plumbing	76	65
Units With More Than 1.01 Persons Per Room	48	18
Renters Paying More Than 30% of the Occupant Households Income	156	466
Owners with a Mortgage paying more than 30% of the Occupant Households Income	285	766
Owners without a Mortgage Paying More Than 309 of the Occupant Households Income	% 106	252

Source: 2006-2010 American Community Survey, U.S. Census Bureau, 2012.

In 2010 the median rent in Alleghany County was 52% of the statewide median rent. Approximately 27.5% of renters were paying less than \$300 per month in Alleghany County. Less than 22% of renters were paying above \$750 per month compared to 69.2% of renters statewide.

Table 27 Gross Rent, 2010

Alleghany County	Vir <u>ginia</u>
\$504	\$970
27.5%	5.1%
21.7%	69.2%
	27.5%

Source: 2006-2010 American Community Survey, U.S. Census Bureau, 2012.

Median owner costs with a mortgage were 55% of the statewide median while median owner costs without a mortgage were 80% of the state median. The lower monthly mortgages may be attributed to lower house values, yet similar costs for utilities, maintenance and taxes.

Table 28 Monthly Owner Costs, 2010

monany o mon o o o o o o			
	Alleghany County	Virginia	
Median Costs with a Mortgage	\$959	\$1,728	
Median Costs without a Mortgage	\$313	\$389	

Source: 2006-2010 American Community Survey, U.S. Census Bureau, 2012.

A standard measure of affordability for both owner and renter is the percentage of income being applied toward housing costs. This cost includes rent or mortgage, utilities, maintenance and taxes. An acceptable rate is 30 percent of the household's income. In 2010, 25.7% of home owners with a mortgage in Alleghany County were applying more than thirty percent or more of their income toward housing costs and 48.1% of renters were applying 30 percent or more of their income toward housing costs.

# **Housing Needs, Strategies and Resources**

Local housing programs can assist in providing residents access to safe affordable housing by addressing the needs of specific clients, improving existing housing, and assisting in financing. In addition, programs for the elderly and handicapped, energy efficiency and weatherization, water and sewer system programs, and local regulations such as the building code and zoning, all play a role in providing affordable housing.

Resources available for financial and technical assistance are discussed below. Many of these programs are available to the local government, non-profit agencies, and private citizens. Programs for private and public financing, rehabilitation, and construction are available from the Federal and state government. A combination of these programs could be used to address housing needs in Alleghany County.

# **Identified Housing Needs**

Alleghany County has identified three areas that have housing needs that should be addressed. The three areas are: Wrightsville/Mallow, Callaghan, and Boiling Springs. Housing needs were determined by public comment, surveys, and individual resident's requests. Housing needs for the areas are described below.

## Wrightsville/Mallow

The Wrightsville/Mallow area has approximately 110 homes. A number of homes reportedly have structural and foundation deterioration requiring major rehabilitation. Additionally, residents have reported homes in need of roof repairs and other minor rehabilitation. A majority of the residences are served by public water and sewer, but there are a few without some level of indoor plumbing.

## Callaghan

There are approximately 140 homes, three trailer parks, and two adult homes located in this area. The adult homes permanently house approximately 140 individuals. There are homes in need of major rehabilitation, as residents have reported structural deterioration. There are also homes in need of minor rehabilitation, including roof replacement, and porch or entranceway improvements. Currently, public sewer is not available in the area and an extension of public water to this area was completed in 2001. As far as can be determined, septic systems in the area are sufficient. Through neighborhood surveys and meetings related to the water project, it has been determined that all homes have indoor plumbing.

## **Boiling Springs**

There are approximately 180 homes in this area. Over the years, property owners have extended existing roads, adding substandard housing for extended families and selling lots for additional development. As a result, many low-income residents are living in homes that have not been properly maintained and are in need of rehabilitation. There are quite a few units without some level of indoor plumbing. The area is not served by public water or sewer. Residents use wells, springs, and septic systems. In 2003, Alleghany County was awarded a Community Development Block Grant for the Bens Run Road portion of the Boiling Springs area.

# **Strategies**

Alleghany County should work with local citizens, the Virginia Department of Housing and Community Development, and other community service providers to address housing issues. A cooperative approach will be required in order to obtain the necessary funding and technical assistance necessary for a successful countywide housing rehabilitation effort. Other potential project areas should be surveyed and evaluated for future grant opportunities.

In 1996, Alleghany County, in cooperation with Clifton Forge and Covington, developed the Alleghany Highlands Housing Assessment. This report examines housing issues in Alleghany County, Clifton Forge, and Covington. The report also contains a housing needs field survey data for the communities of Hematite and Potts Creek. Alleghany County is currently participating in the Virginia Department of Housing and Community Development Indoor Plumbing and Rehabilitation Loan Program, and Emergency Home Repair Program (EHRP).

Alleghany County received Community Development Block Grant (CDBG) Planning Grant funds in FY 2000 to identify community planning projects. The grant allowed the County to develop a housing rehabilitation program design, conduct income and needs surveys in targeted areas, prioritize areas based on need, and identify funding sources for housing rehabilitation. Community needs assessment and interest surveys were conducted in the areas of Wrightsville/Mallow, Callaghan, and Boiling Springs. The information gathered during the project will be used to support future grant applications to the Virginia Department of Housing and Community Development and other appropriate agencies. As mentioned, the County received CDBG funds in 2003 for the Bens Run portion of the Boiling Springs area and this work has been completed.

#### Resources

Virginia Department of Housing and Community Development's (DHCD) Division of Community Development provides technical, financial, and planning assistance to communities through Community Development Block Grant (CDBG) and the Indoor Plumbing and Rehabilitation Loan Program. The Division of Housing provides financial and technical assistance to local governments, non-profits, and other organizations to expand housing opportunities, such as emergency home repair, weatherization, affordable housing production/preservation, and seed fund and start-up funds.

Virginia Housing Development Authority (VHDA) is a public mortgage finance company with a mission to help fellow Virginians obtain safe, sound, and decent housing. VHDA offers single family homeowner programs: basic home purchase loan program; home equity conversion mortgage program, home improvement loans, down payment, and closing cost programs. VHDA also offers multi-family housing programs including federal low income housing tax credit program, multi-family loan program, Section 8 construction and rehabilitation programs, and administers the Virginia Housing Fund.

The USDA Rural Development Office provides loans for low- to moderate-income families. The agency offers loans and grants to very low-income families for repairs to property, and loans to very low-income senior citizens and persons with disabilities for repairs to property. The Rural Development Office also offers low-interest loans and grant funding to rural governments for public utility projects and other community improvements.

The Southeast Rural Community Assistance Project's (formerly known as Virginia Water Project) mission is to provide low income Virginians with adequate, affordable water/sanitation services. The agency's programs include facility development, operation and management training, indoor plumbing and rehabilitation, and a loan fund.

# **Economy**

The purpose of this chapter is to provide an analysis of the labor force, occupations, major employers, trade sectors, and agricultural production in order to identify important changes and trends in the Alleghany County economy.

## **Labor Force Characteristics**

The number of persons in the Alleghany County labor force has declined by approximately 1,000 persons over the past 10 years. The annual number of unemployed persons has increased during that same time period from 231 in 2000 to 641 in 2010.

Table 29
Annual Labor Force Characteristics 2000-2010. Alleghany County

Annual Labor Force Characteristics 2000-2010, Alleghany			County	
	Civilian Labor			Unemployment
Year	Force	Employment	Unemployment	Rate
2000	7,684	7,453	231	3.0
2001	7,764	7,441	323	4.2
2002	8,064	7,639	425	5.3
2003	8,087	7,714	373	4.6
2004	7,578	7,229	349	4.6
2005	7,512	7,162	350	4.7
2006	7,349	6,997	352	4.8
2007	7,000	6,695	305	4.4
2008	6,857	6,484	373	5.4
2009	7,179	6,515	664	9.2
2010	7,122	6,481	641	9.0

Source: Virginia Employment Commission, 2011.

The unemployment rate dropped from a peak of 9.3% in January 2011 to 7.7% in December 2011.

Table 30

Monthly Labor Force Characteristics, 2011, Alleghany County

	Monthly Labor Force Characteristics, 2011, Alleghany County				
	Civilian Labor			Unemployment	
Period	Force	Employment	Unemployment	Rate (%)	
January	7,178	6,507	671	9.3	
February	7,201	6,556	645	9.0	
March	7,346	6,729	617	8.4	
April	7,404	6,847	557	7.5	
May	7,458	6,895	563	7.5	
June	7,328	6,733	595	8.1	
July	7,196	6,632	564	7.8	
August	7,204	6,612	592	8.2	
September	7,277	6,710	567	7.8	
October	7,307	6,803	504	6.9	
November	7,277	6,768	509	7.0	
December	7,248	6,692	556	7.7	

Source: Virginia Employment Commission, 2012.

Table 31 Labor Force Data

Labor Force Status	2000 2010	
Persons 16 and Over	10,322	13,363
In Labor force	5,894	7,820
Employed Civilian Labor Force	5,582	7,331
Number Unemployed	312	484
Percent Unemployed	5.3%	6.2
Armed Forces	0	5
Not in Labor Force	4,428	5,543
Participation Percentage	57.10	58.52

Source: US Census Bureau, 2000.

# **Quarterly Census of Employment and Wages**

The Quarterly Census of Employment and Wages program derives its data from quarterly tax reports submitted to State Employment Security Agencies by employers subject to State unemployment insurance laws and from Federal agencies subject to the Unemployment Compensation for Federal Employees program. This includes 99.7% of all wage and salary civilian employment. These reports provide information on the number of people employed and the wages paid to the employees each quarter.

Covered employers in most States report total compensation paid during the calendar quarter, regardless of when the services were performed. Under most State laws or regulations, wages include bonuses, stock options, profit distributions, the cash value of meals and lodging, tips and other gratuities, and, in some States, employer contributions to certain deferred compensation plans such as 401(k) plans. Data for Alleghany County is shown below.

Table 32
Employment and Wages, Alleghany County

Year	Average Number of Establishments	Average Employment	Average Weekly Wage
2001	265	4,476	\$491
2002	301	4,778	\$503
2003	309	4,830	\$512
2004	313	4,761	\$538
2005	312	4,634	\$563
2006	306	4,522	\$576
2007	313	4,466	\$575
2008	321	4,319	\$595
2009	323	4,216	\$585
2010	311	4,272	\$681

Source: Quarterly Census of Employment and Wages, U.S. Bureau of Labor Statistics, 2011.

Table 33

Average Weekly Wage, Alleghany County

Year	Alleghany County	Virginia
2001	\$491	\$706
2002	\$503	\$716
2003	\$512	\$742
2004	\$538	\$779
2005	\$563	\$813
2006	\$576	\$847
2007	\$575	\$885
2008	\$595	\$908
2009	\$585	\$928
2010	\$681	\$955

Source: Quarterly Census of Employment and Wages, U.S. Bureau of Labor Statistics, 2011.

# **Household Earnings**

Wage and salary income reflect Alleghany County's income disparity with the statewide figures. The wage and salary mean income level in Alleghany County was 66% of the state figure. Mean social security income was higher than the state figure. Retirement income is 57% of the state figure, and mean public assistance income was 69% of the state figure.

Table 34
Mean Household Famings by Type, 2010

Model Flodochica Editingo by Typo, 2010			
Category	Alleghany County	Virginia	
Wage and Salary Income	\$54,242	\$82,308	
Social Security Income	\$16,500	\$15,385	
Supplemental Security Income	\$7,101	\$7,786	
Public Assistance Income	\$1,946	\$2,804	
Retirement Income	\$14,859	\$26,210	

Source: Census of Population, 2006-2010 American Community Survey, U.S. Bureau, 2012.

# **Industry of Employed Persons**

Industry data describe the kind of business conducted by a person's employing organization. The data provides industry classifications that group establishments into industries based on the activities in which they are primarily engaged. The industry categories do not necessarily reflect the occupation/job of residents. For example, people employed in agriculture include truck drivers and bookkeepers; people employed in the transportation industry include mechanics, freight handlers, and payroll clerks; and people employed in the health care profession include nurses, janitors, security guards, and secretaries.

Table 35 Industry of Employed Persons

Industry Category	Number	Percent
Civilian employed population 16 years and over	7,331	100.0
Agriculture, forestry, fishing and hunting, and mining	108	1.5
Construction	485	6.6
Manufacturing	1,527	20.8
Wholesale trade	151	2.1
Retail trade	742	10.1
Transportation, warehousing, and utilities	420	5.7
Information	101	1.4
Finance and insurance, and real estate and rental and leasing	243	3.3
Professional, scientific, and management, and administrative and waste management services	209	2.9
Educational services, and health care and social assistance	1,949	26.6
Arts, entertainment, and recreation, and accommodation and food services	882	12.0
Other services, except public administration	231	3.2
Public administration	283	3.9

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

# **Occupation of Employed Persons**

Occupation describes the kind of work a person does on the job. The data is used to formulate policy and programs for employment, career development and training; to provide information on the occupational skills of the labor force in a given area to analyze career trends; and to measure compliance with antidiscrimination policies. Companies also use this data to assist in deciding where to locate new plants, stores, or offices based on the implied skills of the existing labor force.

Table 36
Occupation of Employed Persons

Occupation Category	Number	Percent
Civilian employed population 16 years and over	7,331	100.0
Management, professional, and related occupations	2,106	28.7
Service occupations	1,341	18.3
Sales and office occupations	1,537	21.0
Natural resources, Construction, and maintenance occupa	itions 780	10.6
Production, transportation, and material moving occupation		21.4

Source: 2006-2010 American Community Survey, U.S. Census Bureau, 2012.

# **Major Employers**

The following table shows major employers for Alleghany County in 2011 based on data provided by the Virginia Employment Commission. Major employers represent several sectors including industrial, retail, medical and government.

Table 37
Major Employers, 3<sup>rd</sup> Quarter, 2011

Employer	Industry	Size Class
Mead Westvaco	Paper Manufacturing	1000 and over
Alleghany Highlands Public School Board	Educational Services	250 to 499
Alleghany Regional Hospital	Hospitals	250 to 499
Wal Mart	General Merchandise Stores	250 to 499
County of Alleghany	Executive, Legislative, and Other General Government Support	100 to 249
Dabney S. Lancaster Community College	Educational Services	100 to 249
Mead Westvaco (Low Moor)	Paper Manufacturing	100 to 249
Bacova Guild	Textile Product Mills	100 to 249
Covington City School Board	Educational Services	100 to 249
City of Covington	Executive, Legislative, and Other General Government Support	100 to 249
Allegany Highland Mental Health Services	Social Assistance	50 to 99
GGNSC	Nursing and Residential Care Facilities	50 to 99
Team Carriers	Truck Transportation	50 to 99
AFS of Low Moor Inc	Nursing and Residential Care Facilities	50 to 99
Kroger	Food and Beverage Stores	50 to 99
WVVA Health Care Alliance	Ambulatory Health Care Services	50 to 99
The Woodlands	Nursing and Residential Care Facilities	50 to 99
Boys Home	Nursing and Residential Care Facilities	50 to 99
Hammond Mitchell	Heavy and Civil Engineering Construction	50 to 99
McDonald's	Food Services and Drinking Places	50 to 99
Kmart	General Merchandise Stores	50 to 99
Mead Westvaco (Power	Management of Companies and	50 to 99
Department)	Enterprises	
Waco Inc.	Specialty Trade Contractors	50 to 99
YMCA	Social Assistance	50 to 99
Manpower International	Administrative and Support Services	50 to 99
Manpower International	Food Services and Drinking Places	50 to 99

Source: Virginia Employment Commission, 2012.

# **Commuting Patterns**

According to the Census Bureau's American Community Survey, almost 95% of workers living in Alleghany County drive to their place of employment. Only 9.1% carpool to work. Approximately 3.4% walk or commute to work by public transit, bicycle or other means. The percentage of those that work at home is 1.6%. Almost 31% of workers are employed outside of Alleghany County. Over 31% of commuters have a travel time to work of more than 30 minutes.

Table 38
Means of Transportation to Work, Alleghany County Residents

Means of Transportation to Work, Alleghany County	Residents
Subject	
Workers 16 years and over	7,128
Car, truck, or van	94.9%
Drove alone	85.7%
Carpooled	9.1%
In 2-person carpool	6.9%
In 3-person carpool	1.4%
In 4-or-more person carpool	0.9%
Workers per car, truck, or van	1.06%
Public transportation (excluding taxicab)	0.4%
Walked	2.4%
Bicycle	0.0%
Taxicab, motorcycle, or other means	0.8%
Worked at home	1.6%
0000 0040 4	

Source: U.S. Census Bureau, 2006-2010 American Community Survey.

Table 39
Place of Work, Alleghany County Residents

Place	Percent
Worked in state of residence	97.2
Worked in county of residence	66.4
Worked outside county of residence	30.8
Worked outside state of residence	2.8

Source: U.S. Census Bureau, 2006-2010 American Community Survey.

Table 40
Travel Time to Work, Alleghany County Residents

Time	Percent
Less than 10 minutes	13.0
10 to 14 minutes	17.0
15 to 19 minutes	16.0
20 to 24 minutes	16.4
25 to 29 minutes	6.0
30 to 34 minutes	10.9
35 to 44 minutes	5.4
45 to 59 minutes	6.5
60 or more minutes	8.9
Mean travel time to work (minutes)	26.2

Source: U.S. Census Bureau, 2006-2010 American Community Survey.

#### **Taxable Sales**

The taxable sales figures presented below are based on Virginia sales tax revenues deposited rather than the actual taxable sales figures as reported on a dealer's return. The amount of annual taxable sales by locality in odd numbered years is among the elements used to calculate the Composite Index of Ability to Pay used by the Department of Education to allocate school-aid money.

The figures should be viewed as approximations of the actual taxable sales for the period. The accuracy depends on a variety of factors such as correct filing of returns, mailing and processing conditions, and the number of filing days in a month. Trends in taxable sales partly represent changes in sales tax collections and so may differ from changes in actual retail sales. The number of registered dealers for each business classification code accounts for multiple locality dealers. This figure is determined by counting each separate place of business once. The report contains only those items that are subject to the sales and vending tax. Many sales are excluded such as certain motor vehicles, mobile homes, travel trailers, and certain motor vehicle fuels.

In 2001, Clifton Forge taxable sales data were combined with those of Alleghany County increasing the county total by approximately \$20 million per year.

The total number of establishments decreased from 2001 to 2011. The total taxable sales however increased by more than \$5 million or 8.3 percent.

Table 41 Annual Taxable Sales

Year	Establishments	Taxable Sales
2000	181	\$40,720,221
2001	268	\$63,226,413
2002	274	\$62,144,796
2003	268	\$56,779,930
2004	266	\$57,219,923
2005	207	\$63,269,804
2006	296	\$60,889,587
2007	293	\$71,814,959
2008	277	\$63,184,416
2009	272	\$63,621,550
2010	259	\$64,618,043
2011	242	\$68,464,820

Source: Taxable Sales in Virginia Counties and Cities, Annual Report, Virginia Department of Taxation, 2000-2011.

# **Agriculture**

The total number of farms in Alleghany County increased from 1997 to 2007; however the total amount of land in farms decreased. Total cropland and harvested cropland also decreased during the period. The average value per farm and average value per acre more than doubled during the time period according to the U.S. Census of Agriculture. Value of livestock and poultry decreased slightly from 1997 to 2007. The total market value of crops remained level from \$286,000 in 2002 to \$283,000 in 2007.

Table 42
Farm Characteristics

1 am Onaraciensico						
Characteristic	1997	2002	2007	Percent Change 1997 - 2007		
Number of Farms	160	202	209	30.6		
Land in Farms (acres)	31,063	32,937	28,886	-7.0		
Avg. Farm Size (acres)	194	163	138	-28.9		
Avg. Value <sup>1</sup> Per Farm	238,953	313,802	392,728	64.4		
Avg. Value <sup>1</sup> Per Acre	1,185	2,197	2,842	140.0		
Total Cropland (acres)	12,642	11,585	7,970	-37.0		
Harvested Cropland (acres)	5,026	5,802	5,572	10.9		

<sup>1.</sup> Includes land and buildings.

Source: Census of Agriculture, U.S. Bureau of the Census, 1997, 2002 and 2007.

Table 43
Value of Agricultural Products

value of Agricultural Froducts					
Category	1997	2002	2007	Percent Change 1997 – 2007	
Market Value of all Agricultural					
Products Sold <sup>1</sup>	2,132	1,987	2,109	-1.1	
Avg. Per Farm	13,323	9,839	10,092	-24.3	
Market Value of Crops <sup>1</sup>	225	286	283	25.8	
Market Value of Livestock, and					
Poultry <sup>1</sup>	1,906	1,702	1,826	-4.2	

<sup>1.</sup> Value in thousands of dollars.

Source: Census of Agriculture, U.S. Bureau of the Census, 1997, 2002 and 2007.

Table 44
Farm Operators by Occupation

I diffi Operators by Coodpation					
Principal Occupation	1997		2007	Percent Change 1997 - 2007	
Farming	44	99	82	86.4	
Other	116	103	127	9.5	

Source: Census of Agriculture, U.S. Bureau of the Census, 1997, 2002 and 2007.

#### Tourism

The studies to estimate the domestic traveler spending were conducted by the Research Department of the Travel Industry Association of America. The studies provide estimates of domestic traveler expenditures. These summary profiles represent all locality-specific travel-related data kept by the Virginia Tourism Corporation.

### Expenditures

Expenditures represent the direct spending by domestic travelers including meals, lodging, public transportation, auto transportation, shopping, admissions and entertainment. Payroll represents the direct wages, salaries and tips corresponding to the direct travel-related employment. Employment represents the estimates of direct travel-related employment in the locality. State Tax Receipts represents the estimates of direct travel-related state taxes generated within the locality. These taxes would include the state sales-and-use tax, gasoline excise taxes, corporate income tax and the personal income tax. Local Travel Receipts represents the estimates of direct travel-related local taxes generated within the locality. These taxes would include the local sales-and-use tax, local excise taxes and property taxes. These five impact estimates exclude indirect, or multiplier impacts.

Table 45
Travel Impacts Alleghany County

Travel impacts Alleghany County						
	2007	2011	Percent Change			
Expenditures	\$31,354,886	\$31,753,553	1.3			
Payroll	\$6,284,085	\$6,233,363	-0.8			
Employment	365	331	-9.3			
State Tax Receipts	\$1,276,897	\$1,249,121	-2.2			
Local Tax Receipts	\$916,394	\$881,075	-3.9			

Source: Virginia Tourism Corporation, 2012.

Table 46

Regional Travel Impacts 2011

	Regional Travel impacts 2011					
	Alleghany	Bath	Botetourt	Covington	Rockbridge	
Expenditures	\$31,753,553	\$236,220,818	\$49,695,365	\$5,149,259	\$113,295,798	
Payroll	\$6,233,363	\$28,035,089	\$8,009,959	\$1,153,304	\$17,027,505	
Employment	331	1,614	432	54	902	
Sales Tax Receipts	\$1,249,121	\$7,090,568	\$2,177,068	\$204,379	\$4,998,604	
Local Tax Receipts	\$881,075	\$2,869,495	\$1,376,874	\$140,217	\$2,462,028	

Source: Virginia Tourism Corporation, 2012.

#### Excise Tax Collections

Lodging Excise Tax Collected, Food Service Excise Tax Collected, and Admissions Excise Tax Collected represent the local excise tax collections for lodging, meals and admissions, respectively, if applicable in the locality. Localities imposing a local lodging excise tax may impose the tax on any or all classes of lodging such as hotels, motels, bed and breakfasts, cabins, and campgrounds. These collections are typically reported in July-to-June fiscal years, not calendar years. For this reason, they may not perfectly mirror the lodging and meals sales movements. The source for this data is the Virginia Auditor of Public Accounts.

Table 47
Excise Tax Collections Alleghany County

	2007	2011	Percent Change
Lodging	\$77,616	\$152,966	97.1
Food Service	\$403,996	\$481,471	19.2
Admissions	\$0	\$0	0.0

Source: Virginia Tourism Corporation, 2007 and 2012.

Table 48
Regional Excise Tax Collections 2011

regional Extends rant delications = + + +					
	Alleghany	Bath	Botetourt	Covington	Rockbridge
Lodging	\$152,966	\$707,584	\$293,549	\$8,232	\$1,145,622
Food Service	\$481,471	\$195,557	\$1,093,240	\$878,562	\$1,212,424
Admissions	\$0	\$0	\$0	\$0	\$0

Source: Virginia Tourism Corporation, 2012.

## **Commercial and Industrial Development Sites**

Because of the mountainous nature of the area, the extensive forestlands, existing agricultural uses of many valley areas, and the limitations on natural gas and water and sewer lines imposed by distance from sources and treatment facilities, the supply of developable land in the Highlands is relatively limited. With that said, there are several *industrial lots* available but a limited number of large lots with large graded building pads. The mountainous terrain presents a challenge to the region and continued grading activity will be necessary over the coming years to improve the supply of attractive developed land for economic development.

There are no large *tenant-ready spec buildings* in the area. There are a few buildings that are suitable for office space and/or call center operations, but again availability of quality built-space remains a problem in the area. There are available buildings and developed industrial sites in the region but supply, especially of quality built-space, remains limited.

The following tables show the available industrial buildings, office buildings, and sites/land in the Alleghany Highlands.

Table 49
Available Office Buildings

r transaction of the authority of						
Name	Jurisdiction	Location	Square Feet	Telecomm.		
Halmode Apparel	City of Covington	920 S Lexington Ave	25,570	nTelos		
Clifton Forge High School	Alleghany County	Lowell Street	53,090	nTelos		
Schewel's/Mallow Mall building	Alleghany County	105 Mall Road	22,038	nTelos		

Source: Virginia Economic Development Partnership, 2012.

Table 50
Available Industrial Buildings

Name	Jurisdiction	Location	Square Feet	Ceiling Height (ft)
Halmode Apparel	City of Covington	920 S Lexington Ave	25,579	19
Parker Hannifin	Alleghany County	1705 Tannery Road	165,000	18
AET 1	City of Covington	901 A West Edgemont Drive	381,938	19
AET 2	City of Covington	901 West Edgemont Drive	139,816	30

Source: Virginia Economic Development Partnership, 2012.

Table 51
Available Sites/Land

Name	Jurisdiction	Location	Acres Available
AET	City of Covington	901 West Edgemont	5.0
Alleghany Regional Commerce Center	Alleghany County	Commerce Center Dr.	81.0
Alleghany Innovation Park	Alleghany County	I-64 and VA Rt. 42	140.0
Bowman Property	Alleghany County	I-64 Exit 27	10.5
Cliftongate Commerce Center	Alleghany County	Nicholas Drive	10.0
Cliftongate Commerce Center 2	Alleghany County	I-64 and Rt. 220	11.16
Karnes Creek/Selma	Alleghany County	I-64 Exit 21	4.87
Clifton Forge Railyard North	Alleghany County	West Ridgeway St.	33.62
Clifton Forge Railyard South	Alleghany County	Frazier Hill Lane	31.19
Clifton Forge Business Park	Alleghany County	Chestnut Street	10.0
Perkins Property	City of Covington	Durant Road	65.41
Low Moor Mine (underground)	Alleghany County	Rich Patch Road	38.72
Mead Property	Alleghany County	1-64 Exit 21	28.94
Williams Property	Alleghany County	Hot Springs Road	248.93

Source: Virginia Economic Development Partnership, 2012.

# **Community Utilities**

Utility locations help guide in the development of the areas in which they are located, especially the location of public water and sewer. This chapter will provide a brief overview of the local utilities that are available in Alleghany County.

### Water and Wastewater Systems

Many of the populated areas of Alleghany County are served by centralized water and wastewater systems, which are supplied by various sources. The County served 2,801 water and 1,975 wastewater customers in January 2012, which represents approximately 54 percent and 38 percent, respectively, of total households within Alleghany County. This is based on an estimated population of 12,926 and 2.5 persons per household.

A report entitled <u>A Countywide Study</u>, <u>Water and Wastewater Facilities</u>, <u>Alleghany County</u>, <u>Virginia</u>, initially prepared on December 28, 1994, and updated in September 2006, by Anderson and Associates, Inc. analyzes the existing and future public water and wastewater facilities. The Alleghany County Board of Supervisors funded the report and it addresses water supply and wastewater disposal issues throughout Alleghany County. This report will be used to determine the future extension of the existing water and sewer systems into other areas of the County. Many of the areas recognized in the original study as future service areas have been developed in accordance with the study.

The County is divided into several service areas. The County buys water from the City of Covington and the Town of Clifton Forge for service to certain areas of the County. Wastewater treatment service is also purchased by the County from the City of Covington to service the western end of the County. Wastewater services are provided by the County to the eastern end of the County which includes the Town of Clifton Forge and the Town of Iron Gate. Wastewater services to the Low Moor and Valley Ridge area are provided by the County.

### **Eastern Portion of the County**

The Valley Ridge service area includes the subdivision known as Valley Ridge and the area surrounding Alleghany High School. The water in this area is supplied by the County and is purchased by contract from the Town of Clifton Forge. Sewage from this area is treated at the Low Moor Wastewater Treatment Plant, which is owned and operated by the County. There are some septic systems in this area.

The Low Moor service area includes the community of Low Moor and the businesses located on the northern side of I-64 at the Low Moor interchange, including the Alleghany Regional Commerce Center. Water for this area is provided by the County and is purchased by contract from the Town of Clifton Forge. Sewage from this area is treated at the Low Moor Wastewater Treatment Plant, which is owned and operated by the County.

The Selma service area includes the community of Selma, Dabney S. Lancaster Community College, and the houses and businesses along Selma-Low Moor Road (Rt. 696). Water service is provided by the County in this area and is purchased through a contract with the Town of Clifton Forge. Sewage from this area is treated at the Lower Jackson River Regional Wastewater Treatment Plant, which is owned and operated by the County.

The *Cliftondale Park* service area includes the subdivisions of Parklin Terrace, Cliftwood Manor, and Cliftondale Park, which includes the Clifton Mobile Home Park. Water service is provided by the County in this area and is purchased through a contract with the Town of Clifton Forge. Sewage from this area is treated at the Lower Jackson River Regional Wastewater Treatment Plant, which is owned and operated by the County.

The Wilson Creek service area includes the homes located on Douthat Road (Rt. 629), north of I-64. It also includes the Falcon Ridge Subdivision, Meadows of Wilson Court, and Alleghany Campgrounds. Water service is provided by the County in this area and is purchased through a contract with the Town of Clifton Forge. Sewage from this area is treated at the Lower Jackson River Regional Wastewater Treatment Plant, which is owned and operated by the County. However, sewer service in these areas is limited and is not provided to all of the homes.

The Sharon-Triangle Hill service area includes the homes located along Longdale Furnace Road (Rt. 269) and the communities of Nicelytown Road, Sharon, Riverland Road, Shawver Creek Estates, Rt. 42, and Triangle Hill. Water service is provided by the County in this area and is purchased through a contract with the Town of Clifton Forge. Sewer service is limited in this area and is not provided to many of the homes. There have been reports of failing or failed septic systems. The County has developed plans to bring sewer to more of this area, however no construction is planned at this time.

The Wesgate service area includes the community of Wesgate, Iron Gate, and includes approximately 30 homes located in Botetourt County, which is adjacent to Wesgate and the Town of Iron Gate. Water service is provided by the County in this area and water service in this area is purchased through a contract with the Town of Clifton Forge. Sewage from this area is treated at the Low Jackson River Regional Wastewater Treatment Plant, which is owned and operated by the County.

# **Central Portion of the County**

The *Pounding Mill* service area includes the communities of Mallow, Jackson Heights, Brentwood, and Dolly Ann. The water and sewage for this area is provided by County and are purchased through a contract with the City of Covington.

The Cherokee-Indian Valley service area includes the subdivisions of Cherokee Forest, Indian Valley, and the houses along Potts Creek Road in the immediate areas surrounding these two subdivisions. The services in this area are provided by the County and are purchased through a contract with the City of Covington.

## Western Portion of the County

The Clearwater Park service area includes the subdivisions of Intervale, Dressler Estates, Clearwater Park, Clearview Estates, Riveredge Retreat, Dunbrack Road, and the houses in the immediate areas along Jackson River Road (Rt. 687) and Hot Springs Road (Rt. 220). The services in this area are provided by the County and are purchased through a contract with the City of Covington.

The Rosedale service area includes the subdivisions of Rosedale, Oak Wood Forest, Westwood, and Callaghan. The services in this area are provided by the County and are purchased through a contract with the City of Covington.

The following table presents the number of water and sewer customers in the County for the month of June 2000, 2005 and 2010. The numbers are given for each of the individual service areas.

Table 52
Alleghany County Water and Wastewater Systems
Total Customers

Service Area	20	00	20	05	20	10
	Water	Sewer	Water	Sewer	Water	Sewer
Clearwater/Clearview	277	226	285	217	296	226
Intervale	118	4	119	66	127	75
Rosedale	84	81	83	82	83	80
Westwood	45	42	48	43	47	43
Cherokee/Indian Valley	159	131	161	133	164	134
Pounding Mill	597	496	631	533	640	542
Low Moor	191	172	200	182	213	197
Selma	226	220	228	225	228	225
Cliftondale	230	225	212	208	225	221
Wilson Creek	82	56	82	53	102	57
Triangle Hill	126	-	130	-	139	-
Sharon	108	-	130	-	132	-
Wesgate	74	60	71	58	71	60
Valley Ridge	-	103	187	116	186	115
Callaghan	-	-	143	-	148	_
Totals	1984	1662	2710	1916	2801	1975

Source: County water and sewer records June 2000, 2005 and 2010.

The County can purchase a total of 1,000,000 gpd of water from the Jackson River Filtration Water Plant in Covington. The current usage is 25% of this reserve. This reserve meets the anticipated needs for the supply of the western section of the County. The County can purchase a total of 600,000 gpd from the Clifton Forge Water Treatment Plant. The current usage of that total is 400,000 gpd. The Countywide Study indicated that both Clifton Forge and Covington have sufficient supply of water to serve the existing and projected County needs during normal circumstances. However, there may not be a sufficient supply during drought conditions or for further economic development.

### Countywide Water and Wastewater Facilities Study

Some of the following information is derived from the <u>Countywide Study</u>, <u>Water and Wastewater Facilities</u>, <u>Alleghany County</u>, <u>Virginia</u>, that was prepared by Anderson and Associates in 2006. The study presented the current water and sewer use, and future water and sewer needs for Alleghany County. The study also projected the number of water and sewer customers and the usage up to the year 2025.

Existing. Water use records for March 2003 through December 2005 were examined for each of the public water systems in the County. Data on the water production records for Covington and Clifton Forge were also reviewed. Customer base information was obtained, and

commercial/industrial use was identified separately for areas with concentrated commercial/industrial usage. The existing wastewater flows were measured at the County's pump stations.

The following table entitled Water Use Calculations has grouped the major commercial, industrial, and institutional flows from the residential flows. To calculate the use per capita, the average use per residential connection has been divided by 2.5, which is the number of persons per household based on the 2000 Census data.

The average water usage per person for the County systems listed range from 56 gpd to 86 gpd with an overall average of 66.5 gpd. Providing an allowance of 10 percent for commercial usage, 30 percent for loss, and 10 percent for future expansion, yields and average flow per capita of 99 gpd. The State Health Department recommends using 100 gpd per capita. Therefore, 100 gpd per capita is used for design purposes in this report. Commercial, industrial, and institution water usage is only identified separately for areas of concentrated commercial industrial development.

Projected Water Use. The per capita use of 100 gpd developed as described above was applied to the projected populations in the different service areas. This provides a residential demand for each service area. Major commercial/industrial areas were examined as to the potential growth and allowances made for commercial and other types of demand. Design flows for these are expressed in equivalent residential connections (ERC's). An ERC is defined as a water flow or demand equal to the average residential customer or 2.5 persons times 100 gpd per person or 250 gpd. Minor commercial usage is included in the residential demand. Private systems within designated service areas are expected to connect to the public systems as the existing service areas are connected. A 30 percent allowance for water loss is included in the 100 gpd per capita demand. This is based on the approximate unaccounted water in the water systems supplied by Clifton Forge.

Projected Wastewater Flows. Wastewater flows in the existing service areas are based on actual water use records. Flows for the service areas are based on 100 gpd per capita or 250 gpd per residence. To determine the inflow/infiltration rate in the County's collection system, the pump station records were compared. The difference between the estimated water use and the pump station flow was the inflow/infiltration. Inflow/infiltration in the systems range from 11,000 gpd to 400,000 gpd. The only systems not subject to significant I/I are those at Dabney Lancaster and Westwood. Major commercial/industrial areas were examined as to the potential for growth and allowances made for commercial and other types of demand. When extent of development was not known, 1,000 gpd per acre was used to project the wastewater flow. For existing commercial/industrial areas, a growth rate equal to the projected residential growth for the area was used.

<u>Summary</u>. Existing and projected water and wastewater use by service area is given in the table Water Use Projections and Wastewater Projections in tables 54 and 55. For example, in 1994 the existing Cliftondale Park service area consisted of 568 customers. For a flow of 260 gpd/connection, the total water use would be 147,680 gpd. For expanded service areas, calculations of projected needs are based on the house counts and other anticipated demands for specific purposes.

Table 53
Alleghany County Water Use Calculations

Date         Cherokee         Cliftondale³         Intervale         Pounding Mill         Rosedale         Selma/Low Moor           Mar-03         19,361         146,110         47,735         103,352         46,342         132,030           May-03         21,481         134,610         53,539         114,913         51,023         119,542           Jun-03         24,127         166,143         63,920         126,907         55,807         122,063           Jul-03         24,984         174,200         59,829         142,239         49,419         128,084           Aug-03         23,439         174,071         64,429         136,584         53,610         142,445           Sep-03         24,717         187,941         62,000         129,737         56,427         136,830           Oct-03         20,810         165,894         54,526         130,829         48,135         123,897           Nov-03         19,353         167,360         47,370         118,883         44,857         113,967           Dec-03         24,958         153,590         61,545         113,155         55,148         107,650           Jan-04         21,265         171,967         60,442         125
Mar-03         19,361         146,110         47,735         103,352         46,342           Apr-03         24,323         167,290         55,800         124,653         55,810         132,030           May-03         21,481         134,610         53,539         114,913         51,023         119,542           Jun-03         24,127         166,143         63,920         126,907         55,807         122,063           Jul-03         24,984         174,200         59,829         142,239         49,419         128,084           Aug-03         23,439         174,071         64,429         136,584         53,610         142,445           Sep-03         24,717         187,941         62,000         129,737         56,427         136,830           Oct-03         20,810         165,894         54,526         130,829         48,135         123,897           Nov-03         19,353         167,360         47,370         118,883         44,857         113,967           Dec-03         24,958         153,590         61,545         113,155         55,148         107,650           Jan-04         21,265         171,967         60,442         125,871         46,506         14
Apr-03         24,323         167,290         55,800         124,653         55,810         132,030           May-03         21,481         134,610         53,539         114,913         51,023         119,542           Jun-03         24,127         166,143         63,920         126,907         55,807         122,063           Jul-03         24,984         174,200         59,829         142,239         49,419         128,084           Aug-03         23,439         174,071         64,429         136,584         53,610         142,445           Sep-03         24,717         187,941         62,000         129,737         56,427         136,830           Oct-03         20,810         165,894         54,526         130,829         48,135         123,897           Nov-03         19,353         167,360         47,370         118,883         44,857         113,967           Dec-03         24,958         153,590         61,545         113,155         55,148         107,650           Jan-04         21,265         171,967         60,442         125,871         46,506         141,203           Feb-04         21,507         187,934         58,543         113,393         5
May-03         21,481         134,610         53,539         114,913         51,023         119,542           Jun-03         24,127         166,143         63,920         126,907         55,807         122,063           Jul-03         24,984         174,200         59,829         142,239         49,419         128,084           Aug-03         23,439         174,071         64,429         136,584         53,610         142,445           Sep-03         24,717         187,941         62,000         129,737         56,427         136,830           Oct-03         20,810         165,894         54,526         130,829         48,135         123,897           Nov-03         19,353         167,360         47,370         118,883         44,857         113,967           Dec-03         24,958         153,590         61,545         113,155         55,148         107,650           Jan-04         21,265         171,967         60,442         125,871         46,506         141,203           Feb-04         21,507         187,934         58,543         113,393         50,825         170,136           Mar-04         21,984         164,160         49,990         105,174         5
Jun-03         24,127         166,143         63,920         126,907         55,807         122,063           Jul-03         24,984         174,200         59,829         142,239         49,419         128,084           Aug-03         23,439         174,071         64,429         136,584         53,610         142,445           Sep-03         24,717         187,941         62,000         129,737         56,427         136,830           Oct-03         20,810         165,894         54,526         130,829         48,135         123,897           Nov-03         19,353         167,360         47,370         118,883         44,857         113,967           Dec-03         24,958         153,590         61,545         113,155         55,148         107,650           Jan-04         21,265         171,967         60,442         125,871         46,506         141,203           Feb-04         21,507         187,934         58,543         113,393         50,825         170,136           Mar-04         21,984         164,160         49,990         105,174         53,287         142,103           Apr-04         21,350         165,370         55,350         118,743         4
Jul-03         24,984         174,200         59,829         142,239         49,419         128,084           Aug-03         23,439         174,071         64,429         136,584         53,610         142,445           Sep-03         24,717         187,941         62,000         129,737         56,427         136,830           Oct-03         20,810         165,894         54,526         130,829         48,135         123,897           Nov-03         19,353         167,360         47,370         118,883         44,857         113,967           Dec-03         24,958         153,590         61,545         113,155         55,148         107,650           Jan-04         21,265         171,967         60,442         125,871         46,506         141,203           Feb-04         21,507         187,934         58,543         113,393         50,825         170,136           Mar-04         21,984         164,160         49,990         105,174         53,287         142,103           Apr-04         21,350         165,370         55,350         118,743         47,140         134,253           Jun-04         26,000         217,190         67,883         136,617         5
Aug-03       23,439       174,071       64,429       136,584       53,610       142,445         Sep-03       24,717       187,941       62,000       129,737       56,427       136,830         Oct-03       20,810       165,894       54,526       130,829       48,135       123,897         Nov-03       19,353       167,360       47,370       118,883       44,857       113,967         Dec-03       24,958       153,590       61,545       113,155       55,148       107,650         Jan-04       21,265       171,967       60,442       125,871       46,506       141,203         Feb-04       21,507       187,934       58,543       113,393       50,825       170,136         Mar-04       21,984       164,160       49,990       105,174       53,287       142,103         Apr-04       21,350       165,370       55,350       118,743       47,140       134,253         Jun-04       26,000       217,190       67,883       136,617       50,977       153,043         Jul-04       22,590       189,087       38,855       117,400       44,713       117,355         Aug-04       21,648       185,348       63,855
Sep-03         24,717         187,941         62,000         129,737         56,427         136,830           Oct-03         20,810         165,894         54,526         130,829         48,135         123,897           Nov-03         19,353         167,360         47,370         118,883         44,857         113,967           Dec-03         24,958         153,590         61,545         113,155         55,148         107,650           Jan-04         21,265         171,967         60,442         125,871         46,506         141,203           Feb-04         21,507         187,934         58,543         113,393         50,825         170,136           Mar-04         21,984         164,160         49,990         105,174         53,287         142,103           Apr-04         21,350         165,370         55,350         118,743         47,140         134,253           May-04         24,261         182,098         57,942         113,677         46,345         124,758           Jun-04         26,000         217,190         67,883         136,617         50,977         153,043           Aug-04         21,648         185,348         63,855         136,448         5
Oct-03         20,810         165,894         54,526         130,829         48,135         123,897           Nov-03         19,353         167,360         47,370         118,883         44,857         113,967           Dec-03         24,958         153,590         61,545         113,155         55,148         107,650           Jan-04         21,265         171,967         60,442         125,871         46,506         141,203           Feb-04         21,507         187,934         58,543         113,393         50,825         170,136           Mar-04         21,984         164,160         49,990         105,174         53,287         142,103           Apr-04         21,350         165,370         55,350         118,743         47,140         134,253           May-04         24,261         182,098         57,942         113,677         46,345         124,758           Jun-04         26,000         217,190         67,883         136,617         50,977         153,043           Aug-04         21,648         185,348         63,855         136,448         50,194         129,248           Sep-04         22,847         209,717         56,486         130,527         5
Nov-03         19,353         167,360         47,370         118,883         44,857         113,967           Dec-03         24,958         153,590         61,545         113,155         55,148         107,650           Jan-04         21,265         171,967         60,442         125,871         46,506         141,203           Feb-04         21,507         187,934         58,543         113,393         50,825         170,136           Mar-04         21,984         164,160         49,990         105,174         53,287         142,103           Apr-04         21,350         165,370         55,350         118,743         47,140         134,253           May-04         24,261         182,098         57,942         113,677         46,345         124,758           Jun-04         26,000         217,190         67,883         136,617         50,977         153,043           Aug-04         21,648         185,348         63,855         117,400         44,713         117,355           Aug-04         22,847         209,717         56,486         130,527         54,480         146,130           Oct-04         18,894         174,939         47,923         109,777         4
Dec-03         24,958         153,590         61,545         113,155         55,148         107,650           Jan-04         21,265         171,967         60,442         125,871         46,506         141,203           Feb-04         21,507         187,934         58,543         113,393         50,825         170,136           Mar-04         21,984         164,160         49,990         105,174         53,287         142,103           Apr-04         21,350         165,370         55,350         118,743         47,140         134,253           May-04         24,261         182,098         57,942         113,677         46,345         124,758           Jun-04         26,000         217,190         67,883         136,617         50,977         153,043           Jul-04         22,590         189,087         38,855         117,400         44,713         117,355           Aug-04         21,648         185,348         63,855         136,448         50,194         129,248           Sep-04         22,847         209,717         56,486         130,527         54,480         146,130           Oct-04         18,894         174,939         47,923         109,777         4
Jan-04         21,265         171,967         60,442         125,871         46,506         141,203           Feb-04         21,507         187,934         58,543         113,393         50,825         170,136           Mar-04         21,984         164,160         49,990         105,174         53,287         142,103           Apr-04         21,350         165,370         55,350         118,743         47,140         134,253           May-04         24,261         182,098         57,942         113,677         46,345         124,758           Jun-04         26,000         217,190         67,883         136,617         50,977         153,043           Jul-04         22,590         189,087         38,855         117,400         44,713         117,355           Aug-04         21,648         185,348         63,855         136,448         50,194         129,248           Sep-04         22,847         209,717         56,486         130,527         54,480         146,130           Oct-04         18,894         174,939         47,923         109,777         49,419         151,881
Feb-04         21,507         187,934         58,543         113,393         50,825         170,136           Mar-04         21,984         164,160         49,990         105,174         53,287         142,103           Apr-04         21,350         165,370         55,350         118,743         47,140         134,253           May-04         24,261         182,098         57,942         113,677         46,345         124,758           Jun-04         26,000         217,190         67,883         136,617         50,977         153,043           Jul-04         22,590         189,087         38,855         117,400         44,713         117,355           Aug-04         21,648         185,348         63,855         136,448         50,194         129,248           Sep-04         22,847         209,717         56,486         130,527         54,480         146,130           Oct-04         18,894         174,939         47,923         109,777         49,419         151,881
Mar-04     21,984     164,160     49,990     105,174     53,287     142,103       Apr-04     21,350     165,370     55,350     118,743     47,140     134,253       May-04     24,261     182,098     57,942     113,677     46,345     124,758       Jun-04     26,000     217,190     67,883     136,617     50,977     153,043       Jul-04     22,590     189,087     38,855     117,400     44,713     117,355       Aug-04     21,648     185,348     63,855     136,448     50,194     129,248       Sep-04     22,847     209,717     56,486     130,527     54,480     146,130       Oct-04     18,894     174,939     47,923     109,777     49,419     151,881
Apr-04       21,350       165,370       55,350       118,743       47,140       134,253         May-04       24,261       182,098       57,942       113,677       46,345       124,758         Jun-04       26,000       217,190       67,883       136,617       50,977       153,043         Jul-04       22,590       189,087       38,855       117,400       44,713       117,355         Aug-04       21,648       185,348       63,855       136,448       50,194       129,248         Sep-04       22,847       209,717       56,486       130,527       54,480       146,130         Oct-04       18,894       174,939       47,923       109,777       49,419       151,881
May-04     24,261     182,098     57,942     113,677     46,345     124,758       Jun-04     26,000     217,190     67,883     136,617     50,977     153,043       Jul-04     22,590     189,087     38,855     117,400     44,713     117,355       Aug-04     21,648     185,348     63,855     136,448     50,194     129,248       Sep-04     22,847     209,717     56,486     130,527     54,480     146,130       Oct-04     18,894     174,939     47,923     109,777     49,419     151,881
Jun-04     26,000     217,190     67,883     136,617     50,977     153,043       Jul-04     22,590     189,087     38,855     117,400     44,713     117,355       Aug-04     21,648     185,348     63,855     136,448     50,194     129,248       Sep-04     22,847     209,717     56,486     130,527     54,480     146,130       Oct-04     18,894     174,939     47,923     109,777     49,419     151,881
Jul-04     22,590     189,087     38,855     117,400     44,713     117,355       Aug-04     21,648     185,348     63,855     136,448     50,194     129,248       Sep-04     22,847     209,717     56,486     130,527     54,480     146,130       Oct-04     18,894     174,939     47,923     109,777     49,419     151,881
Aug-04       21,648       185,348       63,855       136,448       50,194       129,248         Sep-04       22,847       209,717       56,486       130,527       54,480       146,130         Oct-04       18,894       174,939       47,923       109,777       49,419       151,881
Sep-04         22,847         209,717         56,486         130,527         54,480         146,130           Oct-04         18,894         174,939         47,923         109,777         49,419         151,881
Oct-04 18,894 174,939 47,923 109,777 49,419 151,881
Nov-04 24 027 193 323 57 517 117 037 70 123 176 503
Dec-04 19,648 165,468 53,635 105,245 63,752 147,500
Jan-05 20,745 186,867 58,839 108,829 71,268 140,361
Feb-05 21,611 189,925 60,993 119,636 57,939 175,679
Mar-05 21,794 167,394 48,597 99,690 50,894 103,390
Apr-05 20,717 182,447 57,960 117,703 51,013 166,487
May-05 20,435 198,074 55,503 110,245 50,432 145,000
Jun-05 29,520 209,388 72,287 145,073 54,097 179,130
Jul-05 20,658 198,355 61,571 129,045 46,094 157,139
Aug-05 20,968 190,513 62,229 130,535 50,945 173,823
Sep-05 23,623 217,760 64,610 139,723 53,223 181,437
Average 22,376 180,146 57,474 121,666 52,588 142,769
Residential % <sup>2</sup> 100 100 100 100 70 60
Residential Flow 22,376 180,146 57,474 121,666 36,812 85,661
# Connections 162 850 393 595 266 589
Use Per Conn. 138 212 146 204 138 145
Use Per Capita         56         86         59         83         56         59

Total Consumption for all areas: 577,019 GPD.

<sup>1.</sup> Flows are measured in gallons per day based on water meter readings.

<sup>2.</sup> Based on historic percentage break between commercial and residential flows.

<sup>3.</sup> Cliftondale system numbers include connections for the Town of Iron Gate and Wesgate. Source: Countywide Study, Water/Sewer/Drainage, Alleghany County, VA, Anderson & Associates, 2006.

Table 54
Alleghany County Water Projections

	Allegnany	County Wa	ter Projecti	ons			
REGION/AREA	1994	2000	2005	2010	2015	2020	2025
EASTERN							
Cliftondale							;
Residential	147,680	155,220	150,987	156,891	162,795	168,699	174,603
Commercial	1,000	12,500			1 1	·	ł I
Douthat Extension		,11,000		40,720	1 1		
Cowpasture Extension				7,800			
Sharon Loop			8,320	8,580	1 I		
Longdale Furnace			0,020	68,200	: 1	i i	I
-							
Total	147,680	167,720	184,307	319,691	339,135	358,839	378,283
Selma/Low Moor							
Residential	106,340			82,325			
Commercial	90,400	90,852				· ·	
Commerce Center Expansion			25000	50,000	75,000	100,000	125,000
Total	196,740	197,712	197,995	224,081	250,168	276,255	302,341
CENTRAL							
Mallow/Pounding Mill							
Residential	97,560	98,230	90,327	90,831	91,334	91,837	92,340
Commercial	58,700	59,070	59,440	59,810	60,180	60,550	60,920
Cherokee		39,952	40,120	40,287	40,454	40,621	40,789
Route 18 Extension			6,240	6,760	7,280	7,800	8,320
Total	156,260	197,252	196,127	197,687	199,248	200,809	202,369
WESTERN							
Rosedale							
Residential	36,140	37,180	42,756	43,118	43,480	43,841	44,203
Commercial	28,500	29,270	30,040	30,810	31,580	32,350	33,120
Boys Home Extension		10,000	10,500	11,000	11,500	12,000	12,500
Callaghan Extension		36,408	36,654	36,900	37,146	37,392	
Marshall Farms Industrial Park				20,000	35,000	50,000	65,000
Total	64,640	112,858	119,950	141,828	158,706	175,583	192,461
Intervale/Clearwater						ė.	
Residential	87,620	101,140	106,471	114,174	116,105	119,266	122,427
Commercial	0	0	o	0	0	0	0
Falling Springs				31,472	33,292	35,112	36,932
Almost Heaven				2,600	3,380	3,380	3,380
Total	87,620	101,140	1	148,246	1	157,758	1 3
TOTAL	652,940	776,682	804,851	1,031,534	1,100,034	1,169,244	1,238,194

Note: 1. Flows given are in gallons per day.

Source: Countywide Study, Water/Sewer/Drainage Study, Alleghany County, VA Anderson & Associates, Inc. 2006

<sup>2.</sup> Flows are based on 100 gpd per capita.

Table 55
Alleghany County Wastewater Projections

			VIIIC BIT IN	, i		3	1					
Page 1 of 2	2000		2005		2010		2015		2020		2025	
REGION/AREA	Connections	Flow	Connections	Flow	Connections	Flow	Connections	Flow	Connections	Flow	Connections	Flow
EASTERN- Regional Treatment Plant												
Cliftondale												
Residential	222	33,300	233	34,950	245	36,750	257	38,550	270	40,500	284	42,600
Commercial			17	5,000	33	10,000	33	10,000	33	10,000	33	10,000
Proposed Development			132	39,600	217	65,100	242	72,600	242	72,600	242	72,600
Douthat Park Sewer Extension												
Residential			40	12,000	42	12,600	4	13,200	46	13,800	4	14,400
State Park						0	140	42,000	140	42,000	140	42,000
Inflow/Inflitration		299,390		305000		306,540		308,080		309,730		311,490
Total	222	332,690	422	396,550	537	430,990	716	484,430	731	488,630	747	493,090
Sharon												
Sewer Extension			102	15,300	203	30,450	305	45,750	406	60,900	508	76,200
Proposed Industrial Park (200 AC)			29	20,000	133	40,000	200	000'09	267	80,000	333	100,000
VDOT Rest Area							200	000'09	200	60,000	200	60,000
Infiltration/Inflow				11,220		22,330		33,550		44,660		55,880
Total			169	46,520	336	92,780	705	199,300	873	245,560	1,041	292,080
Mound Street		•										
Residential	80	12,000	80	12,000	85	12,750	85	12,750	06	13,500	90	13,500
Commercial	0	0	e	1,000	7	2,000	7	2,000	7	2,000	7	2,000
Inflow/Infiltration		44,000		44000		46,750		46,750		49,500		49,500
Total	80	56,000	83	57,000	92	61,500	92	61,500	97	65,000	26	65,000
Clifton Forge (Regional Plant Contributor)				•								
Flow Allotment		1,670,000		1,670,000		1,670,000		1,670,000		1,670,000		1,670,000
Selma												
Residential	228	34,200	229	34,350	230	34,500	231	34,650	232	34,800	233	34,950
Commercial			63	19,000	29	20,000	67	20,000	67	20,000	67	20,000
Proposed Industrial Park (100 AC)									83	25,000	167	20,000
Average Inflow/Infiltration		410,029		410,139		410,249		410,359		410,469		410,579
Total	228	444,229	292	463,489	297	464,749	298	465,009	382	490,269	466	515,529
Iron Gate/ Wesgate												
Residential	272	40,800	273	40,950	324	48,600	375	56,250	376	56,400	377	56,550
Commercial		0	11	5,000	17	5,000	17	5,000	17	5,000	17	5,000
Acadia Plant	58	17,400	58	17,400	58	17,400	58	17,400	58	17,400	58	17,400
Average Inflow/Infiltration		422,966		423,076		428,686		434,296		434,406		434,516
Total	330	481,166	348	486,426	399	499,686	450	512,946	451	513,206	452	513,466
Regional Treatment Plant Totals	860	2,984,085	1,314	3,119,985	1,661	3,219,705	2,260	3,393,185	2,533	3,472,665	2,803	3,549,165
	+	5		E		_!			1	5		- 1

Connections   Flow   Connections	Page 2 of 2	2000		2005		2010	C	2015		2020	0	2025
150   41,574   170   41,620   177   42,066   172   42,312   171   42,066   172   43,12   171   42,066   175   43,12   171   42,066   171	REGION/AREA	Connections	Flow	Connections		Connections	Flow	Connections	Flow	Connections	Flow	Connections
169   41,574   170   41,820   177   42,066   172   42,372   177   42,066   175   42,372   177   42,066   175   42,072   175	Eastern Cont.											
168   41,574   170   41,820   177   42,066   172   42,312   177   42,066   172   42,312   177   42,066   175   48,022   18,1226   18,1226   18,1226   18,1226   18,1226   19,000   10	Low Moor											
60,042    60,042    60,082    60,0	Residential	169	41,574		41,820		42,066		42,312		42,066	
446,701   44,701   47,869   46,005   50,000   50	Commercial		80,420		80,822		81,226		81,632		81,226	
10,000   1	Inflow/Infiltration		46,701		47,869		49,065		50,292		51,549	
156   156,685   170   216,511   186   256,288   186   283,386   189   399,261   190,000   122,508   189   226,288   188   283,386   188   399,261   189,889   122,508   189,889   122,508   189,889   122,508   189,889   189,889   189,889   189,889   189,89	Kim-Stan				10,000		30,000		30,000		30,000	
168   168   686   170   205,511   186   256,236   188   283,396   179   4,420   125,508   189   283,396   170   205,511   186   256,236   188   283,396   138   309,251   123,246   59,248   59,228   59,883   59,883   59,883   59,883   59,883   188   122,508   188   122,508   188   122,508   188   122,508   188   122,508   188   122,508   188   122,508   188   122,508   188   122,508   188   122,508   188   122,508   188   122,508   188   122,508   188   122,508   188   122,508   188   122,508   188   122,508   188   122,508   122	Commerce Center Expansion				25,000		50,000		75,000		100,000	
168   168   656   170   205   511   186   256,238   186   283,396   189   283,396   189   309,261   189   289,398   189   309,261   309,261	Rich Patch Sewer Extension					15	3,900		4,160		4,420	
498   122.508   50.1   123.246   504   123.984   507   124.722   504   123.984   50.885   58.884   59.885   59.	Total	169	168,695	170	205,511	186	256,258	188	283,396		309,261	190
458 122.568 501 123.246 504 123.984 507 124.72 504 123.984 59.883 58.883 58.883 59.883 58.883 59.893 59.893	CENTRAL											
498 122.508 58.994 69.288 50.4 123.984 507 124,722 509 123.984 508 58.881   79.830 58.994 50.288 50.4 25.88 50.88 59.885	Mallow/Pounding Mill											
58,994   59,288   59,588   59,588   59,588   59,883   5	Residential	498	122,508	504	123,246	504	123,984	205	124,722	504		507
131   32,226   132   32,472   133   32,718   134   32,964   133   32,718   134   32,964   133   32,718   135   26,365   133   32,718   135   26,365   135   32,718   136   136,500   14,185	Commercial		58,994		59,288		59,585		59,883		59,585	
131   32,226   132   32,472   133   32,718   134   32,964   133   32,718   134   32,964   133   32,718   136   1	Average Inflow/Infiltration		79,830		81,826		83,871		85,968		88,117	
131 32,226 132 32,472 133 32,718 134 32,964 133 32,718	Total	498	261,332		264,360		267,440		270,573		14	
131   32,226   132   32,472   133   32,718   134   32,964   133   32,718	Cherokee											
20.916	Residentíal	131	32,226		32,472		32,718		32,964			
131   53,142   1436   19,500   17   19,500   18   19,500   17   19,500   19   19,500   17   19,500   19   19,500   17   19,500	Commercial		0		0		0		0			
131 53,142 148 73,411 150 74,193 152 74,988 150 75,305 28,930 133 32,718 13,600 177 19,500 177 19,500 177 19,500 177 19,500 17, 10,5	Average Inflow/Infiltration		20,916		21,439		21,975		22,524		23,087	
131 53.142 148 73.411 150 74.193 152. 74.988 150 75.305	Route 18 Extension			16	19,500				19,500			
130 31,980 133 32,718 136 33,456 139 34,194 136 33,456 159 29,074 136 33,456 15,300 15	Total	131	53,142		73,411	150	74,193		74,988			
130 31,980 133 32,718 136 33,456 139 34,194 136 33,456 28,930 29,074 136 33,456 15,930	WESTERN											
130 31,980 133 32,718 136 33,456 139 34,194 136 33,456 139 4,194 136 33,456 1598 15,300 15,30	Rosedale/Westwood											
28,643	Residential	130	31,980		32,718				34,194			
15,300	Commercial		28,643		28,786		28,930		29,074		28,930	
130 75,923	Average Inflow/Infiltration		15,300		15,683		16,075		16,476		16,888	
130 75.923 13.240 190 46.740 205 50.430 10.660 11.752 281 15.340 208	Boys Home Sewer Extension				12,000		12,300		12,608		12,923	
130 75,923 133 89,186 271 158,970 279 176,792 281 162,867 35,000	Callaghan Sewer Extension					135						
130 75,923 138 89,186 271 158,970 279 176,792 281 162,867 162,867 176,792 281 162,867 162,867 176,792 281 162,867 162,867 176,792 176,792 281 162,867 176,792 176,792 281 162,867 176,792 281 162,867 176 176 176 176 176 176 176 176 176 1	Marshall Farms Industrial Park						35,000		50,000		35,000	
175 43,050 190 46,740 205 50,430 220 54,120 205 50,430 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Total	130	75,923		89,186				176,792			285
175 43,050 190 46,740 205 50,430 220 54,120 205 50,430 0 205 50,430 0 205 50,430 0 205 50,430 0 205 50,430 0 205 50,430 0 205 50,430 0 205 50,430 0 205 50,430 0 205 50,430 0 205 50,430 0 205 50 20,430 20,520 20,5	Cleanvater											
10,152 10,152 10,060 11,1193 11,193 11,1752 12,340 12,340 13,032,134 13,240,603 13,237 13,037	Residential	175	43,050		46,740				54,120			
10,152 10,152 10,660 1100 1100 1100 1100 1100 1100 11	Commercial		0		0		0		0		0	
120 29,520 125 30,750 130 31,980 135 33,210 130 31,980 31,980 29,520 315 88,150 515 93,603 540 99,082 525 94,750 31,080 31,080 32,083 3,625,898 2,581 3,840,603 3,287 4,070,169 3,926 4,298,017 4,181 4,386,535 and connections for Residential Development in Regional Treatment Plant are based on 150 gpd from PER.	Average Inflow/Infiltration		10,152		10,660		11,193		11,752		12,340	
129 29,520 125 88,150 130 31,980 135 33,210 130 31,980 31,980 32,923 3,525,898 82,722 315 88,150 515 93,603 540,002 540,003 3,625,898 2,581 3,840,603 3,287 4,070,169 3,926 4,298,017 4,181 4,386,535 37Drainage Study, Alleghamy County, VA Anderson & Associates, Inc. 2006 Note: Flows are in gallons per day; ERC connections for Residential Development in Regional Treatment Plant are based on 150 gpd from PER.	Falling Springs					180		185		190		195
295         82,722         315         88,150         515         93,603         540         99,082         525         94,750           2,083         3,625,898         2,581         3,840,603         3,287         4,070,169         3,926         4,298,017         4,181         4,386,535           /Drainage Study, Alleghany County, VA Anderson & Associates, Inc. 2006         Note: Flows are in gallons per day, ERC connections of residential Development in Regional Treatment Plant are based on 150 gpd from PER.	Intervale Sewer	120	29,520									
2,083 3,625,898 2,581 3,840,603 3,287 4,070,169 3,926 4,298,017 4,181 4,386,535 7Drainage Study, Alleghany County, VA Anderson & Associates, Inc. 2006 Note: Flows are in gallons per day, ERC connections nd connections for Residential Development in Regional Treatment Plant are based on 150 gpd from PER.	Total	295	82,722		88,150				99,082			
/Drainage Study, Alleghany County, VA. Anderson & Associates, Inc. 2006. Note: Flows are in gallons per day; ERC connections nd connections for Residential Development in Regional Treatment Plant are based on 150 gpd from PER.	TOTAL	2,083	3,625,898	2,581	3,840,603	3,287	4,070,169	3,926	4,298,017	4,181	4,386,535	
ויי בלענוקוונון פור ספסכם כון כער פאר, מום סיוויסיונים וייסיסיכיונים הכינייק ווייאפיניים וייסייים וייסייקיים ויי	Source: Countywide Study, Water/Sewer/I	Drainage Study,	Alleghany r Resident	County, VA A	nderson & A	Associates, Inc	2006 Not	e: Flows are in	gallons pe	er day; ERC co	nnections	
	יסן מכיליסקאיוריוזי מוכי סמסכים טיי סכים שלימי, מודי	a composition of	1703/401	nai ecceptine	0.653111131	ימי ווכמתיוכות	י ומוור מזכ ה	15 00 10 noon		į		

42,312 81,632 52,838 30,000 125,000 4,680 336,462

Flow

124,722 59,883 90,320 274,925 32,964

23,665 19,500 76,129 54,120

12,957

35,916

50,000 179,741

34,194 29,074 17,311 13,246 33,210

100,287

4,487 4,516,708

#### **Future Water and Wastewater Needs**

<u>A. Eastern Area.</u> Population projections for the eastern region of Alleghany County indicate a slight growth in the areas with public water and/or sewer.

Alleghany County built a regional wastewater treatment facility near Iron Gate to provide adequate wastewater service for the eastern end of the County including the Town of Clifton Forge and the Town of Iron Gate. The design of the 6 mgd treatment plant known as the Lower Jackson River Regional Wastewater Treatment Plant has sufficient capacity to allow for projected growth in the eastern area of the County.

Longdale Furnace: The Longdale Furnace area is a low-density rural area along Route 269 (Old Rt. 60) and Interstate 64. This area is served by a private water system that provides water to a limited number of homes in the area. No significant increases in residential water needs are anticipated and on-site septic systems are expected to meet the residential sewage disposal needs. Some potential for commercial development exists due to the Interstate 64 interchange and the Department of Transportation has developed a truck rest area along I-64. These developments and other large scale commercial/industrial development will require other means of wastewater treatment and create the potential for an increase in services to this area.

Sharon/Triangle Hill: Relatively slow growth is expected in the Sharon/Triangle Hill area at this time. However, residents on Riverland Road have connected to the water system and a large tract of land adjoining the Sharon Elementary School is developing. Also, system reliability in the area could be improved by completing the loop of the water line along Nicelytown Road. This would also provide more fire flow to the Sharon Elementary School. The discussion of the development of an industrial park along I-64 at the Triangle interchange and the potential for commercial development at this interchange would increase the probability of extending sewer services to this area. Increased water usage due to the installed public water system is expected to increase the incident of septic system failure in these areas. This area is included in the Lower Jackson River Regional Wastewater Treatment Plant service area.

Cliftondale Park: Growth in the Cliftondale Park area is limited by steep hills and the location of Wilson Creek, I-64, and Route 220. Interest has been expressed in developing facilities near the Interstate 64 interchange. Development and redevelopment of property in this area may create the need for additional service facilities. Increased water demands combined with existing infiltration and inflow will likely required increased pumping and treatment capacity for this area. This area is included in the Lower Jackson River Regional Wastewater Treatment Plan service area and future development is encouraging in this area.

<u>Wilson Creek</u>: Growth along Wilson Creek is limited by steep hills and National Forest land. There is interest in developing property near the Interstate 64 interchange. The extension of the water lines to Douthat State Park is complete. Also, the potential for extension of sewer service along Douthat Road should be explored to encourage future development of the Wilson Creek area. This area is included in the Lower Jackson River Regional Wastewater Treatment Plant service area.

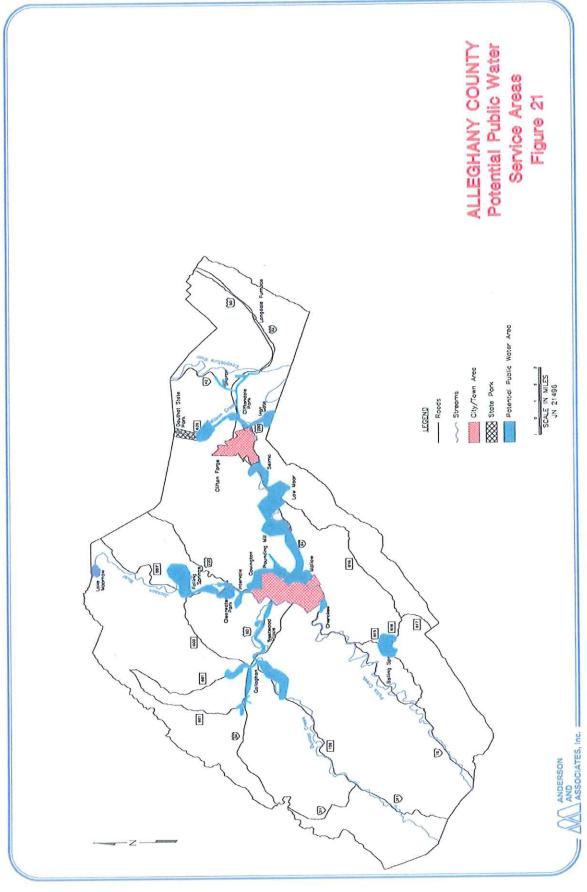
Wesgate: Growth in Wesgate has been limited due to insufficient water supply and has also limited construction in the area. However, with the construction of a larger booster station and 250,000 gallon water storage facility in the area, some growth can be expected. This work should provide sufficient capacity to meet anticipated future wastewater needs. This area is included in the Lower Jackson River Regional Wastewater Treatment Plant service area.

<u>Iron Gate</u>: Water and sewer service for the Town of Iron Gate is the responsibility of the Town. This area is included in the Lower Jackson River Regional Wastewater Treatment Plant service area.

<u>Selma</u>: Significant residential growth in Selma is not likely due to the land restrictions of Interstate 64 to the north and Rich Patch Mountain to the south. Dabney S. Lancaster Community College to develop its campus facilities and increases in the number of students should continue to occur. However, the existing facilities have sufficient capacity to meet the college's anticipated future growth. The purchase of the old railroad yard by Alleghany County from CSXT enables future development of commercial property in the Selma service area. These developments create the potential for increases or upgrades to the existing services in this area. This area is included in the Lower Jackson River Regional Wastewater Treatment Plant service area.

Low Moor: Residential growth in Low Moor will be limited due to land availability. The development of the 300-acre Commerce Center, the construction of the YMCA, and the construction of the middle and elementary schools, increases the potential for development of the surrounding properties in the Low Moor service area. The potential of future development on Route 616 (Rich Patch Road) could create the possibility of an extension of existing water and sewer services. This area is included in the Low Moor Wastewater Treatment Plant service area.

<u>Valley Ridge</u>: Alleghany County purchased the spring that served the Valley Ridge area. The spring and well sources have been determined to be under the influence of surface water and an extension was made to connect this service area into the Low Moor water system. The current tanks and line sizes limit service and do not provide adequate fire protection. However, the wastewater system for this area is adequate for future needs due to upgrades to the capacity of the Low Moor Wastewater Treatment Plant. This area is included in the Low Moor Wastewater Treatment Plant service area.



**B.** Western Area. The overall population for the western area is projected to increase based on the 2000 Census and public water and sewer service areas near Covington have experienced significant growth.

Rosedale/Westwood: Growth in Rosedale will be limited by the available land space. There is potential for significant growth in the Westwood area if privately held land north of the existing subdivision is developed. The installations of a sewer pump station and an upgraded water tank have increased the potential for additional water and sewer customers in the Westwood area. No significant change in wastewater needs for this area is anticipated. Possible residential development in the Westwood area would increase the demand for upgrades to the system as needed.

<u>Callaghan</u>: Public water service was extended to the Callaghan area in the summer of 2001. The growth of this area is expected to remain constant or increase slightly along Route 60 and Interstate 64 due to this service. However, growth outside of the area will be restricted by steep hillsides and National Forest land. With the extension of water service to this area, the increased risk of septic system failure and the possibility of future extensions of sewer service should be considered.

Clearwater Park/Clearview Estates: This area has been one of the fastest growing areas of the County. Growth is expected to continue until the available building sites are used. The need for additional storage in the area will increase as new connections to the system is made. Construction of the wastewater facilities serving this area, as well as the Intervale area, was designed to accommodate the projected growth for the area. No significant change in wastewater needs is anticipated for this area at this time.

<u>Intervale/Dressler Estates</u>: In 2000, a wastewater collection system was installed in these neighborhoods. Also, as part of this system, a new pump station and equalization tank was installed.

<u>C. Central Area.</u> Areas located in the central area should continue to develop in the areas where public water and sewer are available.

<u>Pounding Mill/Mallow</u>: Population in this area is anticipated to continue to increase gradually. Growth will be somewhat influenced by topography and land availability. The County has connected to the City of Covington water system for this service area. The potential for an increase of commercial customers at the Mallow Mall interchange could create more demand on this system. However, the existing wastewater facilities have adequate capacity for the projected future increase in flows in this area.

<u>Cherokee/Indian Valley</u>: Population within the existing water service area is expected to remain stable. Extension of water service along Route 18 should be considered, however, the area contains scattered résidences and farmland. No significant change in wastewater needs is anticipated for the area at this time.

# Water and Sewer Financial Assistance

High-density residential development and commercial/industrial development are feasible only when centralized wastewater and water facilities are available. Federal and State grant assistance programs should be considered to aid in the development of these facilities,

especially for projects serving low to moderate-income areas and for those showing a direct positive economic impact. There are a number of potential sources to fund such projects. The Community Development Block Grant program funds projects that serve low-to moderate-income persons. Long-range plans should be developed for seeking funding from the USDA Rural Development Administration office (RDA), because the interest rate is generally the lowest of all options. The Department of Environmental Quality offers the Revolving Loan Fund for sewer projects which are primarily related to health and environmental issues. The Economic Development Administration and the RDA may be able to provide funding for projects promoting economic development and job creation. Rural Economic and Community Development (RECD) and Southeast Rural Community Assistance Program (SE-RCAP), formally known as Virginia Water Project, are also sources of funding.

Table 56
Alleghany County
Sewer Flow Rates By Service Area - Based on Pump Station Records
July 2009 – June 2010

Month	Indian Valley	Rosedale / Westwood	Clearwater Park/ Intervale	Selma / DSLCC	Cliftondale	Iron Gate	Low Moor STP/ Bacova	Mallow
July	736,740	898,920	1,531,570	803,113	2,182,700 3,739,200	3,739,200	5,447,678	7,852,700
August	724,320	628,460	1,234,730	792,871	1,478,900	2,691,100	4,698,065	6,797,000
September	641,590	753,270	1,253,060	890,946	1,363,900	2,186,600	4,899,378	4,942,600
October	561,460	712,710	1,244,800	768,224	1,417,500	2,045,000	5,433,162	4,795,800
November	1,568,910	1,465,980	2,528,550	4,191,324	3,360,800	5,946,700	7,685,966	7,509,400
December	2,212,140	2,500,340	4,416,960	4,054,541	4,561,400	4,561,400 9,041,200	9,338,254	13,925,000
January	1,123,180	1,426,860	2,785,110	1,658,493	2,804,000	5,092,900	8,133,502	6,817,800
February	1,048,210	1,331,190	2,181,000	992,698	3,406,500	3,406,500 5,443,400	6,688,074	10,643,400
March	1,053,220	2,053,920	2,947,430	1,381,887	2,825,800	5,117,100	9,139,225	14,061,100
April	715,160	1,013,500	1,454,520	1,520,068	1,643,200	3,099,100	6,358,140	3,743,500
May	650,850	1,080,360	1,256,180	1,256,180 1,287,065	1,789,700	1,789,700 3,046,300	5,695,838	800,800
June	612,380	1,013,010	1,212,400	786,089	1,145,900	1,935,500	4,129,662	800,700
Average	970,680	1,239,877	2,003,859	2,003,859 1,593,943	2,331,692	4,115,342	6,470,579	6,890,817
					Ī		7 - H - H - H - H	

Source: Alleghany County Water and Sewer Records, 2009/2010 - Monthly Sewer Flows Given in Gallons.

Alleghany County Water Consumption by Service Area (gpd) July 2009 – June 2010 Table 57

•															
Valley Ridge	Valley Ridge	30,867	29,943	38,093	33,450	30,833	34,770	32,260	29,717	38,653	33,043	31,963	39,090	33,557	
Cherokee/ Indian Valley	Cherokee	26,153	20,383	23,753	19,083	18,390	22,700	20,617	18,193	22,113	20,700	21,410	27,550	21,754	
Pounding Mill	Mallow and Dolly Ann	136,920	103,500	147,493	104,657	106,397	102,567	113,730	105,717	100,353	111,547	106,123	124,190	113,600	
Clearwater Park	Clearview	46,510	38,993	44,083	35,910	34,167	38,200	42,413	35,340	35,207	36,763	37,220	50,170	39,581	
Clearwa	Intervale	20,330	16,227	17,107	14,600	15,383	16,143	21,900	15,457	12,630	18,227	15,050	20,550	16,967	
	Callaghan	35,607	36,537	39,850	31,760	38,777	45,123	37,833	35,170	37,047	32,140	31,610	41,043	36,875	
Rosedale Area	Westwood	5,920	4,653	4,997	4,513	4,417	5,097	5,237	4,823	4,340	5,073	4,780	6,120	4,998	
	Rosedale	10,887	8,193	9,467	9,650	7,820	9,423	10,950	8,230	9,520	9,470	268'8	10,887	9,408	
Low Moor	Low Moor	100,413	86,383	104,713	92,387	83,853	81,750	86,773	82,460	82,753	94,800	91,010	95,153	90,204	
Selma	Selma	33,797	28,743	36,473	29,210	29,152	30,815	39,147	30,365	35,870	37,643	37,273	45,630	34,510	
Wesgate	Wesgate	10,867	9,030	10,233	9,760	8,623	5,007	10,427	8,107	9,217	10,327	8,913	11,673	9,682	
and e Hill	Sharon	26,707	29,907	18,693	15,123	14,090	16,030	15,400	16,033	14,343	15,900	16,140	17,377	17,979	
Sharon and Triangle Hill	Triangle Hill	22,147	21,067	26,443	20,007	18,387	21,260	19,640	20,730	18,823	21,967	16,910	21,133	20,710	
Wilson Creek	Wilson Creek	49,510	32,222	43,867	25,160	26,939	26,021	22,947	20,125	17,332	27,600	27,754	43,896	30,281	
Cliftondale Park	Cliftondale	29,978	24,902	29,183	24,405	22,557	23,592	26,553	24,675	23,710	27,755	24,518	28,195	25,835	
Service Area	Metered Area	July	Aug.	Sept.	Oct.	Nov,	Dec.	Jan.	Feb.	March	April	May	June	Avg.	

Source: Alleghany County Water and Sewer Records, 2009/2010. Note: Flows are measured in gallons per day. Monthly totals were divided by 30 and rounded to the nearest gallon

## Individual Well and Septic Systems

A majority of the properties in Alleghany County are in rural settings where public water and sewer are not available. These areas utilize individual wells and septic systems. The Alleghany-Covington Health Department regulates the approval, installation, and operation of these systems. Changes in Health Department regulations for septic systems have made it more difficult to acquire approvals for traditional systems. The trend is evolving to where expensive, alternative systems are being required more frequently.

# **Solid Waste Management**

In 1988, Alleghany County, the City of Clifton Forge, the City of Covington, and the Town of Iron Gate entered into an agreement to jointly own and operate the Peters Mountain Landfill. The contract ended in June 1996 and Alleghany County did not renew its contract with the other local governments. The County constructed a waste transfer station.

The County owns and operates the Island Ford Transfer Station located off of Valley Ridge Road. This facility opened in July of 1996 and is the primary source for refuse disposal in Alleghany County. Refuse is collected in trailers and hauled to an approved sanitary landfill on a daily basis. An estimated 18,684 tons of refuse was collected in 2011of which 4,554 tons were recycled. The transfer station serves all County residents, private contractors, the Town of Clifton Forge, and the Town of Iron Gate. All incoming vehicles are weighed and certified scales and operators verify the amounts of refuse. A fee of \$65 per ton is charged to contractors for the utilization of the facility. Residents of Alleghany County can utilize this facility free of charge. Composting of leaves, brush disposal, and metal recycling are available at the transfer station. Tire disposal is available for a fee, which varies depending upon tire size.

Weekly residential garbage collections are made by County Public Works employees from house to house, with garbage placed at the curb by the residents. Persons living on private roads must transport their garbage to an intersection with the State maintained road. Funds to provide this service come from the County's general revenues. Refuse from commercial and institutional establishments are usually collected from dumpsters or cans located on the property. The first waste pickup a week for commercial establishments is free of charge. Residents of the County may, for a fee, reserve a dump truck to be placed near their home overnight to use to dispose of larger items.

Recycling is encouraged by all localities in the Highlands. All three localities support Jackson River Enterprises, who collects recyclables from area businesses on a regular basis and provides containers at various locations throughout the area for individuals to dispose of their recyclables.

#### **Electric Service**

Three electric power companies serve the County: Dominion - Virginia Power Company (central area along Interstate 64), Craig-Botetourt Electric Co-op (southern portion of the County), and BARC Electric Co-op (northern and northeastern portions of the County). With the deregulations initiated by the Federal Government, the potential for a change in suppliers and potentially more competitive services will be provided in the near future.

#### Communications

Lumos, formerly n-Telos and Clifton Forge Waynesboro Communications (CFW), provides telephone, cell phone, and Internet services in the County. Shentel, formerly Rapid Cable, provides television and internet services in limited areas of the County. Residents also have access to satellite TV providers. New fiber optic lines have been placed within the County and provide DSL and Broadband connections. Several national companies such as AT&T and Verizon provide long distance access. In addition to Lumos, US Cellular, AT&T, and Verizon Wireless provide cell phone service in the County. Installation of cellular towers along I-64 has occurred and it is anticipated that service along this corridor will continue to improve. The upgrade of existing telephone lines is warranted in the areas that are poorly serviced and are in need of better Internet services, such as wireless and broadband. Lumos has installed broadband to many areas of the County and continues to make efforts to provide this service throughout the County.

### **Natural Gas**

Natural gas service is available in the County from Columbia Gas of Virginia. Underground gas lines are located in limited areas of the County. These pipelines extend from a pumping station located in the Gala area of Botetourt County and cross the western portion of Alleghany County to Greenbrier County, WV, with a small pumping station located on Pitzer Ridge Road in Alleghany County. Natural gas has been available in Alleghany County since 1903. The number of Columbia Gas customers is 4,900 in Alleghany County, 2,800 in Covington, and 1,500 in Clifton Forge. The number of customers has remained relatively consistent for the past several years. Propane gas service is also available in the County and is provided by Ameri-Gas, Dixie Gas and Oil, and Highland Propane.

#### **Educational Facilities**

The Alleghany Highlands Public School System was created through the unification of the Alleghany County and Clifton Forge School Systems in 1982. Due to the Town reversion of Clifton Forge in 2000, the name of the school system was changed to the Alleghany County Public School System. The school system is managed by a superintendent, administrative staff, and school principals. Policy matters are handled by the Alleghany County School Board. The School Board is located at 100 Central Circle in Low Moor and generally meets on the third Monday of each month.

### **Existing Facilities**

The Alleghany County School Board operates five elementary schools, one middle school, one high school, and cooperatively with Covington City Public Schools the Jackson River Technical Center. Student Membership stood at 2,686 at the end of September 2011. Table 58 provides an inventory of existing school buildings.

### **School Facility Needs**

Overall the Alleghany County School System elementary school and middle school facilities are in good condition, with the high school needing major renovations to the building. The technology equipment in the schools is very adequate. The School Board projects student enrollment to decrease.

Alleghany High School remains the primary facility need for the Alleghany County Public Schools. The staff and greater community have communicated the immediate need to address this facility and explore potential options. As of February 2007, three of four potential options have been explored. They include; (a) the development of a merger agreement with the City of Covington to renovate/replace the current Covington High School at an estimated cost of \$34-\$39 million; (b) expand, renovate, and flood mitigate the existing Alleghany High School at an estimated \$36-\$40 million; and (c) use available funds to provide an approach to school improvements. The final potential option would include a refined estimation of the cost of the construction of a new high school, was reported to the Alleghany County School Board on October 1, 2007.

Window and door renovations were completed in the spring of 2010. Other major renovation features included renovating the auditorium and gymnasium at Alleghany High School.

The Alleghany County School Board, in an effort to improve education facilities, completed construction of a new elementary school and a new middle school on a 43-acre campus near Low Moor. As a result of this construction, Central Elementary School, Clifton Middle School, Clifton Forge East Elementary School, and Clifton Forge West Elementary School closed in the fall of 2001.

The new Clifton Middle School houses grades 6 through 8 for the entire County. The school has a capacity of 879 with an enrollment of 666 as of Fall 2011. The school has a total of 120,000 square feet of space. Mountain View Elementary School which also opened in the fall of 2001, houses K-5 students from the former Central Elementary School, Clifton Forge East Elementary School, and Clifton Forge West Elementary School. The school has a capacity of 864 and an enrollment of 518 as of Fall 2011. The school has a total of 90,000 square feet available.

A \$1.3 million project to renovate a portion of the former Central Elementary School into administrative offices has been completed. Alleghany County School Board offices relocated to Central School in October 2006. The School Board offices were previously located in Rosedale. Central was closed as a school in June 2001. Its students were shifted to Mountain View Elementary School and Clifton Middle School that opened in the fall of that year. The 1972 addition at Central is utilized as an athletic field house. Alleghany High School and Clifton Middle School wrestling practices are held at Central and the facility will continue to be utilized for community recreation activities. The Alleghany Highlands YMCA administrative offices and child care program are consolidated into the rear 1972 section of the building that houses the cafeteria. YMCA operations currently are spread throughout the middle 1927 section and in both 1972 rear sections, including the athletic field house. The Chairs and Vice Chairs of the School Board and the board of supervisors have agreed to evaluate the remainder of the Central facility for renovation and possible joint usage in the years ahead. The building that housed the school board offices in Rosedale is owned by Alleghany County.

Alleghany County School Public Schools has its own Technology Plan and Capital Improvement Plan. Alleghany County Public Schools met the national goal of one computer per five students by 2000. In 2001, the school division exceeded this goal by having one computer per two students. The challenge faced by the school division becomes one of maintaining this very favorable ratio and providing for emerging technologies in a climate of economic restraint.

Each classroom in the school division is connected to the Internet. The technology infrastructure at Alleghany High School was upgraded in 2001. Clifton Middle School and Mountain View Elementary School opened with state of the art infrastructure in September 2001. The remaining four elementary schools underwent renovation in 2003-2004 and had the technology infrastructure upgraded as part of this renovation.

Alleghany County Public Schools has one 63 meg internet. Each school is connected by ten megs wide and networked banked. The firewall is a Cisco Pix firewall. The antivirus software used at Alleghany High School, Clifton Middle School, and Mountain View Elementary School is Enterprise managed Norton Corporate software. The other four schools and the school board office use AVG antivirus software.

The current plan aims to maintain the progress made by Alleghany County Public Schools in the acquisition of technology by establishing a five-year replacement schedule. The division also has the goal of simplifying technology repairs and shortening "down" time by making work orders available online. The maintenance of adequate network connections and operations is crucial to integration of technology into the instructional program.

# Table 58 Alleghany County School System School Building Inventory

Building Description		Year Built/ Additions	Area (Square Feet)
Boiling Spring Elementary School 5403 Boiling Spring Circle, Covington Masonry/NC	, VA	1975	26,500
Callaghan Elementary School 4018 Midland Trail, Covington, VA Masonry/NC		1964 1970 1974	45,000
Falling Spring Elementary School 100 Falling Spring Circle, Hot Springs Masonry	s, VA	1930 1972 1980 1994 2004	35,700
Alleghany High School 210 Mountaineer Drive, Covington, V Masonry/NC Includes concession and press box.	A	1963 1970	127,625
Sharon Elementary School 100 Sharon Circle, Clifton Forge, VA Masonry/NC		1964 1968 1974 2004	43,000
Clifton Middle School 1000 Riverview Farm Road, Covingto Masonry/NC	n, VA	2001	118519
Central Elementary School/Administra 100 Central Circle, Low Moor Masonry	ative Offices	1930 1972 2007	46,493
Jackson River Technical Center 105 E. Country Club Lane, Covington		1974	30,643
Mountain View Elementary School 100 Gleason Drive, Covington, VA Masonry		2001	89,549

### **Enrollment**

The Alleghany County School System operates 5 elementary schools, one middle school, one high school, and the Jackson River Technical Center in cooperation with the City of Covington. The Fall 2011 student membership was 2,686. The School System employed 224 teachers in 2012. The table below provides enrollment data for the individual school memberships by grade.

Table 68
Alleghany County School System Fall Membership by Grade for 2011

Alleghany County School System Fall Membership by Grade for 2011								
	Boiling	Callaghan	Mountain	Falling		Clifton	Alleghany	
Grade	Spring	Elem.	View	Spring	Sharon	Middle	High	Total
113131.121	Elem.		Elem.	Elem.	Elem.	School	School	
JK/K	23	16	36	4	8			87
K	7	29	75	21	26			158
First	14	29	95	19	34			191
Second	15	22	70	27	26			160
Third	12	35	76	22	29			174
Fourth	16	29	72	29	23			169
Fifth	31	32	94	22	33			212
Sixth						219		219
Seventh						205		205
Eighth						242		242
Ninth							241	241
Tenth							214	214
Eleventh							207	207
Twelfth							207	207
Total	118	192	518	144	179	666	869	2,686

Source: Virginia Department of Education, 2011.

Table 60
Alleghany Highlands School System Fall Membership Trend

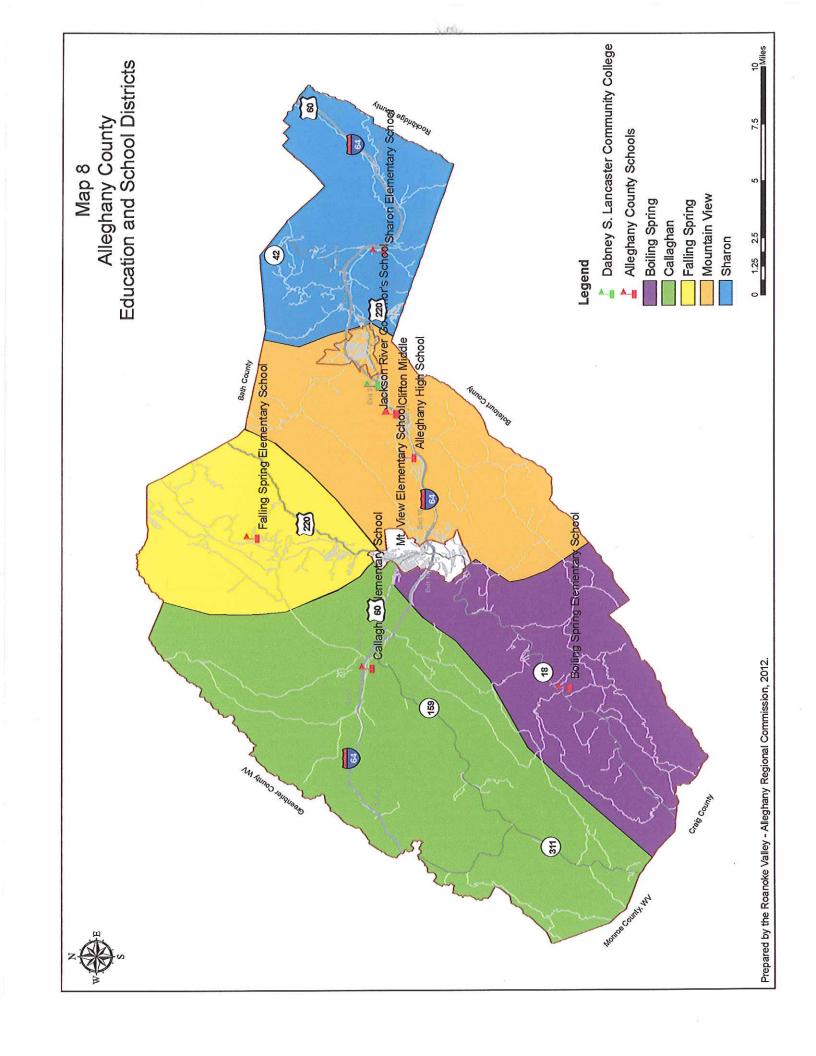
Allegrany i i	igilialius oc	HOOL OYSIGH	II all wollby	cionip i rond
Grade	1995	2000	2006	2011
PK	67	91	-	87
·K	231	242	276	158
1	237	239	216	191
2	205	195	216	160
3	234	225	231	174
4	225	205	248	169
5	245	231	218	212
6	241	227	248	219
7	215	204	220	205
8	220	216	212	242
9	259	242	227	241
10	262	231	219	214
11	201	186	203	207
12	221	167	189	207
Total	3,063	2,901	2,923	2,686

Source: Virginia Department of Education, 2011. Note: Data does not include ungraded individuals.

Table 61
Alleghany County Fall Membership Forecasts 2006-2011

2000-2011					
Grade Level	2006-07	2007-08	2008-09	2009-10	2010-11
K	312	250	272	315	285
First	243	243	195	212	246
Second	223	239	240	192	209
Third	221	219	235	236	189
Fourth	247	222	221	237	237
Fifth	212	249	224	223	239
Sixth	244	215	252	227	226
Seventh	217	240	211	248	223
Eighth	207	211	233	205	241
Ninth	237	231	235	260	229
Tenth	206	213	207	211	233
Eleventh	201	181	186	181	185
Twelfth	191	205	184	190	185
Total	2,960	2,917	2,896	2,937	2,926

Source: Fall Membership Forecasts, Weldon Cooper Center for Public Service, University of Virginia, 2007.



### **Education Statistics**

Dropout rates for high school students declined for the time period shown. The dropout rate for the County was lower than the State average (1.88) for each school year listed in Table 63. Approximately 78% of Alleghany High School graduates continued their formal education at a 2-or 4-year college.

Table 62
Graduates by Continuing Education Plans

Oradiatoo by Continuing Education Filante					
Year		Attend 4-Year College	No Plans	Other Plans	Total Graduates
1996-97	69	29	74	11	183
2000-01	89	42	20	13	164
2005-06	90	48	1	39	178
2011-12	108	63	0	48	219

Source: Virginia Department of Education, 2011.

Table 63
High School Dropouts

riigii oonooi bropodio				
Year	End of Year Membership	Number of Dropouts	Dropout Rate	
1996-97	1,343	39	2.9	
2000-01	1,249	19	1.52	
2005-06	1,250	22	1.76	
2010-11	1,330	15	1.13	

Source: Virginia Department of Education, 2011.

Table 64
Education Attainment Level

Education Attainment Level					
Education Level	2000*	2010	Change		
< 9 <sup>th</sup> Grade	1,275	934	-26.7%		
9 <sup>th</sup> -12 <sup>th</sup> Grade, No Diploma	1,563	1,199	-23.3%		
High School Graduate or GED	4,727	4,498	-4.8%		
Some College, No Degree	2,371	2,204	-7.0%		
Associate Degree	799	1,157	44.8%		
Bachelor Degree	1,046	1,141	9.1%		
Graduate / Professional Degree	497	608	22.3%		
Persons Age 25 and Over	12,278	11,741	-4.4%		

\*Includes Alleghany County and City of Clifton Forge 2000 Census data. Source: Census of Population, US Census Bureau, 2000 and 2006-2010 American Community Survey, 2012. Approximately 8% of the County's population age 25 and older had an education level below 9<sup>th</sup> grade, while 24.8% had achieved a college degree. Overall, the number of those 25 and older with at least a high school degree was 9,608 or 81.8%. Almost 800 of the college students received an associate's degree, 1,141 received a bachelor's degree, and 608 received a graduate or professional degree.

#### **Jackson River Technical Center**

Jackson River Technical Center (JRTC) provides vocational-technical training for high school students and adults. Jackson River Technical Center serves the counties of Alleghany, Botetourt, Craig, Bath, and Rockbridge; the Town of Clifton Forge, and the cities of Buena Vista, Lexington, and Covington. JRTC is a trained regional instruction center for Virginia apprenticeship training programs. The Center offers adult continuing education programs in cooperation with the Alleghany County Public Schools and Covington City Schools.

Job-entry level vocational training programs are available to students at Jackson River Technical Center. These courses allow high school students to earn credits towards graduation and receive a vocational certificate in addition to his or her diploma. All of the classes meet the practical arts high school graduation requirements. Courses include: Accounting, Business Law, Business Management, Computer Information Systems, Economic and Personal Finance, Advance Sport and Recreation Entertainment Marketing, Entrepreneurship Education, Marketing, Sports, Entertainment, and Recreation Marketing, Hotel/Motel Marketing, Advanced Marketing, Health Assistant I-III, Automotive Servicing I-III, Carpentry I-III, Electrical Wiring, Plumbing, Welding I-III, Building Maintenance I-III, Building Trades I and II, Culinary Arts I-III, and Early Childhood Education I-III.

Students may participate in a work experience program in a JRTC approved local business or industry. In this work experience, a student may earn additional credit in the third course of a three-course sequence. The student must participate in a business or industry related to that final course in a JRTC program. The student's teacher would supervise the work experience program as it would relate to the JRTC classroom and lab.

### **Dabney S. Lancaster Community College**

Dabney S. Lancaster Community College (DSLCC) is a two-year public institution of higher education and a member of the statewide Virginia Community College System. The College is supported by the Commonwealth of Virginia and the citizens of the counties of Alleghany, Bath, Botetourt (northern portion) and Rockbridge as well as the cities of Buena Vista, Covington, and Lexington, but welcomes students from other areas as well. The College is located one mile west of downtown Clifton Forge on a 117-acre tract bounded by the Jackson River on three sides.

DSLCC operates under the policies of the State Board for Community Colleges and the Dabney S. Lancaster Community College Board. The College is financed primarily by State funds and supplemented by contributions from the service area counties and cities, the federal government, businesses, individuals, and student tuition. The College is supported by the Commonwealth of Virginia and the Counties of Alleghany, Bath, Botetourt, Rockbridge, and the Cities of Buena Vista, Covington and Lexington.

Dabney S. Lancaster Community College provides an opportunity for the extension of knowledge, skills, and personal enrichment in a forum that maintains high academic standards, is financially and geographically accessible, and respects each student's rights and responsibilities.

The College offers programs at the associate degree level as well as a full complement of credit and non-credit courses and resources tailored to the life-long learning needs of local residents. On-site and long-distance options incorporate up-to-date technological support. Comprehensive guidance, counseling, and tutoring services assist students in achieving their potential and in making sound educational, occupational, and personal choices.

The College serves the diverse needs of the community, sponsoring a wide array of cultural events, offering training to meet changing workforce demands, and providing facilities for research and recreation. In cooperation with local business, industry, government, professions, and other educational institutions, DSLCC prepares students for a full range of academic choices and careers.

Dabney S. Lancaster Community College (DSLCC) offers a wide variety of affordable courses and programs including: Administration of Justice, Administrative Support, Advanced Manufacturing, Business Administration, Business Management, Business Leadership, Culinary Arts, Education, Emergency Medical Services, Forensic Science, Forest Management Technology, General Studies, Hospitality Management, Hospitality Services, Information Systems Technology, Law Enforcement, Massage Therapy, Nursing, Office Management, PC Repair, Welding, and Wind Turbine Service Technology.

Transfer programs at Dabney S. Lancaster Community College (DSLCC) are designed for students who plan to earn a bachelor's degree at a four-year college or university. DSLCC students have gone on to successfully achieve that goal at a number of institutions of higher learning in Virginia and other states. The number of special transfer agreements that DSLCC has in place with four-year schools continues to grow, creating opportunities for smooth transfers to many fine institutions.

Responding to both demand and need in the community, Dabney S. Lancaster Community College formed the Division of Continuing Education and Workforce Services (CEWS). Employers rely on the division's expertise to help meet their increasingly complex workforce training needs. Our primary facility, the CEWS Center, is located on campus in Clifton Forge, Virginia, and includes state-of-the-art interactive technology. CEWS also provides training at the College's Rockbridge Regional Center, and the Greenfield Education and Training Center in Botetourt County and on-site at local businesses.

The CEWS offers training plan development, assessment and testing, certificate and two-year degree programs in various workforce related areas. Hands-on instruction in the computer technology field is available in various application software programs and is taught in state-of-the-art computer labs at various locations. The College offers training in various soft-skill areas, which are designed to develop workplace skills that are critical to achieving positive business results. A variety of non-credit and special interest classes are designed to address the personal, recreational and vocational interests of individuals throughout the service region.

### **Additional Educational Opportunities**

Some of the other institutions of higher learning within proximity of the area include: Virginia Western Community College, Hollins University, Roanoke College, Radford University, Washington and Lee, Virginia Military Institute, James Madison University, University of Virginia, and Virginia Polytechnic Institute and State University.

#### Recreation

Recreation is an important element in the quality of life for Alleghany County citizens' lifestyles, as well as in tourism and economic development. Planning for appropriate recreational opportunities to meet the demands of the local population in Alleghany County is a cooperative effort of the local government, the U.S. Forest Service, the Virginia Department of Game and Inland Fisheries, and the Virginia Department of Conservation and Recreation.

### **Department of Parks and Recreation**

Various organized recreation programs are available from the Alleghany County Parks and Recreation Department. This organization provides for the following sporting events: youth league football, flag football, cheerleading, teen league basketball, boys and girls youth league basketball, girls youth league volleyball, teen league volleyball, youth wrestling, and assists other organizations with little league baseball, soft ball, and boys and girls soccer.

The Parks and Recreation Department also provides the Summer Fun Camp, Cheerleading Camp, Baseball Camp, and Senior fishing day. They also certify coaches for youth league activities. Assistance is provided to the Sheriff's Office with the annual Kids Day and Bike Rodeo and the YMCA After Prom Parties. They organize and administer the Kids Fishing Day with assistance from the U.S. Forest Service.

The Department maintains several parks and playgrounds in the County. They include: Altamont Park, Brentwood Park, Mountain View Park, Cowpasture River Access Park, and Sharon Park. These parks and playgrounds contain a variety of recreational uses such as ball fields, tennis courts, kids playground areas, and walking trails.

The Parks and Recreation Department is presently responsible for the improvements and development to the Jackson River Scenic Trail. The Master Plan for the development of the trail was completed in 2007 with several construction phases complete. Total completion of the project is anticipated by the end of 2013.

Senior citizen programs are offered through the Department of Parks and Recreation. Senior citizen activities are provided at three areas of the County: Sharon, Boiling Springs, and Falling Spring. The department sponsors many activities including covered dish luncheons, Diner Clubs, exercise programs, Meals on Wheels, vital services, free blood pressure screenings, and various other educational, social, and recreational programs. The Department provides van transportation for senior citizens in Alleghany County and Covington. The senior citizens take many trips throughout the year, which are organized by the Department.

# Community College Campus and National Guard Armory

A Virginia National Guard Armory is located beside Dabney S. Lancaster Community College near Clifton Forge. The building provides recreational courts, a stage, and seating for audiences. There is also an armory in Covington in which the Covington Recreation Department sponsors organized events. There are tennis courts, soccer fields, and a cross-country running course located on the campus of Dabney S. Lancaster Community College that are utilized by the community. There are also plans to develop an amphitheater on campus.

# **Private Recreation Opportunities**

There are three country clubs with golf courses located within the County. Cliff View Golf Course has an 18-hole golf course, while Alleghany Country Club and Cliftondale Country Club have nine-hole courses.

The Covington Lumberjacks Valley League Baseball team makes its home at Casey Field in Covington. The Valley League plays a 40-game schedule in 7½ weeks each summer. The 2011 season marked the 50th year of the Valley League as an official NCAA sanctioned league.

# Alleghany Highlands YMCA

The YMCA program was introduced to the Alleghany Highlands in 1993. The YMCA opened their facility in Low Moor in 2007. The new 37,000 square feet facility provides a full indoor gym, six-lane competitive/family indoor swimming pool, childcare facility, basketball courts, wellness center, multi-purpose activity rooms, locker rooms, and meeting rooms.

The YMCA Learning Centers - West Learning Center in Covington and Central Learning Center in Low Moor - and the YMCA "Kid's Connection" School Age Programs -provide services to Jeter Watson, Mountain View, Sharon, Clifton Forge Middle School, Callaghan, Falling Springs, Edgemont and Eagle Rock. They teach children to swim, provide all-day child care at the West and Central Learning Centers, and support the development of children in after school programs and camps in Covington, Low Moor and Eagle Rock.

#### **Outdoor Water Recreation**

The Jackson and Cowpasture Rivers provide opportunities for freshwater fishing, as do many of the mountain streams in the County. Stocked trout streams on National Forest lands include: Shawver's Run, Jerry's Run, Pounding Mill Creek, Smith Creek, Clifton Forge Reservoir, Smith Creek, and Simpson Creek. The U S Army Corps of Engineers manages stocked trout fishing on the tail waters of Lake Moomaw below the dam on the Jackson River.

There are nine public canoe access points on the Jackson River and Cowpasture River in Alleghany County. Parking is available at each of the access points.

The following public canoe access sites are located on the Jackson River and managed by the U S Forest Service:

- Petticoat Junction north of Covington on Route 687 (Jackson River Road) near Clearwater Park.
- Johnson Spring north of Covington on Route 638 (Natural Well Road) near Natural Well.
- Indian Draft north of Covington on Route 687 (Jackson River Road) approximately three miles from Clearwater Park.
- Old Smith Bridge north of Covington on Rt. 721 (N. Smith Bridge Road) near the Falling Spring Gardens development.

The following public canoe access sites are located on the Jackson River and are managed by the Virginia Department of Game and Inland Fisheries:

- Island Ford about 2 miles west of Covington on Rt. 1104 (Valley Ridge Road) at the Island Ford Transfer Station.
- Low Moor at the Clifton Middle/Mountain View Elementary Schools on Rt. 735 (Irvine)

### Farm Road)

The following public canoe access point is located on the Jackson River and is managed by the US Army Corp of Engineers:

 Jackson River Tail waters at Gathright Dam. A permit is required from the Corp of Engineers before driving down to the access site. Fishing is permitted in this area with a permit from the Corp.

Opportunities for public fishing on the Jackson River are minimal, as the private landowners control most of the fishing along the Jackson River. The very small Forest Service canoe access points may be fished, but straying onto private land is prohibited without the landowners' permission.

The following public canoe access site is located on the Cowpasture River and is managed by the US Forest Service:

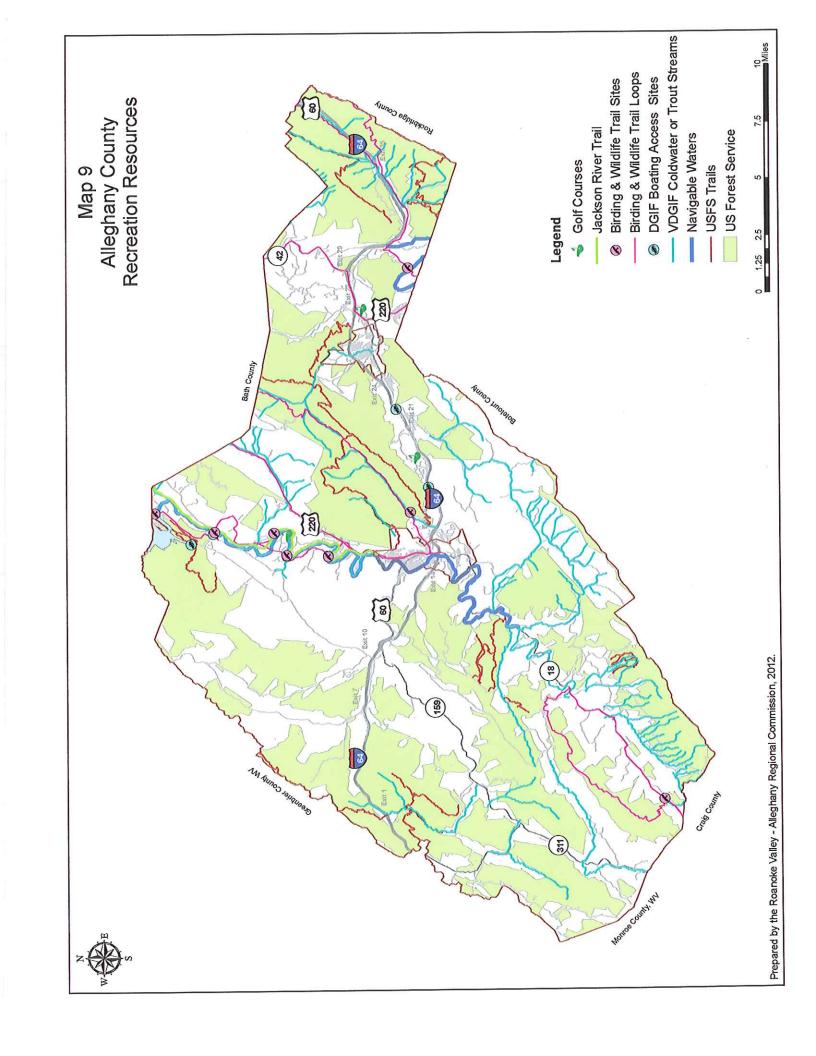
 Evans Tract, at the river's intersection with Rt. 633 (McKinney Hollow Rd), about 1.5 miles southwest of Sharon Elementary School

The following public canoe access site is located on the Cowpasture River and is managed by Alleghany County Parks and Recreation:

• Cowpasture River Access Park located at 4017 Nicelytown Road, Clifton Forge

Additional access points are currently under assessment by the U.S. Forest Service. Encouragement from the public to the Department of Game and Inland Fisheries and the U.S. Forest Service to establish additional access points along the waters of the Cowpasture and Jackson Rivers should be continured.

The U.S. Forest Service maintains a public boat ramp/launch facilities and docks on Lake Moomaw at Coles Point and Fortney Branch. Both serve motorized boats up to 25 feet in length.



# Alleghany Highlands Chamber of Commerce & Tourism

The Alleghany Highlands Chamber of Commerce & Tourism serves Alleghany County, the City of Covington and Town of Clifton Forge. The office has recently moved from Main Street in Covington to a more visible location at Mallow Mall. The office now serves as a Visitors Center as well and is easily accessible from Routes 220/60 and I-64. The Chamber serves the region in small business development and retention, tourism promotion, relocation assistance and demographics, business referrals and community enhancement. A variety of annual forums, seminars and special events are hosted in collaboration with other groups in the region. The Chamber is a non-profit organization governed by a Board of Directors including a representative from Alleghany County. Its mission is to provide programs and services which foster a healthy business environment and promote economic growth, thereby enhancing the quality of life in the community.

The Tourism initiative is becoming a primary economic development focus for the Alleghany Highlands. Partial funding for tourism related projects comes from the transient occupancy tax imposed by the County. On November 2 and 30, 2011, tourism stakeholders gathered at DSLCC to provide input for a Tourism Strategic Marketing Plan. A full situational analysis was completed and is summarized within the plan. That analysis and review of the previous needs assessment and marketing plan was used as a reference to determine a tourism vision, mission, goals and objectives.

The "Shop Locally" initiative was established by the Chamber in 2006. This initiative was to encourage area residents and businesses to shop for their goods and services in the Alleghany Highlands. The plan was supported by all governing bodies.

In June 2010, the Chamber of Commerce introduced the Alleghany Gran Fondo Cycling Festival. The two day annual event brought approximately 160 cyclists to the area in 2011. Cyclists come to the Alleghany Highlands on Friday evening and some stayed through Sunday. The cycling event on Saturday provides distance races of 3 different lengths and provides the cyclists an amazing view of the Alleghany Highlands. Sunday's race benefits the Virginia Wounded Warrior Program and the Raising Hope Foundation. The Chamber will continue with the event to encourage tourism in the area, as well as promotion of community pride.

Other successful projects: New logo, Visitors Website, Visitors Guide, and other branded materials and advertising/marketing to better promote the area's tourism assets. Virginia's Western Highlands Trail Guide, and the Alleghany Living Magazine, used as the area's relocation guide.

Funding for many of these projects, including the enhancements made to the building that now serves as the visitors center, was made possible through grants from the Alleghany Foundation and Virginia Tourism Corporation.

Upcoming projects include the Virginia's Western Highlands Artisan Trail, the Blueway Initiative, and the Midland Trail Project.

# **U.S. Forest Service Recreational Opportunities**

The Jefferson and George Washington National Forests offer excellent fishing, hunting, and recreational opportunities for residents of Alleghany County. Alleghany County is within the James River Ranger District. The area offers some of the U.S. Forest Service's most popular campgrounds and facilities.

# Gathright Dam and Lake Moomaw Recreation Area

This area is the largest recreation complex in the George Washington and Jefferson National Forests. It is developed around a 2,530-acre reservoir that is the largest flat-water lake in western Virginia with over 43 miles of shoreline. Congress gave authorization for the development of the dam and lake in 1947. Construction began in the 1970s by the U.S. Army Corps of Engineers and was completed in the early 1980's. All facilities, except Gathright Dam and a visitor center, were transferred to the Forest Service in 1981.

The south end of Lake Moomaw, operated by the James River Ranger District in Alleghany County, Virginia, has a 55-unit family campground at Morris Hill. Picnicking facilities are available at Morris Hill and Coles Point. There is a boat launch at Coles Point adjacent to a beach and bathhouse. Group picnic shelters are offered at Coles Point. The Fortney Branch boat launch ramp is at the southernmost end of the lake and is the most popular of the three boat launch ramps on the lake.

### Coles Mountain Recreation Area

Coles Mountain Recreation Area features a beautiful swimming beach, a bathhouse with warm showers and flush toilets, two reservable shelters with approximately 60 picnic tables, a boat launch, a courtesy dock, and vending machines. A universally accessible fishing pier may be reached by a short, hard-surfaced trail leaving the north end of the Coles Point parking lot.

### Morris Hill Recreation Area

Morris Hill Recreation Area is set atop a wooded ridge at the southern end of Lake Moomaw. This area includes the Morris Hill Campground, which is the largest, most popular campground in the district. It has 55 campsites, each with a tent pad and picnic table. Showers, flush toilets, trailer spaces, a trailer dump station, and nearby lake access trails are available. A limited number of campsites may be reserved; the remainder is available on a first-come, first-served basis. The nearby Morris Hill Group Campground offers two reservable developed group tent campsites and two vault toilets. The Morris Hill Picnic Area, managed by the Corp of Engineers, features picnic facilities, picnic shelters, toilet facilities, and hiking trails.

### Longdale Recreation Area

Longdale Recreation Area is an attractive, rustic area constructed by the Civilian Conservation Corps in the 1930s. This recreation area features a small lake with a beach and an interesting history. The area provides 20 picnic sites, a picnic shelter, and nearby hiking trails.

#### Highlands Scenic Tour

The Highlands Scenic Tour is a 19.6-mile scenic byway. It is located in Alleghany and Rockbridge Counties and includes segments of State Route 850, State Route 770, and Forest Road 447. The tour is part of the National Forest Scenic Byway System and features panoramic views of the Blue Ridge Mountains and the Alleghany Highlands. The tour offers wayside opportunities for viewing interesting geologic formations, historical sites, and examples of active forest management.

### North Mountain Trail

The North Mountain Trail is an 8.6 mile section of trail which begins on FDR 172 near Longdale Recreation Area and winds its way up the crest of North Mountain, ending on SR 770. The trail features stream habitats, interesting rock formations, varied forest types, opportunities for wildlife viewing, and panoramic views as it rises in elevation from 1,700 feet to 3,200 feet. Once on the crest of the mountain, there are excellent views to the east of Lake Robertson and the Peaks of Otter.

### Alleghany Trail

Twelve miles of the Alleghany Trail pass through the James River Ranger District. The Alleghany Trailhead provides an excellent access point for hikers headed for the Laurel Run Trailhead, 15 miles to the north on the Monongahela National Forest. This long distance trail crosses and follows the Eastern Continental Divide in the rugged Allegheny Mountains of West Virginia and Virginia. When complete, it will extend 330 miles from Preston County, West Virginia, near the Pennsylvania border, to the Appalachian Trail in Monroe County, West Virginia. The Alleghany Trailhead can be reached by exiting I-64 at Jerry's Run (Exit 1).

### Fore Mountain Trail

The 14.8-mile Fore Mountain Trail travels through upland hardwoods and pines that are typical of high elevation forests of the Allegheny Mountains. A variety of wildlife, including whitetail deer, turkey, grouse, squirrel, and an occasional black bear, may be seen along this trail. Hikers following this winding trail will enjoy several nice views as they travel through stands of hardwoods. The Fore Mountain Trail begins at the Dolly Ann Work Center, just off US 60 east of Covington, and ends near Douthat State Park, where it becomes the Middle Mountain Trail and continues north another 5.5 miles to FDR 125.

### Dry Run Trail

The Dry Run Trail is a scenic nine-mile trail offering excellent vistas and wildlife viewing opportunities as it passes near Big Knob, the highest point in Alleghany County. The trail begins at the end of Cypress Street in Covington. It extends up Dry Run Creek and Peter's Ridge, crosses FDR 125, and ends at its intersection with the Fore Mountain Trail. It can also be accessed from FDR 125.

### Rich Hole Wilderness

Congress established the 6,450-acre Rich Hole Wilderness area in 1988, making it one of the newest entries into the Wilderness Preservation System. Named for the rich soils that can be found in the head of drainages or "holes" on Brushy Mountain. Rich Hole harbors a diverse array of flora and fauna including some old growth hardwood species. As in the majority of wildernesses in the East, the area was once intensely used by man and is now returning to natural ecological processes. Elevations range from 1,500 feet to nearly 3,500 feet on the crest of Brushy Mountain. The area represents excellent opportunities for solitude and primitive recreation.

### Eastern National Children's Forest

The Eastern National Children's Forest is located in the Bens Run area of the County in the southern portion of the James River District. In 1971, a wildfire destroyed trees on approximately 1,176 acres on Potts Mountain. On April 28, 1972, on the 150th anniversary of Arbor Day, more than 1,000 children from Virginia, West Virginia, Maryland, and Pennsylvania planted pine trees on the wildfire site. The Hunt-Wesson Foods Inc. provided funds to purchase tree seedlings from labels of food containers mailed into the company. The planting was one of three National Children's Forests originally established in the United States.

The names of the children that participated in the forest restoration are stored in the buried time capsule that is to be opened in the year 2072. Near the time capsule is a monument to the children. The stone monument is the trailhead of the paved .25-mile loop trail (handicapped accessible), which offers a glimpse of the foliage and wildlife in the area as well as a spectacular view of the surrounding mountains. The trail is accessible year round.

### Alleghany Highlands Trail System

The Alleghany Highlands Trail System (AHTS) is a multi-user trail system on George Washington and Jefferson National Forest lands surrounding Douthat State Park in Alleghany and Bath Counties. The trail project has been coordinated effort with the James River District of the U.S. Forest Service and the Virginia Department of Conservation and Recreation, which plans to construct a horse camp at Douthat State Park. When complete, the trail system will include about 63 miles of nested loop trails of varying lengths and difficulty on some existing open roads, existing old logging and mining roads, existing trails, and about 14 miles of new trails yet to be constructed. The trail will accommodate mountain bikers, hikers, and equestrians users.

### Watchable Wildlife Areas

### Lake Moomaw Watchable Wildlife Area

The Lake Moomaw Watchable Wildlife Area is located in the Warm Springs and James River Ranger Districts surrounding Lake Moomaw. The Wildlife Management Area is managed primarily for the production of wild turkey. Great blue heron can be seen year round on the lakeshore and green-backed heron in the summer. The area has excellent songbird viewing, especially in the summer. In warmer months, snapping, eastern painted, and the eastern box turtles are active.

### Top Drive Watchable Wildlife Area

The Top Drive Watchable Wildlife Area is located along the ridge top on the border of Alleghany and Rockbridge counties on unpaved Forest Road 447, also known as Top Drive and is traveled when taking the "Highlands Scenic Tour" on the National Forest Scenic Byway. Because Top Drive is somewhat remote, wildlife viewing here is very good. It is also one of the best mountain bike routes in the State. Naturalists can view whitetail deer, wild turkey, red-tailed hawk, and ruffed grouse year round. During the fall, migrating hawks can be viewed from open areas and rocky outcroppings, especially in September. During the summer, many warblers nest along the ridges.

### Evans Tract Watchable Wildlife Area

This former farm is located on the banks of the Cowpasture River. A large field borders the river, gently ascending to higher ridges of mixed upland oak and pine forests. The river's clarity offers ideal viewing of aquatic life, especially small mouth bass, bluegill, rock bass, beaver, and

snapping turtle. Great blue heron can be seen on the shore year round, and in the summer, green-backed heron. Wood duck and mallard are active during spring and summer on the river. Red-tailed hawk and American kestrel use the large fields as hunting grounds during the daytime, while the barred, eastern screech, and great-horned owls hunt the fields and forests at night. The fields also sustain killdeer (spring-summer), American woodcock (spring-fall), and bobwhite quail (year round). Whitetail deer are seen throughout most of the tract.

### Virginia Birding and Wildlife Trail

The Virginia Department of Game and Inland Fisheries sponsors the Virginia Birding and Wildlife Trail program. This program showcases the State of Virginia's 43,000 square miles of diverse natural habitat and wildlife. This program is the first statewide program of its kind in the United States. In Virginia, three phases of trail link wildlife site throughout the state. The Alleghany Highlands is featured in the "mountain" phase of the trails. There are thirteen sites of interest in the area highlighted for wildlife and breathtaking views.

#### **Douthat State Park**

Douthat was one of six State Parks planned by the Commonwealth in the early 1930s. It is now on the National Register of Historic Places and straddles Bath and Alleghany counties. The park encompasses a total of 4,493 acres. The Douthat Land Company, a consortium of Virginia businessmen, donated the initial 1,920 acres of the present-day park. The rest of the land was purchased with a portion of the funds allocated by the General Assembly in 1933 for parkland acquisition. The establishment of the Civilian Conservation Corps (CCC) as part of the emergency Conservation Works by President Roosevelt in 1933 provided the means for development of the parks. An estimated 600 men lived and worked at the three camps responsible for building Douthat's facilities. The built and natural features of the park have remained virtually unchanged since construction. In 1986, the 50th anniversary of Douthat State Park and the Virginia State Park System, Douthat was recognized as a Registered Historic Landmark. In 1999, Douthat received the centennial medallion from the American Society of Landscape Architects. Editors of the 1999 *Outside Magazine* Family Vacation Guide named Douthat State Park one of the nation's 10 best.

A 50-acre lake offers swimming, boating, and seasonal trout fishing. Overnight facilities in the park include cabins, camping, Creasey Lodge, and Douthat Lodge. Douthat Lake and adjoining Wilson Creek are stocked regularly with trout, water conditions permitting. The boathouse is open from April through the end of October. Johnboats, with or without electric motors, are available for rent until Labor Day. Canoes, paddleboats, hydrobikes, and funyaks may be rented from Memorial Day through Labor Day. A boat launch ramp is available for guests with their own non-gasoline powered boat. Year-round boat storage is also available from the park for a fee. No gas-powered equipment is allowed on the lake. In 2006, the Virginia State Park System and Douthat Park celebrated 70 years of the State Park System.

Douthat State Park has an extensive trail network for hiking, horseback riding and mountain biking. There are more than 40 miles of wooded hiking trails to choose from throughout the year, ranging from easy to difficult.

Douthat Lakeview Restaurant, one of the original CCC facilities, is a full-service restaurant that overlooks the lake and has recently been renovated. Adjacent to the restaurant is Douthat Camp Store that stocks most convenience items and fishing necessities. Concession operations include a snack bar and rental facility for boats, floats, umbrellas, and mountain bikes. The gift

shop is located in the main office complex.

Interpretive Programs sponsored by the park include nature hikes, paddleboat tours, midnight canoe tours, Kid Kapers, Junior Rangers, evening amphitheater programs, living history, beaver talks, night hikes, environmental education, and survival training. The park sponsors educational outreach programs during the school year. The interpreter and other park rangers host environmental education programs in the park. They also visit schools in the six counties surrounding the park. Outreach opportunities are also available to scout groups, 4-H groups, civic organizations, church groups, senior groups, and others.

### Falling Spring State Park

The Falling Spring Falls are located about 5 miles north of Covington on Route 220. Over 7,000 gallons of water a minute plunge over a sheer, 200-foot bluff to the rocks below. The Falls have been the subject of many photographers over the years. This wayside park provides opportunities for site seeing and picnicking. The Falling Spring Falls were dedicated in 2004 as part of the State Park System and is under the direction of Douthat State Park.

#### Jackson River Scenic Trail

The Alleghany County Board of Supervisors acquired the property known as the Hot Springs Branch of the C & O Railway in order to create a walking, hiking, biking, and horseback-riding trail. This 14-mile stretch of property runs from the old Alleghany Central Scenic Railroad station in Intervale north to the Bath County line. Grant monies have and will be acquired from various organizations for the development of this trail. Once completed, the trail will be marketed as a tourist destination and for its historic connection with the railroad. Bath County and the Homestead Resort should be encouraged to develop the trail from the Bath County line north. Economic opportunities should arise from the development of the trail such as camping areas, bicycle rentals, shuttle service and tax revenue from restaurants and lodging.

#### Rural Bikeway Plan

The Rural Bikeway Plan was completed in 1997 and updated in 2006. The Plan covers the rural portions of Alleghany, Craig, and Franklin Counties, the City of Covington, the Town of Clifton Forge and portions of Botetourt and Roanoke Counties. The purpose of the Plan is to provide information and guidance on the planning and provisions of bicycle accommodations at the local and regional levels that enhance and encourage bicycling in the rural portions of the areas addressed in the plan. The information provided in the plan will enable citizens to enjoy the transportation, health and economic benefits of a bicycle friendly environment. The relationship between tourism and bicycling is addressed and its economic benefits. The recommendations of the plan are discussed in the Transportation section of the Comprehensive Plan.

### **Transportation**

Transportation is an integral part of the present and future health of a community. A well-planned transportation system allows the private, public, and non-profit sectors to deliver goods and services to society as a whole. The demand for transportation is derived from and shapes activity patterns at the local, regional, and national levels. The Transportation chapter of the Comprehensive Plan primarily deals with planning for the future transportation needs of the County and its role in the Alleghany Highlands.

The Transportation Chapter is divided into three main sections: transportation network, transportation plans, and transportation needs. The first section reviews the current situation and presents data that describes the current state of affairs. The second section describes the importance of consistency between the comprehensive plan and other transportation plans and programs. The last section explores transportation needs and identifies projects that should be taken into consideration when setting goals and objectives.

### **Highways**

The County is crossed east to west by Interstate Highway 64, and US Highway 60, though the two follow the same corridor for much of the distance. US Highway 220 provides north-south travel entering the County from Botetourt County, connecting the City of Covington and Town of Clifton Forge, then going north to Warm Springs in Bath County. Virginia Primary Routes 18 and 159 connect the southwestern part of the County to I-64 and to Route 311. Virginia Primary Route 42 connects the County to the eastern part of Bath County.

#### **Federal Functional Classification**

Functional usage of a roadway is based upon its mobility and accessibility. Choice of a travel route can be logically related to the roadway's ability to access land and the mobility through an area. The Federal Highway Administration (FHWA) has set up functional classification guidelines. The Federal Functional Classification Guidelines contain a list of classifications and descriptions given for each class of roadway. Roads may be classified as local, collector or arterial roads. Urban or rural U.S. Census designations also have importance because design features are based on these designations. For example, in urban areas, the streets and roads may require a curb and gutter design while the rural roads will normally feature shoulders and ditches in the design.

Briefly, for each of three areas (rural, urbanized and smaller urban areas):

- · Local roads function to provide a higher degree of access but lower travel mobility-flow,
- Collectors provide a mixture of access and mobility, for through movement and access, and
- Arterials, with two sub-classes, minor and principal, provide a lower level of access and higher mobility with the functional standards for minor and principal arterials being relatively high for through traffic.

Functional classes for the highway network in Alleghany County are shown on Map 10.

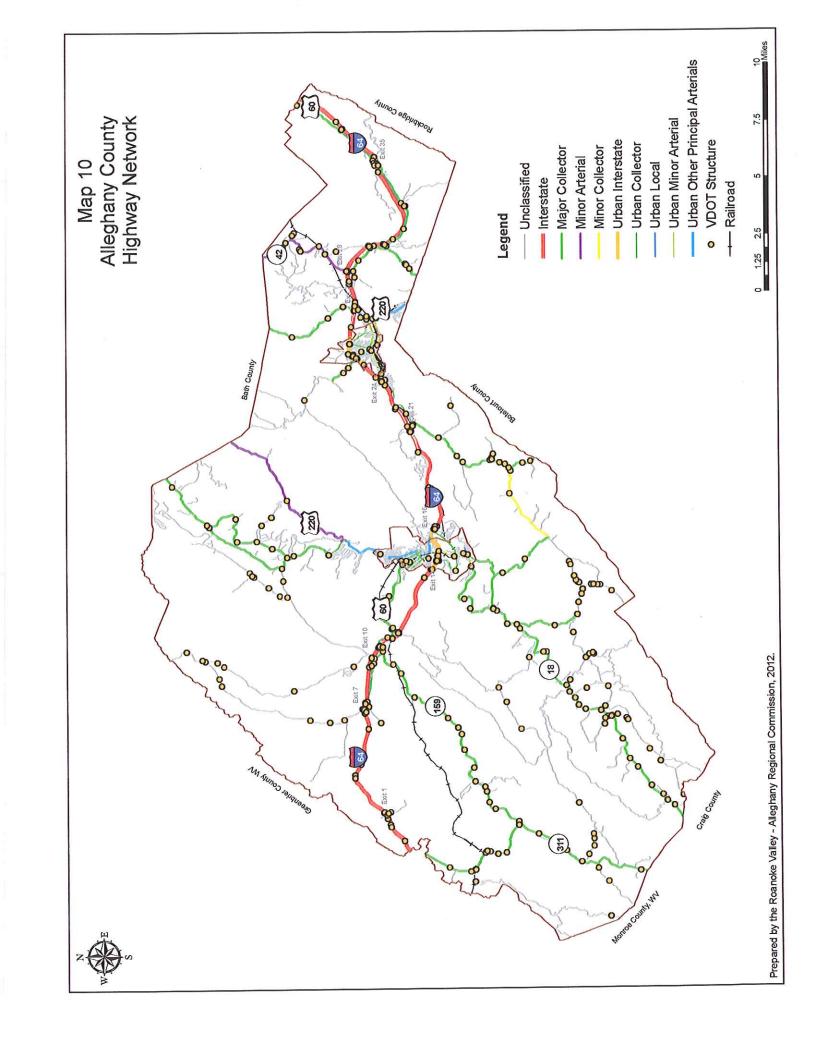


Table 65
Annual Average Daily Traffic Volume Estimates

Route	al Average Daily Traffic Volur From	To	AADT
18 Potts Creek Road	Craig County Line	607	220
18 Potts Creek Road	657 Pitzer Ridge Rd	Covington City Limit	1,900
42/220 Market Ave	Alleghany County Line	Iron Gate Town Limit	6,500
42 Forty-Two Road	269 Longdale Furnace Rd	Bath County Line	1,500
60 Midland Trail Rd	I-64 at Callaghan	1-64	2,900
60 Midland Trail Rd	1-64	WCL Covington	2,200
60/220 Madison St	ECL Covington	US 220	13,000
60 Bus/220 Bus	I-64/384	WCL Clifton Forge	8,300
60 Bus Main St	ECL Clifton Forge	US 220 Market Št	5,100
60 Bus/20/42	US 220 Market Ave	670 Longdale Furnace Rd	8,300
60 Bus/220 Market Ave	670 Longdale Furnace Rd	I-64 US 60	7,900
159 Dunlap Creek Rd	311 Kanawha Trail	665 Moss Run Rd	860
159 Dunlap Creek Rd	665 Moss Run Rd	I-64	1,200
220 Hot Springs Rd	NCL Covington	687 Clearwater Dr	4,900
220 Hot Springs Rd	687 Clearwater DR	Bath County Line	1,400
269 Longdale Furnace Rd	1-64/220/42	632 Longdale Furnace Rd	1,200
269 Longdale Furnace Rd	632 Longdale Furnace Rd	I-64/60	570
311 Kanawha Trail	West Virginia State Line	159 Dunlap Creek Rd	760
311 Kanawha Trail	159 Dunlap Creek Rd	West Virginia State Line	520
600 Indian Draft Rd	661 Midland Trail	641 Indian Draft Rd	750
600 Morris Hill Rd	641 Indian Draft Rd	666 Morris Hill Rd	270
606 Sulphur Springs Rd	NCL Clifton Forge	699 Sulphur Springs Rd	470
606 Sulphur Springs Rd	699 Sulphur Springs Rd	Bath County Line	370
616 Rich Patch Rd	613 Bens Run Rd	617 Jamison Mountain Rd	270
616 Rich Patch Rd	617 Jamison Mountain Rd	619 Hayes Gap Rd	390
616 Rich Patch Rd	619 Hayes Gap Rd	621 Roaring Run Rd	420
616 Rich Patch Rd	621 Roaring Run Rd	622 Rose Hill Lane	540
616 Rich Patch Rd	622 Rose Hill Lane	623 White Rock Gap Rd	730
616 Rich Patch Rd	623 White Rock Gap Rd	696 Selma-Low Moor Rd	890
621 Roaring Run Rd	Botetourt County Line	616 Rich Patch Rd	460
687 Jackson River Rd	US 220	642 Mount Pleasant Drive	1,900
687 Jackson River Rd	642 Mount Pleasant Drive	641 Indian Draft Rd	1,700
687 Jackson River Rd	641 Indian Draft Rd	640 Falls Road	1,300
687 Jackson River Rd	640 Falis Road	638 Natural Well Rd	600
687 Jackson River Rd	638 Natural Well Rd	637 Sycamore Bend Lane	630
687 Jackson River Rd	637 Sycamore Bend Lane	Bath County Line	590

Source: 2010 Daily Traffic Volume Estimates, Virginia Department of Transportation.

Table 66
Annual Average Daily Traffic Volume Estimates, Interstate 64

Route	From	To	AADT
I-64/60	West Virginia State Line	198 Jerrys Run Rd	9,000
I-64/60	198 Jerrys Run Rd	661 Midland Trail	9,100
I-64/60	661 Midland Trail Rd	159 Midland Trail	8,900
I-64	159 Midland Trail	WCL Covington	10,000
I-64	WCL Covington	154 Durant Rd	10,000
I-64	154 Durant Rd	ECL Covington	13,000
I-64	ECL Covington	US60/220	13,000
I-64/60/220	US60/220	696 Selma-Low Moor Rd	19,000
I-64/60/220	696 Selma-Low Moor Rd	60 Bus/220 Bus	18,000
I-64/60/220	60 Bus/220 Bus	WCL Clifton Forge	13,000
I-64/60/220	WCL Clifton Forge	ECL Clifton Forge	13,000
I-64/60/220	ECL Clifton Forge	US 220/Bus 60	13,000
I-64/60	US 220/Bus 60	42/269	10,000
I-64/60	42/269	269 North Mountain Rd	7,900
1-64/60	269 North Mountain Rd	Rockbridge County Line	7,900

Source: 2010 Daily Traffic Volume Estimates, Virginia Department of Transportation.

### Virginia Six-Year Improvement Program

The Six-Year Improvement Program (SYIP) is the Commonwealth Transportation Board's (CTB) program for allocating funding for rail, public transportation, commuter assistance, bicycle, pedestrian, interstate and primary highway transportation projects over the next six years. The program is updated annually. Typically, the CTB conducts hearings in the fall of each year to gather public and local government input on priorities for transportation funding. These meetings provide local governments with an opportunity to have input on priorities for the Interstate and Primary systems. Projects for the SYIP are shown on Map 11.

The CTB and VDOT make a concerted effort to assemble projects in the SYIP so they can move through the development process in an orderly fashion. As projects are being developed, many issues arise that must be addressed, such as citizen concerns, project development, or environmental issues. Projects must also be fully funded to move to construction. Most projects require multiple years of funding. Projects are removed from the SYIP once they are completed. Projects are also taken out of the SYIP if there is not enough funding to finance them or if preliminary engineering determines that the project is not feasible.

Table 67
VDOT Six-Year Improvement Program Projects

	VDOT DIX-Teal Improvement Togram Tojecto					
Map #	Description	Estimate	Previous	FY 13	FY 14-18	Balance
1	I-64 Safety and Drainage Improvements	Φ4 24E 000	\$1,420,000	\$0	\$0	(\$75,000)
2	ARRA Alleghany I64 Safety & Drainage Improvements	\$1,345,000 \$13,955,000	\$1,420,000	\$0 \$0	\$0 \$0	(\$161,000)
3	I-64 Install Median Cable Guardrail	\$4,415,000	\$4,415,000	\$0	\$0	\$0
4	Humpback Covered Bridge Rehabilitation	\$125,000	\$125,000	\$0	\$0	\$0
5	Rt. 60 Over Jackson River	\$6,033,000	\$737,000	\$0	\$243,000	\$5,053,000
6	Rte 159 Over Crow Run	\$1,189,000	\$338,000	\$80,000	\$771,000	\$0

Source: Six-Year Improvement Program, Virginia Department of Transportation, 2012.

# Secondary Six Year Plan

The Virginia Department of Transportation (VDOT) Six Year Secondary Construction Program is based on the County's Priority List and is reflective of available State road funding allocated to the County. Projects for the SYIP are shown on Map 11.

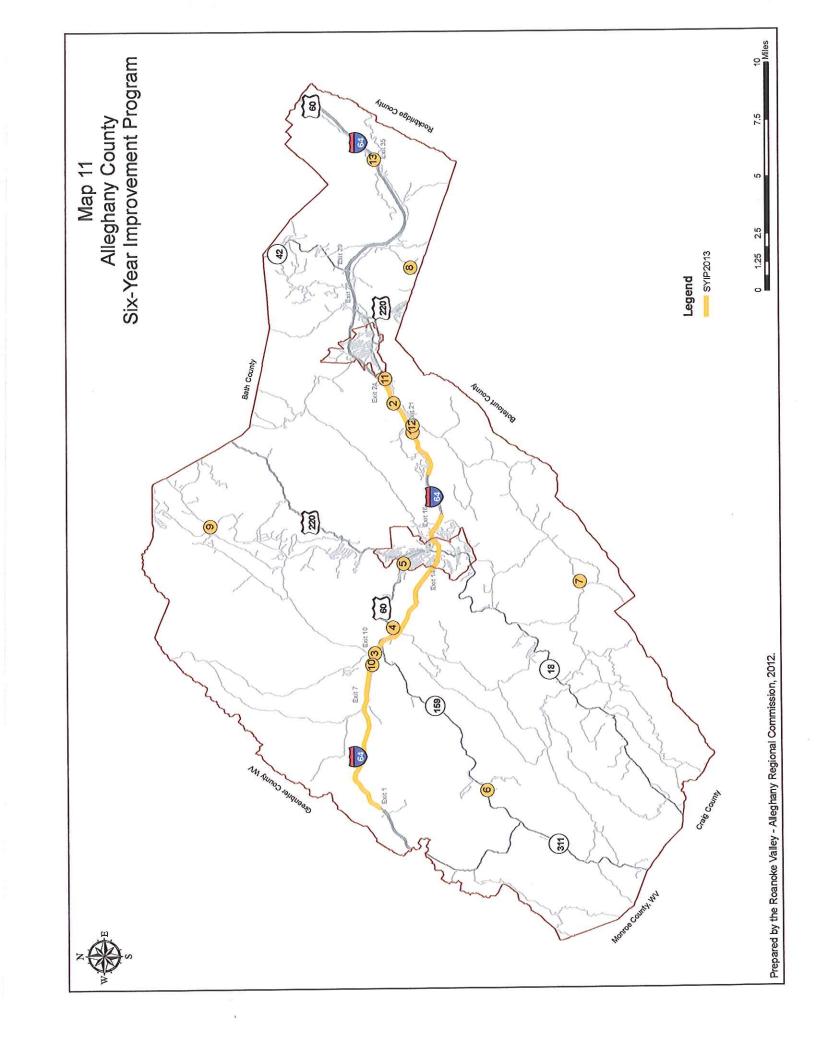
The Secondary System programming process is coordinated between the local Board of Supervisors and VDOT's Residency Administrator. The Residency Administrator works with the Board of Supervisors to establish or reconfirm their priorities for the Secondary Six-Year Plan. Each year the Residency Administrator attends a meeting of the Board of Supervisors for the purpose of preparing a budget for the expenditure of secondary road improvement funds for the next fiscal year.

VDOT has provided the following projected funding allocations for Alleghany County for fiscal years 2013 to 2018.

Table 68
Secondary Six Year Plan Projects

		Secondary Si	ix Year Plan P	rojecis	,	• · · · · · · · · · · · · · · · · · · ·
Мар						
#	Description	Estimate	Previous	FY 13	FY 14-18	Balance
7	Rte 616 Bridge Rehabilitation Over Blue Spring	\$917,000	\$0	\$0	\$182,000	\$735,000
8	Rte 633 - Approaches & Bridge Replacement at Cowpasture River	\$3,212,000	\$2,673,000	\$539,000	\$0	\$0
9	Rte 638 - Replace Bridge & Approaches Over Jackson River at Rt. 687	\$3,088,000	\$1,341,000	\$92,000	\$1,573,000	\$83,000
10	Bridge Replacement of Rt. 661 Over Ogle Creek	\$3,523,000	\$947,000	\$0	\$2,576,000	\$0
11	Rte 696 - Approaches & Bridge Replacement Over CSX at Selma	\$5,022,000	\$5,825,000	\$0	\$0	(\$802,000)
12	Bridge Replacement Rt. 696 Selma Lowmoor Road Over Karnes Creek	\$1,767,000	\$0	\$256,000	\$805,000	\$707,000
13	Rt. 850 Bridge Over Simpson Creek	\$1,568,000	\$0	\$0	\$305,000	\$1,263,000

Source: Six-Year Improvement Program, Virginia Department of Transportation, 2012.



### 2035 Rural Long Range Transportation Plan

The Transportation and Mobility Planning Division of the Virginia Department of Transportation has worked with other agencies and local governments to develop VTrans 2035, Virginia's multi-modal long range plan and a more detailed subset report known as the 2035 Surface Transportation Plan. The highway element of the 2035 Surface Transportation Plan includes proposed improvements on Virginia's federal functionally classified roadways. This Rural Long Range Transportation Plan is one piece of the 2035 Surface Transportation Plan.

The transportation system within the rural areas for each region was evaluated, and a range of transportation improvements - roadway, rail, transit, air, bicycle, and pedestrian - are recommended that can best satisfy existing and future needs. Each rural regional plan has a horizon year of 2035 and addresses the anticipated impacts of population and employment growth upon the transportation system.

Each rural plan was developed as a vision plan, addressing all needs of the transportation system studied regardless of anticipated funding availability. It is envisioned that each regional plan will be used as a basis to identify transportation funding priorities. Each RLRP is developed as a vision plan and will be reviewed every five years. Project timeframes are classified as long-term, mid-term, and short-term.

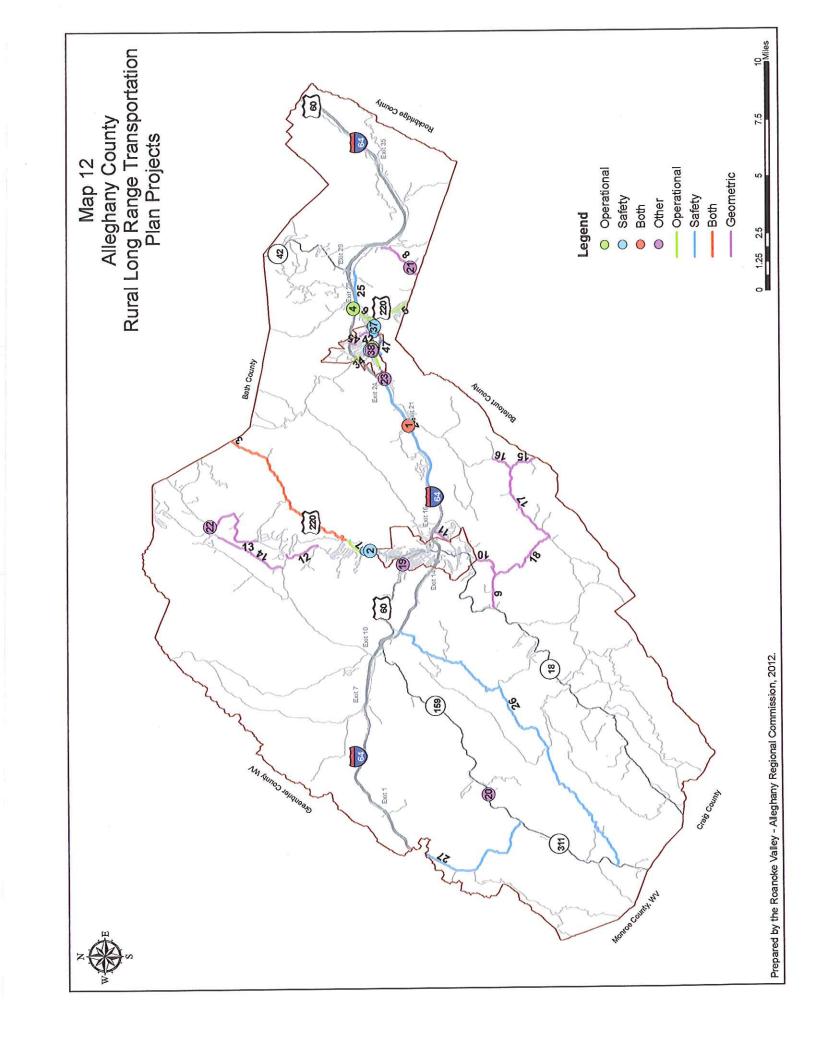
Listed below are the recommended projects from the Rural Long Range Transportation Plan that are located in Alleghany County. Project numbers correspond to those in the Rural Long Range Transportation Plan.

#### Recommendations

- I-64, Exit 21 at VA 696 (Selma Low Moor Road)
   Mid-term add right turn bay for exit-lane approaches; Long-term consider reconstruction of interchange.
- US 220 at VA 778 (Dressler Drive)
   Mid-term reconfigure or relocate parking away from intersection; Long-term relocate
   intersection to address geometric issues.
- US 220 from VA 687 (Jackson River Road) to the Bath County Line Short-term maintenance; Mid-term monitor truck volumes to assess need for truck runaway ramps; Long-term improve shoulders and consider widening to rural threelane roadway.
- 4. I-64 at US 220 (Exit 27) Long-term upgrade interchange.
- 5. US 220 from Botetourt County Line to US 60 Business Long-term widen to urban four-lane roadway with median.
- 6. US 60 Business from US 220 to I-64 Long-term widen to urban four-lane roadway with median.

- US 220 from Northern Corporate Limits of Covington to VA 687 (Jackson River Road)
   Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders).
- VA 633 (McKinney Hollow Road) from Botetourt County Line to VA 269 (Longdale Furnace Road)
   Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders).
- VA 657 (Pitzer Ridge Road) from VA 18 to VA 619 (Hayes Gap Road)
   Long-term reconstruct road to address geometric deficiencies (11-foot lanes).
- VA 657 (Pitzer Ridge Road) from VA 619 (Hayes Gap Road) to Covington Corporate Limits
   Long-term reconstruct road to address geometric deficiencies (11-foot lanes).
- 11. VA 647 (Mallow Road) from the Eastern Corporate Limits of Covington to VA 648 Long-term widen to urban two-lane roadway.
- 12. VA 687 (Jackson River Road) from VA 642 (Mount Pleasant Dr.) to 0.35 miles north of VA 641 (Indian Draft Road) Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders).
- 13. VA 687 (Jackson River Road) from VA 640 (Falls Road) to VA 638 (Jackson River Road) South Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders).
- VA 666 (Morris Hill Road) from VA 641 (Indian Draft Road) to VA 638 (Jackson River Road)
   Long-term reconstruct road to address geometric deficiencies (11-foot lanes).
- VA 621 (Roaring Run Road) from the Botetourt County Line to VA 616 (Rich Patch Road)
   Long-term reconstruct road to address geometric deficiencies (10-foot lanes).
- 16. VA 616 (Rich Patch Road) from VA 621 (Roaring Run Road) to VA 622 (Rose Hill Lane)
  Long-term reconstruct road to address geometric deficiencies (11-foot lanes).
- 17. VA 619 (Rich Patch Road) from VA 619 S. (Hayes Gap Road) to VA 621 (Roaring Run Road) Long-term reconstruct road to address geometric deficiencies (11-foot lanes).
- VA 619 (Hayes Gap Road) from VA 616 (Rich Patch Road) to VA 657 (Pitzer Ridge Road)
   Long-term reconstruct road to address geometric deficiencies (10-foot lanes).
- 19. US 60 (Midland Trail) at the Jackson River

- Mid-term replace bridge.
- 20. VA 159 (Dunlap Creek Road) at Crow Run Mid-term replace bridge.
- 21. VA 633 (Longdale Furnace) at the Cowpasture River Mid-term replace bridge and reconstruct bridge approaches.
- 22. VA 638 (Natural Well Road) at the Jackson River Mid-term replace bridge and reconstruct bridge approaches.
- 23. VA 696 (Selma-Low moor Road) over the CSX Railroad Short-term replace bridge and upgrade approaches (ongoing).
- 24. I-64 from the Jackson River/SAB (near milepost 17) to US 60 (near milepost 24) Short-term replace guardrail and median rail (ongoing).
- 25. VA 633 (Rural Rustic Road) from US 60 to VA 42 Short-term improve roadway as per the Alleghany County Comprehensive Plan.
- 26. VA 600 from VA 311 (Kanawha Trail) to US 60 Short-term improve roadway as identified by Alleghany County.
- 27. VA 311 (Kanawha Trail) from VA 159 to the West Virginia State Line Short-term perform study to identify needed improvements to address geometric deficiencies in the corridor; Long-term construct improvements identified in study.



### Rural Bikeway Plan

The Rural Bikeway Plan (2006) is an update to the Rural Bikeway Plan for the Fifth Planning District Commission, completed in 1997. The Rural Bikeway Plan covers the rural portions of the Regional Commission's service area.

The purpose of the Rural Bikeway Plan is to provide information and guidance on the planning and provision of bicycle accommodations at the local and regional level, which enhance and encourage bicycling, thereby better enabling citizens to enjoy the transportation, health, and economic benefits of a bicycle-friendly environment. Consideration is given to both utilitarian (i.e., bike commuting, running errands) and recreational uses of the transportation infrastructure.

While much of Alleghany County is rural, there are more densely developed areas in the County suitable for bicycle accommodation. The highest population and development densities in Alleghany County are adjacent or in close proximity to the City of Covington and the Town of Clifton Forge and along the US 60 Business and US 220 Business corridors. Alleghany County also offers bicycling and other outdoor recreation opportunities and destinations that could be connected via a bicycling network.

The list of roadways for bicycle accommodation was developed based on review of demographic and spatial data, fieldwork, and local staff and citizen input. Accessibility and connectivity between activity centers and tourism/outdoor recreation opportunities were also considered in developing these tables. The 2004 VDOT Policy for Integrating Bicycle and Pedestrian Accommodations improved the ability of a locality to use its secondary roads allocation to plan, design, and construct bicycle facilities. This policy eliminates the past VDOT policy requiring that a roadway be included in an adopted bikeway plan in order for bicycle accommodations to be considered as part of roadway improvements using Federal and State funding.

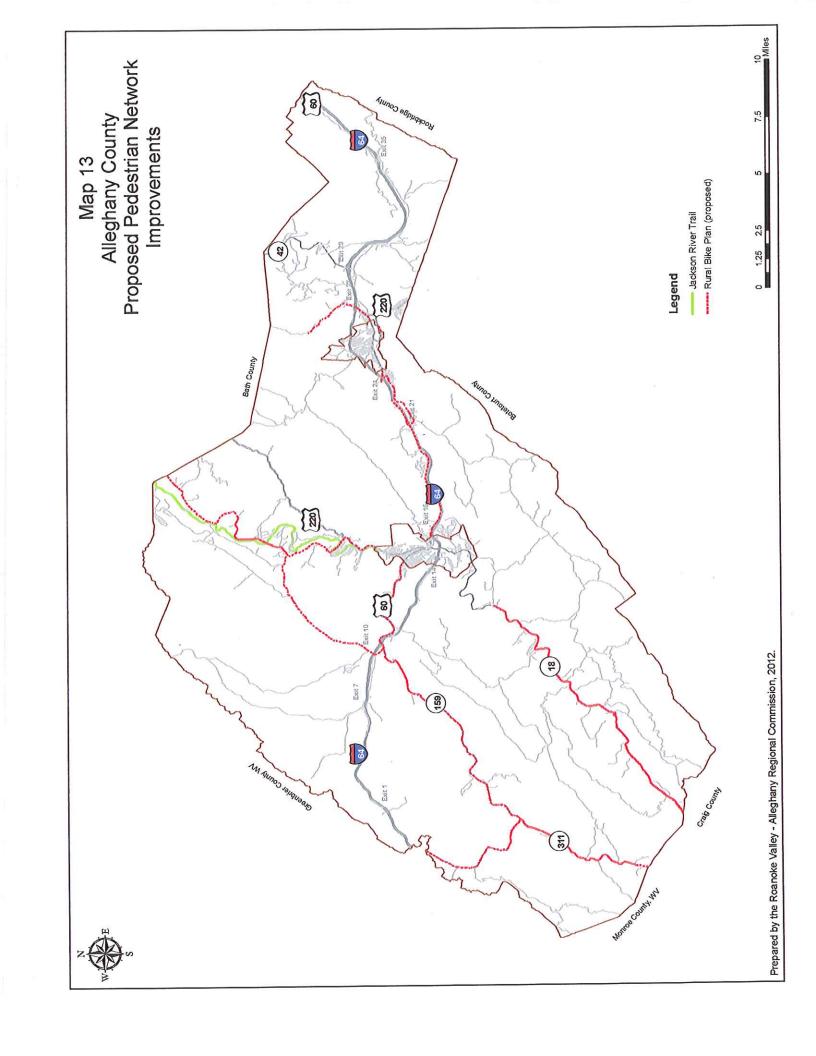
It should be noted that all VDOT maintained roads, in addition to the recommended corridors, are covered by the *VDOT Policy for Integrating Bicycle and Pedestrian Accommodations*. As such, Table 70 presents a listing of corridors to be considered for bicycle accommodation.

Detailed planning would be required, at the local and regional levels, to develop and implement a bicycling network and realize the benefits of bicycling.

Table 69 Rural Bikeway Plan Recommendations

Roadway	From	To
Route 18 (Potts Creek Road)	Pitzer Ridge Road	Craig County CL
Pitzer Ridge Road	Potts Creek Road	City of Covington SCL
Route 159 (Dunlap Creek Road)	I-64 (Exit)	Route 311
Route 60 (Glafton Road)	I-64 (Exit 27)	Clifton Forge ECL
Route 60	Valley Ridge Road	City of Covington ECL
Route 60 (Midland Trail Road)	1-64	City of Covington WCL
Route 60 / 220	Clifton Forge WCL	Dabney Drive
Route 220	City of Covington NCL	Route 687
Route 311 (Kanawha Trail Road)	Craig County CL	West Virginia State Line
Route 600	Route 159	Route 641
Route 641	Route 600	Route 687
Route 629 (Douthat Road)	I-64 (Exit 27)	Bath County CL
Route 638	Route 687	Route 666
Route 666	Route 638	Route 600
Route 687 (Hot Springs Road)	Route 220	Route 638
Selma-Low Moor Road	US 60 / 220	I-64 (Exit 21) / Winterberry Ave.
Valley Ridge Road	City of Covington ECL	Winterberry Ave.
Winterberry Ave.	I-64 (Exit 21) / Route 696	Valley Ridge Road
Winterberry Ave.	I-64 (Exit 21) / Route 696	Road Terminus

Source: Rural Bikeway Plan, Roanoke Valley-Alleghany Regional Commission, 2006.



#### Rail Service

The CSX Corporation provides rail service to area industries, with a portion of their rails being leased to the Buckingham Branch Railroad Company. Travel is along one east-west corridor with several spur lines connecting to a number of industrial properties. Amtrak provides passenger rail service to the region at its Clifton Forge station on Wednesday, Friday, and Sunday on its Cardinal Line connecting locations of New York, Washington DC, Cincinnati, and Chicago.

The Buckingham Branch Railroad, a Class 3 rail company, provides daily services to all existing CSX customers on the railroad along the 200 mile section of rails from Richmond to Clifton Forge. Buckingham Branch Railroad interchanges with both CSX and Norfolk Southern, giving existing and new industries the ability to have competitive rail rates for inbound and outbound freight.

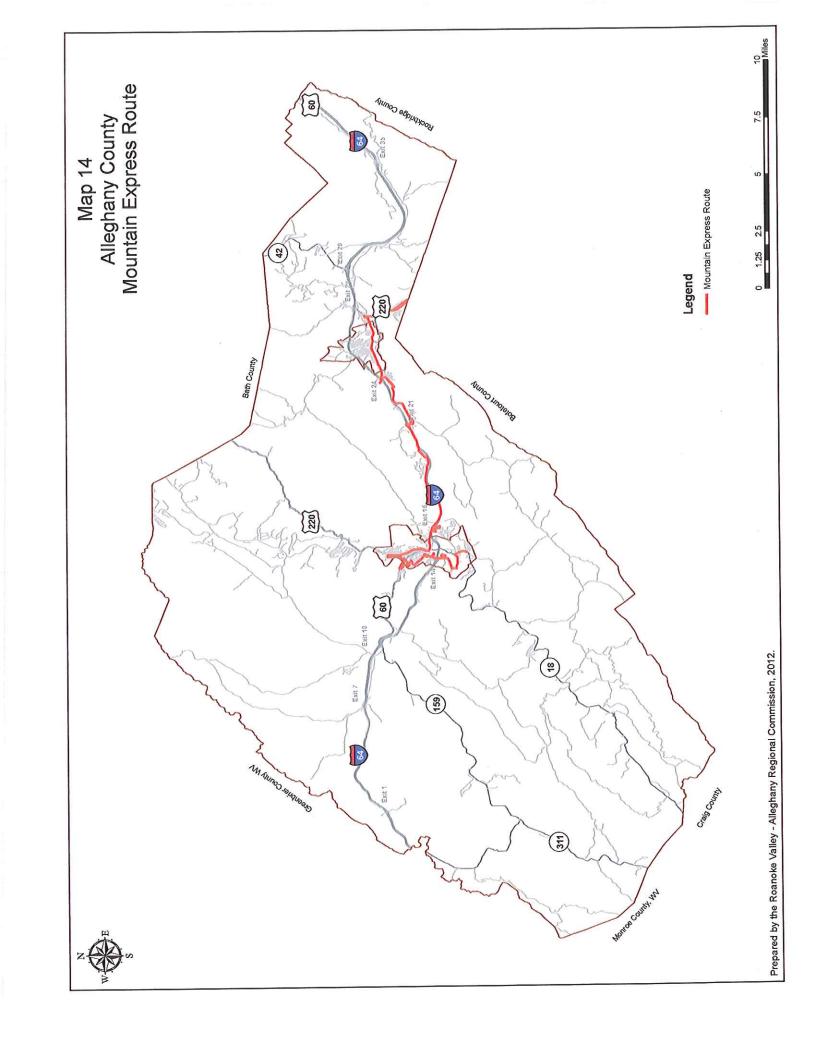
#### Air Service

The Alleghany Highlands area is served by the Roanoke Regional Airport in Roanoke, the Greenbrier Valley Airport in Lewisburg, West Virginia, and Ingalls Field in Bath County. Commercial air passenger service is offered at the Roanoke Regional Airport located 60 miles south of Alleghany County in Roanoke, Virginia. The Roanoke Regional Airport is served by four commercial carriers - Allegiant Air, Delta, United Airlines, and US Airways - which offer service to several domestic hubs. Commuter air services are also offered at the Roanoke Regional Airport. Air freight providers include: Air Freight Air Cargo Carriers, Delta Connection Carriers, Federal Express, Quest Diagnostics, RAM Air Freight, United Express, UPS, and United Airways Express. The Greenbrier Airport provides private charter flights and major commercial flights and carriers Continental Airlines and Delta Airlines.

Ingalls Field is a commercial airport atop Warm Springs Mountain. It has a main runway and a crosswind runway. Although there is no scheduled commercial airline service to the airport, general aviation and charter services are provided.

### **Public Transit**

RADAR, which has its headquarters in Roanoke, currently operates the "Mountain Express" bus service. The Mountain Express is a public bus service in and between Covington, Clifton Forge and Iron Gate. Service operates between 8 a.m. and 5 p.m., Monday through Friday. The Mountain Express offers a deviated fixed route service. A fare of fifty cents per trip is charged and must be paid when boarding the van. Exact change is required. Children under the age of six years old ride at no charge. Individuals who are ADA certified may request the van to deviate off its route to make pick-ups and drop offs. This distance may not exceed 3/4 of a mile off the route. The Mountain Express route in is shown on Map 15.



### **Future Highway Needs**

Alleghany County is a rural locality that has experienced little demand for commercial and residential development over the past decade. This trend is not expected to change over the 5-year planning period for the Comprehensive Plan. It is expected that most growth will occur along the Interstate 64 corridor as identified on the Future Land Use map (page 123) as High Growth Area. Some demand for commercial development is expected at the I-64 interchanges serving the City of Covington and Town of Clifton Forge although no specific plans for those areas has been identified at this time. The County is working toward opening up additional sites for industrial development at the Commerce Center that is located immediately west of Exit 21 on I-64.

The overall transportation priorities discussed in this chapter were selected following review of existing planning documents and gathering of public input. Existing VDOT plans (Six Year Improvement Plan, 2035 Rural Long Range Transportation) were used as the basis for development of the priority listing. Local plans influencing future development including design of the Commerce Center, Countywide Water and Sewer System Study, and the Jackson River Scenic Trail master Plan were all taken into consideration.

The priority projects listed here are mostly concerned with maintaining the existing highway infrastructure and safety improvements at various intersections and along roads. The four-laning of Route 220 from the Botetourt County line to US 60 Business continues to be the county's top priority.

Projects were initially reviewed by the Planning Commission and County staff. Projects were further reviewed with VDOT staff during meetings and a field trip before creating the priority project list. All projects were reviewed based on need, impact on the transportation network, construction time required and cost. Project alternatives were determined by VDOT and Alleghany County staff.

Described on the following pages and shown on Map 13 are the priority transportation projects endorsed by Alleghany County.

Table 70
Transportation Project Priorities

Transportation Project Priorities		
Priority	Project Description	Cost Estimate
1	Widen U.S. 220 from Botetourt County Line to U.S. 60 Business.	\$25,000,000
2	Installation of safety and pedestrian oriented improvements along U.S. 60 Business from U.S. 220 to I-64 and widen to four lanes if that is determined to be the preferred alternative.	\$9,000,000
3	Complete reconstruction of the interchange at I-64 Exit 21 at VA 696 (Selma Low Moor Road) including a new 4-lane bridge and roundabout.	\$28,140,000
3 A	Reconstruction of the intersection at Selma Low Moor Road and Winterberry Avenue including a roundabout.	\$2,000,000
4	Complete reconstruction of the interchange at 1-64 Exit 27 at U.S. 220	\$28,140,000
4 A	Conduct study to determine deficiencies at I-64 Exit 27	\$30,000
5	Replace the VA 638 (Natural Well Road) at its crossing of the Jackson River to improve access to Lake Moomaw area	\$3,088,000
6	Conduct a study to determine needed improvements at VA 311 (Kanawha Trail) tunnels at CSX railroad	\$150,000
7	Installation of improvements including wider lanes, shoulders, and guardrails along VA 666 (E. Morris Hill Road) from VA 641 (Indian Draft Road) to VA 638 (Natural Well Road)	Cost prohibitive due to terrain
7 A	VDOT Location and Design to conduct a study to determine possible safety improvements on VA 666	N/A
8	Installation of guardrail and rumble strips along VA 606 (Sulfur Spring Road) from Reservoir Trail to Dolly Ann Drive	Cost prohibitive due to terrain
8 A	Installation of remote water quality monitoring equipment on Smith Creek to provide early alert to water treatment plant of possible contamination	N/A
9	U.S. 220 at VA 778 (Dressler Drive) traffic signal installation.	Not recommended due to topography and vehicle speeds on U.S. 220
9 A	Conduct a safety improvement study to determine need for a traffic signal for U.S. 220 at VA 778 (Dressler Drive) intersection	\$25,000

# Priority 1 - U.S. 220 from Botetourt County Line to U.S. 60 Business

#### Reference:

Rural Long-Range Transportation Plan, page 10, #5 US 220/Botetourt Co. Line to US 60 Bus. – Long-term widen to urban four-lane roadway with median

# **Project Description:**

This project is a continuation of the needed improvements along U.S. 220 in Botetourt County. If the project is phased, Alleghany County prefers accomplishing the improvements by starting in Botetourt County then continuing in Alleghany County. Challenges to widening this section of U.S. 220 are related primarily with how to go through or bypass the Town of Iron Gate. Significant relocations of homes and businesses would take place in Iron Gate if the road is widened in place. Portions of the current alignment are also wedged between the side of a mountain, a railroad and the James River. Bypass options have been developed but also have challenges due to the cost of constructing a new highway through mountainous terrain.

The U.S. 220 widening in Botetourt and Alleghany Counties is the highest priority largescale rural transportation project in the region.

### Recommendations:

- Determine the preferred improvement through Iron Gate.
- Installation of box culverts on a 4-lane right of way
- · Study to determine possible locations for construction of a passing lane

#### Priority 2 - U.S. 60 Business from U.S. 220 to I-64

### Reference:

Rural Long-Range Transportation Plan, page 10, #6 US 60 Bus./US 220 to I-64 – Long-term widen to urban four-lane roadway with median.

#### Project Description:

U.S. 60 Business serves as the link between U.S. 220 and I-64. This is currently a two-lane roadway, approximately 36-feet wide with curb and no sidewalks. Bicycle and pedestrian activity was noted in the corridor during the field visit near the interchange with U.S. 220 as shown in the photograph below. U.S. 60 Business is lined with private residences and some commercial properties, including two gas stations. It serves as the main street of a small community. Widening U.S. 60 Business in this section to four lanes with a median would cause a number of relocations and significantly affect the character of the community.

#### Recommendations:

- Identify safe accommodations for bicycles and pedestrians along U.S. 60 Business to connect the neighborhoods east and west of U.S. 220.
- Long-term, identify the appropriate location for a four-lane connection between U.S. 220 and I-64, and widen this section of U.S. 60 Business if it is determined to be a component of the preferred alternative.

### Priority 3 - I-64 Exit 21 at VA 696 (Selma Low Moor Road)

#### Reference:

Rural Long-Range Transportation Plan, page 10, #1 I-64, exit 21/VA 696 (Selma Low Moor Rd.) – Mid-term add right turn bay for exit lane approaches; Long-term consider reconstruction of interchange.

#### **Project Description:**

The interchange between VA 696 (Selma Low Moor Road) and I-64 serves a number of facilities. North of I-64, Mountain Valley Elementary School, Clifton Middle School, and the Alleghany County administrative offices are located east of the interchange. Alleghany High School and the Alleghany Highland YMCA are located west of the interchange. MeadWestVaco has a storage facility on the north side of I-64 and a plant on the south side. LewisGale Hospital at Alleghany is also located south of I-64. With so many traffic generators depending on I-64 Exit 21, the interchange experiences significant traffic in the morning and afternoon peak periods; morning traffic routinely backs-up onto the interstate.

HNTB Corporation conducted a study on the I-64 Exit 21 interchange in 2007. The report indicates that in the morning, westbound traffic at the Winterberry Avenue/VA 696 intersection has an average vehicle delay of just under three minutes and a level-of-service F. To improve traffic flow, the Study considered two options: install a series of roundabouts or a series of traffic signals. The consultant's recommendation was to build the roundabouts because, in this case, they provide the same benefit as traffic signals, require less maintenance, and are easily constructed within the existing right-of-way. The Study also mentions the need for bicycle/pedestrian accommodations between the elementary/middle schools and Commerce Center Drive.

### Recommendations:

- Per the 2007 HNTB Study, design and construct roundabouts to improve traffic flow through the I-64 Exit 21 interchange and adjacent intersections.
- Along with the interchange improvements, if space on the current bridge is sufficient, construct a sidewalk or multi-use path from Winterberry Avenue through the interchange to Westvaco Road.
- Construct a sidewalk or multi-use path along the north side of Winterberry Avenue between the elementary/middle school and the YMCA and high school off of Commerce Center Drive.

#### Alternative Recommendation:

 Per the 2007 HNTB Study, design and construct roundabout on the north side of the interchange to improve traffic flow through the intersection of Winterberry Avenue.

### Priority 4 - I-64 Exit 27 at U.S. 220

#### Reference:

Rural Long-Range Transportation Plan, page 10, #4 I-64/US 220 – Long-term upgrade interchange.

### **Project Description:**

As improvements are made to better facilitate traffic along Grafton Street (U.S. 220) to connect U.S. 220 and I-64, the interchange at U.S. 220 and I-64 will need to be upgraded.

### Recommendations:

 Short term – conduct study to determine interchange deficiencies and possible solutions as part of the update to the Rural Long Range Transportation Plan

Priority 5 - VA 638 (Natural Well Road) at Jackson River (under construction in March 2013)

### Reference:

Rural Long-Range Transportation Plan, page 10, #22 VA 638 (Natural Well Road) at Jackson River – Mid-term replace bridge and reconstruct bridge approaches.

### **Project Description:**

VA 638 (Natural Well Road) is used to access the Lake Moomaw recreational area. The 1955 bridge over the Jackson River limits the types of vehicles that can pass because of the 12'-10" height restriction and 14 ton weight limit. The only other alternative for such vehicles to get to Lake Moomaw is on VA 666 (E. Morris Hill Road), which is a narrow road that is also on Alleghany County's priority list for improvements. The VA 638 bridge over the Jackson River project is in the FY13-18 VDOT Six-Year Improvement Program. Online records indicate the preliminary engineering phase is underway. The current schedule for right-of-way is FY2015 and for construction is FY2016.

### Recommendations:

 Continue project development as scheduled in the Six-Year Improvement Program and support funding needs during each phase.

# Priority 6 - VA 311 (Kanawha Trail) tunnels at CSX railroad

#### Reference:

Rural Long-Range Transportation Plan, page 10, #27 VA 311 (Kanawha Trail)/VA 159 to West Virginia Co. Line – Short-term perform study to identify needed improvements to address geometric deficiencies in the corridor; Long-term construct improvements identified in study.

#### Project Description:

VA 311 (Kanawha Trail) passes under the CSX railroad via a pair of tunnels, one lane in each direction. A creek flows along the eastern side of VA 311 and also passes under the railroad in a small square tunnel. West of VA 311, at the base of a mountain, a stream develops during storms. The water is collected into a concrete channel that parallels the railroad, passes through two box culverts under the VA 311 eastbound lane, then proceeds through a metal barrel under the westbound lane to where the water then enters the creek. Due to the quantity of water flowing into the creek during storms, the creek often overflows into the road causing the tunnels to flood and the road to close.

### Recommendations:

- Conduct a study of stormwater management options and other engineering options to prevent the road's closure due to flooding.
- Pursue the best option for physical improvements at the site.

Priority 7 - VA 666 (E. Morris Hill Road) from VA 641 (Indian Draft Road) to VA 638 (Natural Well Road)

### Reference:

Rural Long-Range Transportation Plan, page 10, #14 VA 666/VA 641 to VA 638 Long-term reconstruct road to address geometric deficiencies (11-foot lanes).

#### Project Description:

VA 666 (E. Morris Hill Road), located west of the Jackson River is the main road leading into the Lake Moomaw recreational area. The road is narrow and windy in places. It is a difficult road to travel for larger vehicles like campers, particularly when passing other vehicles. Improvements including wider lanes, shoulders, and guardrails are needed. Such improvements would improve mobility, safety, and increase tourism and economic development.

#### Recommendations:

- Widen travel lanes and add shoulders and guardrails.
- Add signage to reroute traffic to VA 638 to utilize the new Jackson River bridge to access the Lake Moomaw area.

## Alternative Recommendation:

 Request VDOT Location and Design to conduct a study to determine possible safety improvements along the route.

# Priority 8 - VA 606 (Sulfur Spring Road) from Reservoir Trail to Dolly Ann Drive

#### Reference:

This project is not in the Rural Long-Range Transportation Plan.

#### Project Description:

This project is physically located in Alleghany County but is a priority for the Town of Clifton Forge. VA 606 between Reservoir Trail and Dolly Ann Drive (F 125) parallels Smith Creek, which serves as a drinking water source for the Town of Clifton Forge. The creek enters the Clifton Forge Reservoir off of Reservoir Trail. VA 606 is narrow and mountainous, and additional measures are needed to prevent a vehicle from inadvertently entering the creek. VA 606 is also a bike route, used in conjunction with U.S. 220, to ride between the City of Covington and the Town of Clifton Forge.

#### Recommendations:

- Install guardrails and rumble strips along the edge of the road.
- · Install "Share the Road" signs.

### Alternative Recommendation:

 Installation of remote water quality monitoring equipment on Smith Creek to provide early alert to water treatment plant of possible contamination.

# Priority 9 - U.S. 220 at VA 778 (Dressler Drive)

#### Reference:

Rural Long-Range Transportation Plan, page 10, #2 U.S. 220/VA 778 – Mid-term reconfigure or relocate parking away from intersection; Long-term relocate intersection to address geometric issues.

#### Project Description:

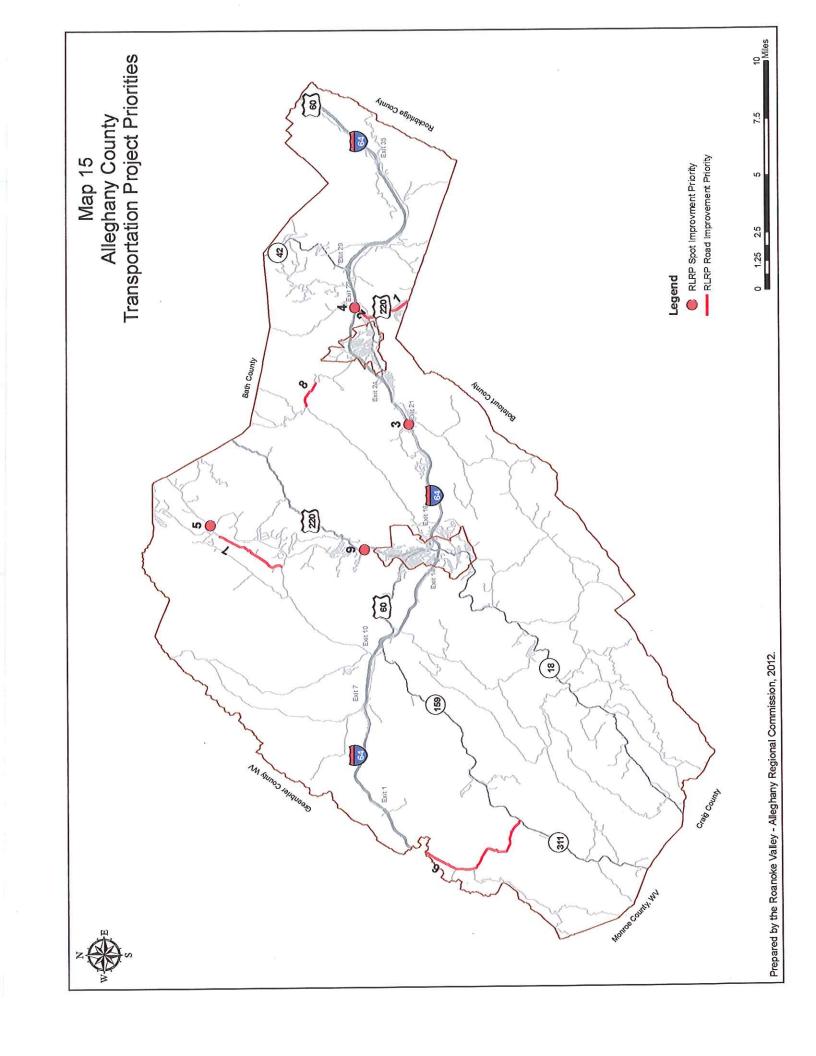
VA 778 (Dressler Drive) sharply turns and goes up a small hill to meet U.S. 220 (Hot Springs Road), making sight distance limited for motorists turning onto U.S. 220. The speed limit is 45 mph on U.S. 220. VA 778 serves as the only access road to more than 100 homes. A trailhead and parking area for the Jackson River Trail is located off of VA 778. Additionally, a veterinarian business is located at the southwest corner of the intersection. The parking lot has limited space between the road and the building, and vehicles must back out onto the road.

### Recommendations:

- Install a traffic signal at the intersection with a loop detector on VA 778.
- Add signage on U.S. 220 to notify people about the Jackson River Trail parking lot.

### Alternative Recommendation:

 Conduct safety improvement study to determine need for intersection improvements and/or signage.



### **Community Services**

Community services represent an important element of the man-made environment since these activities help maintain and enhance County development by serving the community in a specific, functional manner. Included in this discussion are essential public services, social and human activities, and cultural activities.

#### Law Enforcement

The Alleghany County Sheriff's Office provides certain law enforcement functions in conjunction with the City of Covington, the Town of Clifton Forge and the Town of Iron Gate. This Office provides five basic services: (1) officially serves the legal notices required by the court system; (2) maintains court order through the services of a deputy who acts as bailiff; (3) enforces laws of the locality and state; (4) operates the Alleghany Regional Jail; and (5) houses the Alleghany County E-911 Communications Center. In addition, the Office provides citizens in Alleghany County, Clifton Forge, Iron Gate, and Covington with a variety of law enforcement such as the Regional Drug Task Force, and safety programs on topics such as substance abuse, drinking and driving, bicycle safety, crime prevention, child fingerprinting and identification, and the DARE program. The Sheriff's Office operates a bicycle patrol program, also. Law enforcement operates on a digital, UHF, 450MHz radio system.

The Sheriff's Office employs 24 road officers, 20 correctional officers, 12 E-911 communication officers, three clerks, one secretary, two full-time cooks, one part-time cook, and a Jail Control Room Operator. There are two School Resource Officers that are assigned to the Alleghany County Public Schools.

There are eight State Police Officers assigned to Alleghany County.

#### Fire Departments

Alleghany County has seven volunteer fire departments with 39 fire fighting vehicles (including Clifton Forge). The Dunlap and Boiling Springs Departments each have a substation. There are approximately 350 volunteer fire/rescue personnel. All County and Town fire departments are dispatched through the Alleghany E-911 Communications Center. The County utilizes first due coverage and mutual aid from the Covington and Clifton Forge Fire Departments. The Clifton Forge Police Department serves as a backup dispatch for the County. The United Fire and Rescue Association (composed of the seven County fire departments, five rescue squads, and two first responder agencies) utilize a countywide, low-band, radio system for paging and an 800MHz radio system for communications. All fire departments have the capability to handle vehicle extrication and minor hazardous materials incidents. There is a cooperative effort among all of the departments to assist each other and provide back up when needed.

### Rescue Squads

The volunteer rescue and first aid members provide a valuable public service to the County. The County has five rescue squads and two first responder agencies. All County and Town rescue squads are dispatched through the Alleghany E-911 Communications Center. The City of Covington's rescue squad provides first due service and mutual aid for areas of the County, also.

The County is served by 14 ambulances (including Clifton Forge) and all are equipped as Advanced Life Support (ALS) vehicles. The County has five first responder certified vehicles and five rescue/crash trucks equipped with vehicle extrication and some heavy rescue equipment. In the case of situations where vertical rescue, confined space rescue, swift water rescue, or dive rescue is needed, the MeadWestvaco Rescue Squad can be dispatched for assistance from the paper mill in Covington. The MeadWestvaco Rescue Squad is also available to all County squads for mutual aid.

All rescue squads have a radio link with Lewis Gale Hospital - Alleghany. When patients need to be transported by helicopter to specialized facilities outside of the region, MedEvac units can be called through the E-911 Communications Center. The members of all departments are trained in establishing landing zones at or near the site of an accident and assisting with a helicopter landing. There is also a helipad at Lewis Gale Hospital - Alleghany.

The County funds all vehicle and accident/health insurance, maintenance and upkeep of the radio system, an allocated amount of money each year for operations, and many other incidentals. The total annual budget is over one million dollars.

The County fire departments do not have an aerial ladder truck. However, the City of Covington and Town of Clifton Forge do and will respond if called for assistance.

# E-911 System

The County has established an Enhanced 911 emergency communication system. This program is designed to help emergency crews find citizens quicker and easier in case of an emergency. A citizen needs only to dial "9-1-1" on any wire line or wireless phone and explain the emergency. Assistance will be dispatched as quickly as possible utilizing automatic location and number identification and E-911 mapping technology. Alleghany County is also Phase II compliant for wireless calls.

#### Regional E-911 Communications/Emergency Operations Center

Alleghany County, the Town of Clifton Forge, and the City of Covington are planning a joint E-911 Communications Center. Alleghany County and the Town of Clifton Forge have already merged E-911 dispatching services. However, the focus for the regional center will be on erecting a stand-alone, self-supporting, E-911 Communications/Emergency Operations Center outside of the City and Town limits capable of supporting all three localities. This E-911 Communications/Emergency Operations Center will most likely be governed by the County with oversight by an advisory board comprised of officials from all three localities. The land for the regional center will be purchased in the near future.

### Alleghany Highlands Emergency Notification System

Alleghany County recently partnered with Cassidian Communications and FastCommand to provide Reverse 911 and mass public notification solutions. Alleghany County, City of Covington, and Town of Clifton Forge will use the solutions provided by Cassidian Communications for rapid notification of emergency response teams, volunteers and the community at large. Voice and text messages sent by the Cassidian system are meant to provide recipients event-specific information and/or potentially life-saving instruction by phone, email and SMS. Alleghany residents with unpublished or cell numbers who want to receive the alerts will soon be able to register online through the County's website.

FastCommand is a centralized service that employs patented 'deflection' technology to push proactive alerts and warnings out via the Internet. Use of the system allows public safety entities to intercept and control the emergency administration of their websites to disseminate information. Localized institutions such as schools, health care facilities, government agencies and private businesses wishing to team with authorities in emergencies can opt to be included in the notifications. Potential applications for the FastCommand system within the Alleghany Highlands include inclement weather, missing persons, and hazardous materials incidents. FastCommand also provides capacity for both the organization and coordination of response and relief efforts.

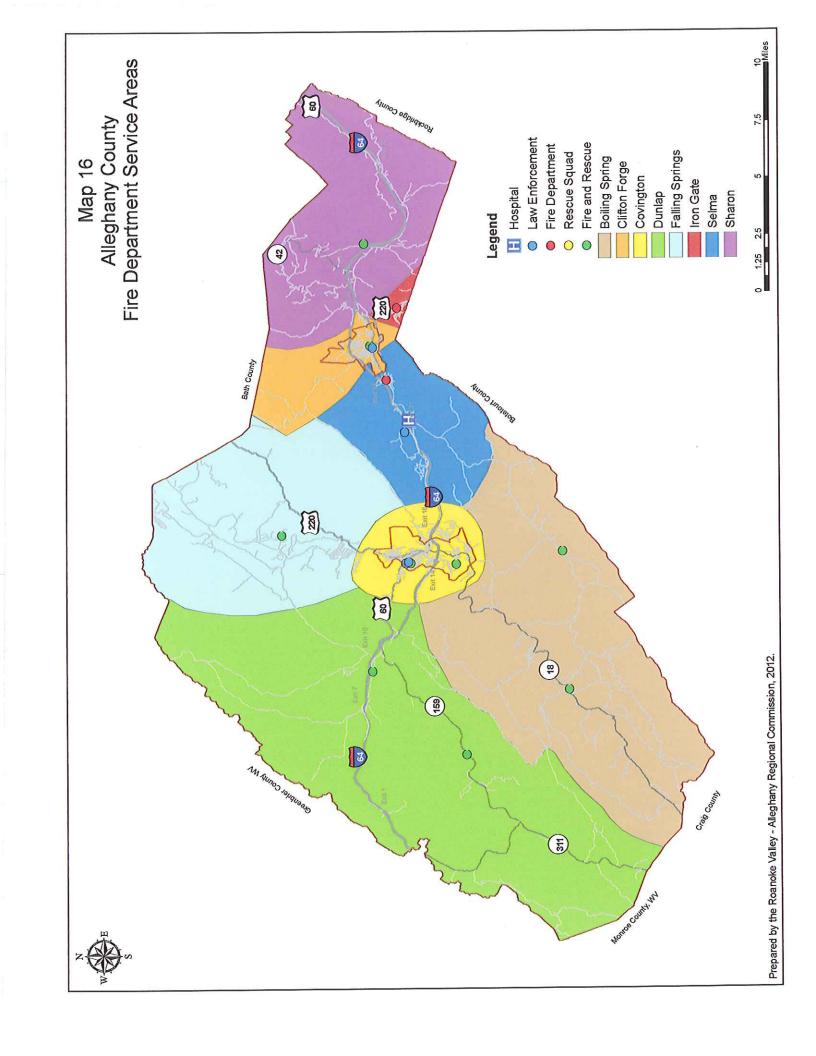
# **Emergency Operations and Hazardous Materials**

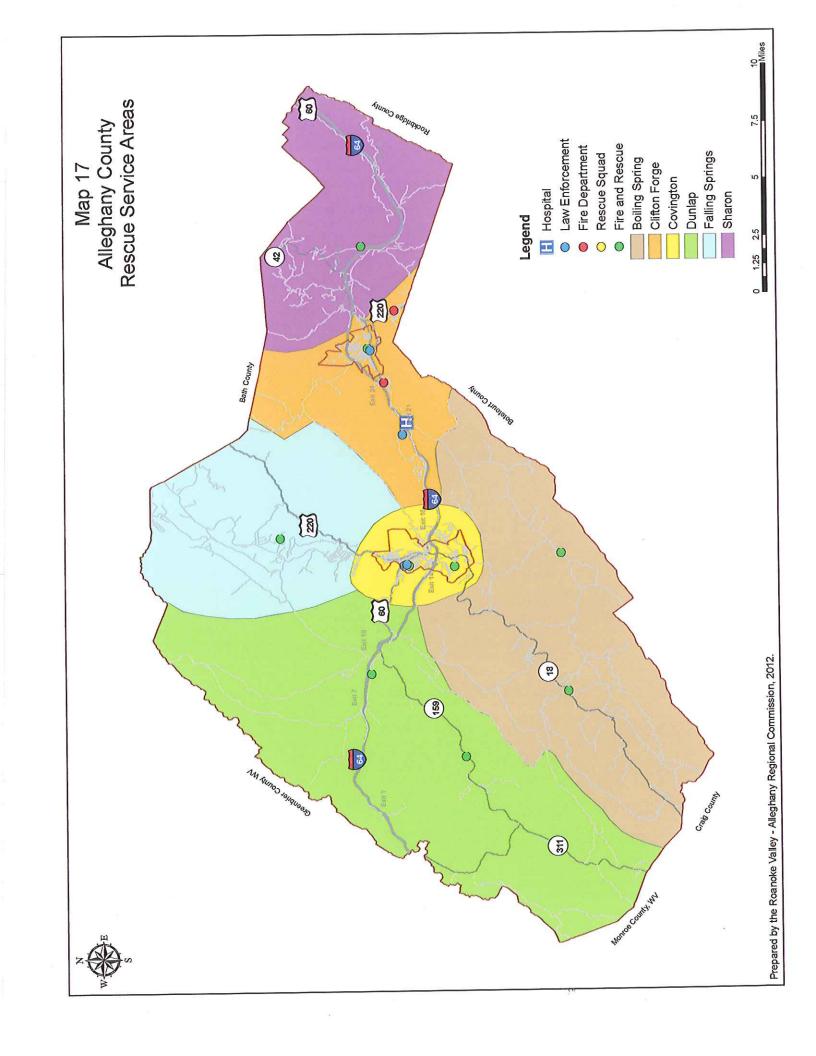
Alleghany County has an Emergency Operations Plan, which is a prearranged guide to handle major, local hazards and incidents. The purpose of the plan is to provide planned and coordinated response actions to protect the public from harmful effects of an accident or disaster. The Plan was produced and is reviewed through cooperation of local officials and departments, state and federal agencies, and local private companies.

There is also a Local Emergency Planning Committee (LEPC), which consists of representatives from Alleghany County, Covington, Clifton Forge, Iron Gate, local fire departments and rescue squads, local law enforcement agencies, local businesses and corporations, and the school systems. As a supplement to the Emergency Operations Plan, the LEPC has put together a Hazardous Materials Emergency Plan for the area. The Committee meets bi-annually to discuss and review areas of interest pertaining to the Hazardous Materials Plan.

#### Fire Safety Trailer

In October 2006, the Alleghany United Fire and Rescue Association took delivery of a Fire Safety Trailer made possible through a grant by The Alleghany Foundation. The trailer is used to teach elementary-age school children about fire safety and prevention. It will be utilized by all fire departments within Alleghany County and is also available to loan to departments in neighboring jurisdictions. Alleghany County should continue to support the volunteer fire departments' efforts to provide fire safety education to area youth.





#### Libraries

The public library is an important community facility and its use expands with increasing population, land development, and higher educational goals. There are three libraries in the Alleghany Highlands: the Charles P. Jones Memorial Library, the Clifton Forge Public Library, and the Dabney S. Lancaster Community College library. The libraries offer various reading and educational programs throughout the year. On-line catalogues are available on the Internet for all three libraries and offer Internet access to the public at their facilities.

#### **Health Facilities**

Lewis Gale Hospital - Alleghany, formerly Alleghany Regional Hospital (ARH) is located in the Low Moor community of the County and serves patients from Clifton Forge, Iron Gate, and Covington; Alleghany, Bath, Botetourt, and Rockbridge counties in Virginia; and Greenbrier, Summers, Monroe, and Pocahontas counties in West Virginia.

This facility provides general medical and surgical facilities, pediatric care, Intensive Care Unit, Progressive Care Unit, Operating Rooms, cystoscopy, endoscopy, and emergency services.

Specialties at ARH include family practice, internal medicine, emergency medicine, cardiac services, pulmonology, infectious diseases, orthopedics, nephrology, general surgery, urology, gynecology, opthalmology, anesthesiology, radiology, pathology, pediatrics, psychiatry, and otolaryngology.

There are also major medical facilities in nearby Lexington, Roanoke, Salem, Warm Springs, and Lewisburg, West Virginia.

There are several nursing homes in the Alleghany Highlands. Four facilities are within the Alleghany Highlands serve physically or mentally-impaired adults. There several Hospice and Home Health Care facilities located in the area that provide service to homebound patients.

The Alleghany Highlands Free Clinic provides free medical care and limited pharmacy care to residents of the Alleghany Highlands that are low income, uninsured, or have no other means of care.

Within the County are various mental health services. The Shenandoah Autism Center and Adult Day Care facilities are located in the Town of Clifton Forge. Alleghany Regional Hospital offers outpatient mental health services. The Alleghany Highlands Community Services Board Mental Health Clinic is a full-time counseling and psychiatric clinic, serving mainly Alleghany County, Covington, Iron Gate, and Clifton Forge. The Community Services Board's office located in the Town of Clifton Forge offers substance abuse counseling. The Community Services Board also provides support to the mentally retarded.

#### **Health Department**

The Virginia Department of Health has two offices in the Highlands, which serves the citizens of Clifton Forge, Iron Gate, and Alleghany County. The Covington office is located on Beech Street, and the Clifton Forge office is located on Jefferson Street. The Health Department is concerned with the availability of pure drinking water, sanitary public eating-places, septic systems, and the control of communicable diseases. The Health Department issues permits for

restaurants, birth and death certificates, and provides a variety of clinics and health education. Fees may be charged for certain services based on the income level of the client.

#### Social Services

The Department of Social Services is located at 110 Rosedale Avenue in Covington and is a joint operation between Alleghany County, including the towns of Clifton Forge and Iron Gate, and the City of Covington. Social Services' provides two types of assistance programs to the citizens of the Highlands. The two programs are Benefits Program and Services Unit. The Benefits Program is the program for which persons must meet Federal, State, and local requirements to qualify for assistance. The programs include Supplemental Nutrition Assistance Program (SNAP, formerly food stamps), Medicaid, Temporary Assistance for Needy Families (TANF), and LIHEAP (Energy Assistance programs). The Services Unite programs include Virginia Initiative for Employment, not Welfare (VIEW), supportive day care services, foster care, and adoption services, adult protective and spousal abuse services, nursing home and adult home pre-screening and referral, and child protective services. Social Services is on-call 24 hours a day for investigation and crisis resolution.

# **Cooperative Extension Service**

The Cooperative Extension Service provides practical information to the citizens of the Alleghany Highlands to improve the economic, social, and cultural well-being. The primary purpose is to select, interpret, disseminate, and encourage application of relevant research. The Extension Service advises the public in such topics as agricultural, natural resources, home economics, 4-H, and community resource development through a variety of programs. The Extension Office is located in the old Central School on Central Circle in Low Moor.

# **Community Assistance Programs**

There are many organizations in the Highlands that provide assistance to local residents in times of emergency or for day to day living. Some of these organizations are the Salvation Army, American Red Cross, League of Older Americans, and Safe Homes.

### **Community Services Board**

The Alleghany Highlands Community Services Board offers an array of mental health, mental retardation, early intervention, and substance abuse services to the public including: outpatient therapy for children and adults, psychiatric treatment and evaluation, clubhouse psychological day program, case management, assessments, education groups, intensive outpatient groups, aftercare and relapse prevention groups, family counseling, respite, infant and toddler, family support, waiver support, and a residential group home. No one is refused service because of an inability to pay.

#### Media

The Alleghany Highlands is served by two radio stations, WJVR 101.9FM and 103.5FM/ WKEY1340AM. One subscription newspaper, the Virginian Review, serves the County six days a week. Many County residents also subscribe to the daily newspaper The Roanoke Times published in Roanoke, Virginia. Local television broadcasts come from Roanoke and Lynchburg which broadcast three major network stations and represents a major media service. Shentel and Lumos provide cable television services within the County. Area residents also have access

to several satellite TV providers. There is also access to the Internet through local and national access providers.

### Arts, Culture and Historical Landmarks

The Alleghany Highlands Arts Council is located in Covington. The Council introduces various, performers into the Alleghany Highlands. The Council has sponsored performances of music, drama, dance, and vaudeville on stages in the Alleghany Highlands. The Arts Council also sponsors the Young People's Theatre series that provides educational theater, musical, and dance productions to the area schools.

The Alleghany Highlands Arts and Crafts Center is located on Ridgeway Street in Clifton Forge. The Center gallery exhibit is changed monthly. The Center also has an outreach program, art classes, and markets local arts and crafts. The Clifton Forge School of the Arts opened in 2011 providing classes and programs to the area.

Residents of the Alleghany Highlands have an opportunity to become involved in the Alleghany Highlands Chorale, Alleghany Highlands Orchestra, Alleghany Community Theatre, and the Virginia Opry. The Historical Masonic Theatre in Clifton Forge is home to the Appalfolks of America, the Virginia Opry, the Southern Gospel Review and the newly constructed Masonic Ampitheater. The programs are funded in part by Virginia Commission for the Arts, National Endowment for the Arts, the three local governments, area industries and businesses, and by private citizen donations.

There are many historical buildings and districts located in the Alleghany Highlands. The following have been listed on the Virginia Landmarks Register and the National Register for Historical Places: Clifton Furnace, Austrailia Furnace, Humpback Bridge, Oakland Grove Presbyterian Church, Sweet Chalybeate Springs and Hotel, J. T. Fudge Farm, Clifton Forge Historic District, Massie House, Wood Hall (Milton Hall), Jacob Persinger House, First Baptist Church in Covington, Douthat State Park Historic District, Longdale Furnace Historic District, Covington Historic District, Rosedale Historic District, and Luke's Mountain Historic District.

### Alleghany Humane Society

The Alleghany Humane Society serves as an animal shelter and local pound for Alleghany County, the City of Covington, the Town of Clifton Forge, and the Town of Iron Gate. The facility enables the area's animal population to be reunited with their owners and gives animals a "second chance" for adoption. All area Animal Control Officers utilize the facility for the housing of animals relating to enforcement of their animal control ordinances. The current facility is located on Rich Patch Road in Low Moor.

### **Government Services**

Alleghany County operates under a Board of Supervisors - County Administrator form of government. The County is divided into seven (effective July 1, 2001) electoral districts with one supervisor representing each. The County Administrator is employed by and serves the Board of Supervisors. The Administrator oversees the day-to-day operations of the County government and advises the Board on governmental matters. Among the public services operated by the County are a Building Inspections Department, Planning/Zoning Department, Public Works Department, Public Safety, and Department of Parks and Recreation. The

Treasurer, Commonwealth's Attorney, Commissioner of the Revenue, Sheriff, and the Circuit Court Clerk are constitutional officers, elected by the voters.

Citizen participation in local government is encouraged by the Board of Supervisors through the appointment of local residents to numerous advisory boards and commissions that assist in the operation of these public services. Local residents serve on the School Board, the Board of Zoning Appeals, Planning Commission, and Water and Sewer Commission, among others.

Alleghany County is a member of the Roanoke Valley - Alleghany Regional Commission; one of 22 planning districts in Virginia. Other member jurisdictions are the Counties of Botetourt, Craig, Franklin, and Roanoke; the cities of Covington, Roanoke, and Salem; and the towns of Clifton Forge, Rocky Mount, and Vinton. The Roanoke Valley - Alleghany Regional Commission serves as a coordinating body for the above jurisdictions, planning for the delivery of needed services.

Services to the citizens of Alleghany County and fairness to all residents is a key element to local government. Alleghany County continues to seek services and provide programs that are beneficial to the community. Economic development and growth is a key function of the local government in the Highlands. The Geographical Information System (GIS) is completed and provides parcel data, including zoning and flood information, "on-line" that can be accessed by citizens, realtors, developers, and investors.

Alleghany County continues to strive to improve the current services being provided and to initiate new projects and services in order to serve the Alleghany Highlands more efficiently.

#### Land Use

Alleghany County is mainly rural in nature with mixed land uses of agriculture, residential, commercial and industrial. A large portion of the County is designated as National Forest land and provides many recreational opportunities. Land development is slowly progressing in the area and should continue at a steady rate.

The existing and future land use maps in this chapter are based on the general uses within an area and the future expectation of development in certain areas. The reader should keep in mind that these maps are general in nature and are not designed to show land use detail on a parcel-by-parcel basis. The County should continue to utilize its site plan review process to ensure that future developments are in accordance with the Comprehensive Plan.

### **Existing Land Use**

The Existing Land Use Map is a visual representation of the current land use of Alleghany County. It was developed based on the existing land use and from County zoning maps. The pattern in which land use in the County has been developed in past years largely determines the direction the land will be used in the future. The following information briefly describes the concepts shown on the map.

<u>Public/National Forest</u>: There are a total of 288,841 acres of land in Alleghany County, and approximately 255,000 of these acres, or 88%, lie in forestland, both private and public. Of the forested land, 142,053 acres, or 56.6% lie in the George Washington and Jefferson National Forest. The National Forest comprises 49.2% of the total land area in the County. This forestland is spread throughout the County with the exception of river valleys, where flatter land often has attracted more concentrated development.

Medium to High Density Residential: These residential areas are the densest of the residential areas in the County. Most of these areas are designated as either Residential R-1 or Residential R-2 on the County zoning maps. Some of the areas within this group are zoned Agricultural/Rural Residential AR and are included because of their high-density population. This includes areas along Interstate 64, such as Longdale Furnace, Wilson Creek, Cliftondale Park, Selma, Low Moor, Pinehurst/Wrightsville, Mallow, Brentwood/Jackson Heights, Dolly Ann, Valley Ridge, Rosedale, Westwood, Oakwood Forest, and Callaghan. There are some residential areas north of Covington, which include Clearwater Park, Clearview Estates, River Edge Retreat, Intervale, Dunbrack Road, and Falling Spring Gardens. Indian Valley, Cherokee, Broken Arrow, and Mountain Lake are located south of Covington. Wesgate is a residential area located near the Town of Iron Gate.

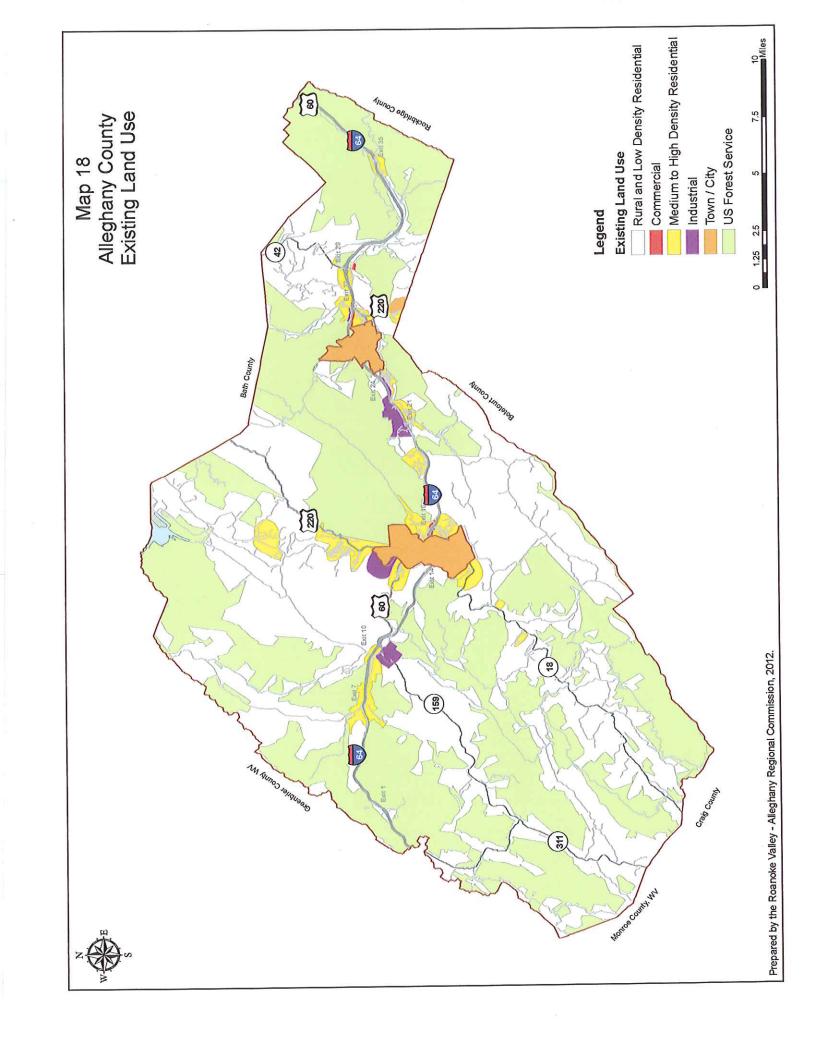
Rural and Low Density Residential: A majority of the land in Alleghany County is rural in nature. Land uses in these areas include forestry, agriculture, and rural residential sites. Residential dwellings are often somewhat dense along the primary roads of the County.

Industrial: There are two major industrial areas located in the County. There is industrial land owned by MeadWestvaco near Covington. The other area lies on the north side of Interstate 64 in Low Moor and extends from the western boundary of the Alleghany Regional Commerce Center eastward along Interstate 64 to Dabney S. Lancaster Community College property. This area also runs along the south side of Interstate 64 in Low Moor to include the MeadWestvaco

Converting Plant. There are other small pieces of land in the County that are zoned for industrial uses.

<u>Commercial</u>: Although some commercial development, such as restaurants and small general stores, can be found in the more rural sections of the County, the majority of commercial businesses are found in the more populous areas of the County. These areas include the Mallow interchange off of Interstate 64 east of Covington where Mallow Mall is located. Also, there is a commercial area at the Cliftondale Park interchange off of Interstate 64 east of Clifton Forge.

<u>Town/City</u>: There are two Towns and one City located within the County boundary. They are the Town of Iron Gate, the Town of Clifton Forge, and the City of Covington. All are their incorporated independent entities with their own guidelines for land use and development within their jurisdictions, which are not covered in this document.



#### **Future Land Use**

The Future Land Use Map is a visual representation of the anticipated future land uses of Alleghany County. It is meant to be a guide to delineate general areas of concern relative to local land development. The following information briefly describes the concepts shown on the map. The County zoning and subdivision ordinances will continue to guide the development in all areas of the County.

Primary Growth Area: The two sections of the Primary Growth Area of Alleghany County are located primarily along Interstate 64. One area extends from the eastern edge of the City Limits of Covington, including the Mallow and Dolly Ann areas, and runs along Interstate 64 to the western Clifton Forge Town Limits, which includes Valley Ridge, Low Moor, and Selma. The second area lies from the eastern edge of the Town Limits of Clifton Forge to the Interstate 64 Interchange in Cliftondale Park and a portion of the area lying just to the north of Interstate 64 on Douthat Road. This area also includes the Nicelytown and Triangle Hill areas. This area can be considered as such because: 1) there is a large number of major employers; 2) has high accessibility to Interstate 64; 3) water and sewer facilities enhance development; and 4) this area is in close proximity to population concentrations. Growth in these areas continues to progress in a steady manner. It is anticipated that this trend will continue especially in areas where public water and sewer services are upgraded.

Secondary Growth Area: These areas are predominantly residential areas, which are sites of population concentrations. Also, major employers may be located within their boundaries. The policy for these areas should be to maintain a sufficient level of public services consistent with the scale of development that is occurring or expected to occur. Also, these areas may have access to either public water or sewer, but predominantly have private water and sewerage systems. In these areas, the County's land use regulations, particularly the zoning and subdivision ordinances, should ensure orderly development. There are several large tracts of land that hold the potential for development and are anticipated to develop more rapidly than others especially where public water and sewer services are extended. The Secondary Growth areas are:

From the south City Limits of Covington along Route 18 - Potts Creek Road to the intersection of Route 657 - Pitzer Ridge Road. This area includes Cherokee, Indian Valley, and Mountain Lake Subdivision.

From the west City Limits of Covington along Route 60 - Midland Trail to Route 709 - western end of Midland Trail and F199 - Frontier Lane. This area includes Rosedale, Westwood, Oakwood Forest, and Callaghan.

From the north City Limits of Covington along Route 220 - Hot Springs Road to Route 687 - Jackson River Road. This area includes Intervale, Clearwater Park, Clearview Estates, Dressler Estates, River Edge Retreat, and Dunbrack Road.

From Route 641 - Indian Draft Road to Route 640 - Falls Road on Route 687 - Jackson River Road. This area includes Woodland Hills, Falling Spring Gardens, and a portion of Mount Pleasant.

The Wesgate area to the Botetourt County Line, and to the boundary line with the Town of Iron Gate.

Route 269 - Longdale Furnace Road going east from Cliftondale Park along Interstate 64 and Route 269, to Route 633 - McKinney Hollow Road in the Sharon area.

Town/City: There are two Towns and one City located within the County boundary. They are the Town of Iron Gate, the Town of Clifton Forge, and the City of Covington. All are their own entities and have their own guidelines for development.

Recreation Development: Aside from the County's parks and playgrounds, two large areas of recreation development exist in the County at Douthat State Park and in the Lake Moomaw and Gathright Dam areas. These areas provide boating, camping, hiking, and picnic facilities. Also, the Longdale Recreational Area provides recreational opportunities for picnicking and hiking. Falling Spring Falls had recently been designated as a State Park and is under the care of Douthat State Park.

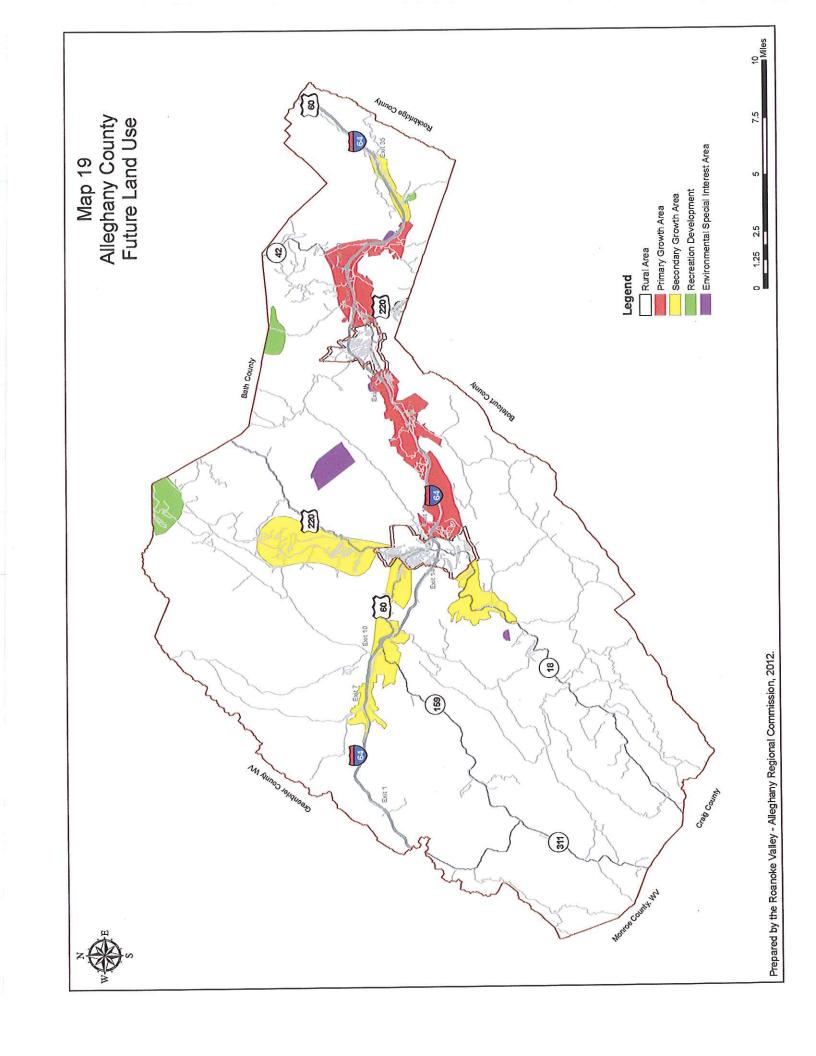
Alleghany County is currently developing the Jackson River Scenic Trail. The 17 mile trail will be a hiking, biking, and horseback riding trail that will run along the Jackson River on an old railroad bed from the City of Covington north to the Bath County line.

An increase in interest for these areas is anticipated and should provide additional recreational opportunities for this area. There is the potential for development of private recreational opportunities along the Cowpasture River, Jackson River, and other major contributories in the County. All these areas offer excellent recreation facilities, which attract both local residents and visitors to Alleghany County.

<u>Environmental Special Interest Area</u>: The U.S. Forest Service determines these areas. They include lands that support key components and concentrations of the forest's biological diversity. The areas typically include high quality natural communities such as high elevation mountaintops, shale barrens, caves and karsts features, wetlands, and habitats for threatened, endangered, and sensitive species. There are four such areas located in Alleghany County. They are Dabney S. Lancaster Shale Barren, Dry Run (Dolly Ann), Gauging Station (Potts Creek) Shale Barren, and the East Sharon Shale Barren.

<u>Rural Area</u>: A majority of the land in Alleghany County is rural in nature. Land uses in these areas include forestry, agriculture, and rural residential sites. Normal public safety and health functions should continue to be provided at adequate levels in this area. There is a potential for these areas to develop; however, due to the use of private wells and individual septic systems, development is limited and larger parcel sizes is the trend.

<u>Public/National Forest</u>: These areas are expected to remain under the State and Federal Forest Service's care.



# Implementation

### **Zoning Ordinance**

The zoning ordinance for Alleghany County was adopted in November of 1988. Therefore, a majority of the structures in Alleghany County existed at that time and are now considered "non-conforming". Over the years there have been many amendments to the zoning ordinance that have reflected changes in development and new uses associated with changing times. The six zoning classifications (AR, R1, R2, B1, B2 and M1) seem to be adequate and include all existing land uses and many potential land uses. The County should continue to review and update the zoning ordinance as needed to reflect changes relating to uses of property and development in the County.

#### **Subdivision Ordinance**

There have been many versions of the Alleghany County Subdivision Ordinance over the years. One of the earliest ordinances was 1951. In keeping with the changes and trends in development, many amendments have been made to the ordinance. A major revision to the ordinance was made in 2002 requiring that the County Subdivision Agent review all divisions of land before they can be recorded in the Clerk's Office. This change was made to ensure that properties being created meet the minimum lot size, setback and frontage requirements under the zoning ordinance, and to ensure that each parcel has adequate ingress and egress. The Subdivision Ordinance establishes many different types of land divisions. There are many key determining factors that dictate the type of division a proposed development falls under. Two key factors are lot size and the number of lots. Each division is unique and is reviewed based on its own merits.

Recent consideration for amendments to the ordinance include additional wording required by State code for allowing the development of private roads in the County and their funding, and the requirement for on-site septic systems for minor land divisions.

The County should continue to encourage well-planned land development projects and monitor the trends of development in the County so that changes can be made to the ordinance as needed or required.

### **Conservation Easements and Land Use**

Conservation easements are legal agreements through which a landowner voluntarily conveys certain rights and uses of their property to a non-profit, charitable conservation organization or a public entity. The rights are tailored to meet the owner's wishes regarding the future use of their land. Typical conservation easements restrict development or uses on the property that would destroy the natural, scenic, or historic features of the property while allowing other traditional uses such as farming or recreation to occur. Conservation easements are recorded in the land books at the courthouse. Lands placed in conservation easements for perpetuity qualify for federal, state, and local tax benefits. Currently there are a total of three parcels that have been placed under conservation easements. These three parcels contain approximately 3,348 acres of land. The Valley Conservation Council is responsible for the management of these conservation easements.

Alleghany County adopted a Land Use Program in 1980 that allows land to be taxed at a lower rate per acre based on the "use" of the land rather than the fair market value established within the general reassessment. Minimum acreages and uses are required to be met for land to qualify for this program. Currently, there are 1,188 parcels containing over 80,000 acres designated as "land use" in Alleghany County. Home sites and land within designated subdivisions created after 1980 do not qualify for this program. The Alleghany County Commissioner of the Revenue's Office administers the "Land Use Program".

Alleghany County recognizes the significance of the conservation easement program and land use program opportunities. The County should continue to encourage participation in these programs and efforts should be made to educate landowners on these programs.

# Wind and Solar Energy Bill SB262 and Wind Resources

The Wind Energy Bill SB262 directed the Virginia Department of Mines Minerals and Energy (DMME) to create a Virginia Renewable Scoring System (VRS3) for the siting of renewable wind resources. James Madison University has been assigned to work with the DMME to ascribe numerical scores to parcels of real property based on the extent to which parcels are suitable for the siting of wind energy or solar energy facilities. Mapping of localities within the State of Virginia that have high wind velocities has been developed, and there are several areas in Alleghany County that have been identified with high wind velocities where potential facilities could be located. VRS3 will be used to evaluate all sites identified and provide a scoring system based on suitability based on wind velocity, sustained velocity, turbulence, proximity to electrical power transmission systems, potential impacts to natural and historic resources and to economically disadvantaged or minority communities, and compatibility with the local land use plan. Once completed, localities can utilize the scoring system to determine the potential number of sites that a developer may want to consider for a wind or solar facility. Alleghany County should continue to follow this program and consider adopting regulations for these types of facilities.

### **Goals and Objectives**

The previous sections of this plan present an overview of the past and future trends, as well as the current conditions in the County. The purpose of this section is to outline goals, objectives, and policies to assist future analysis and the decision-making process regarding key community factors such as economic development, transportation, community services and facilities, land use, and housing. The goals and policies are general in nature and should be viewed as a guide for elected officials and administrative officials as they plan and carry out the duties of their offices. Each individual department or organization may have more detailed goals and objectives that coincide with the general ones listed below.

The following summarizes the goals and objectives of the County, which shall serve as the foundation for future plans and decisions for Alleghany County.

### **Economic Development**

Goal:

To enhance the economic base and employment opportunities in the County.

#### Objectives:

Emphasize economic development through capital investment and job creation.

Develop a regional marketing strategy to pursue programs and projects that will enhance the role of Alleghany County as a tourism destination.

Investigate the acquisition and utilization of additional land conducive to economic development along the I-64 corridor including Innovation Park and the Commerce Center.

Strengthen efforts to retain existing businesses and identify resources that encourage or facilitate expansion and development in the County, especially in the Alleghany Highlands Enterprise Zone.

Encouragement and creation of small businesses, utilizing State and Federal programs designed for support and assistance to existing businesses through a business incubator program.

Improve the County's infrastructure to accommodate future businesses and residential development, such as the development of water and wastewater treatment facilities in areas of the County in need of these services.

Educate the public about economic development through the Comprehensive Economic Development Strategy as adopted by the governing bodies in 2006.

Encourage educational opportunities and workforce development services at all levels, which prepare and improve the regional workforce for future and current employer needs. This would include working with existing businesses and industries on appropriate educational concentration.

### Transportation

#### Goal:

Maintain emphasis on an adequate and safe transportation network to serve residents and visitors to the County.

### Objectives:

Continue to provide a close working relationship with the Virginia Department of Transportation on future and ongoing highway projects and needs.

Encourage the upgrade of Interstate 64 through Alleghany County and the widening of Route 220 south to four lanes.

Study areas of the County for future traffic needs where an increase in development or potential development has, and is, occurring, such as the Low Moor interchange.

Continue to develop a Geographic Information System (GIS) to assist in the development of a comprehensive traffic plan for the County, among other things.

Support appropriate alternate means and routes to alleviate the heavy tonnage traffic problems in the County.

Increase input and coordination with the Virginia Department of Transportation Six-Year Plan.

### **Community Facilities and Services**

### Goal:

To enhance the quality of life for our residents by assuring access to adequate health care, and improving educational programs, community services, and governmental services.

#### Objectives:

Continue to evaluate and upgrade the Enhanced-911 system within the County to ensure the most efficient service to County residents, including the two towns and the City of Covington.

Continue to support transportation for the elderly through LOA, Senior Citizen Program, and the RADAR bus program, as well as public transit to rural areas.

Continue to support the local community mental health, mental retardation, and substance abuse programs established in the County through the Community Services Board and other agencies.

Encourage the development of educational programs within the existing school system that increase the potential of student academic achievement.

Develop and support programs that stress the importance of acquiring a high school education. Also, continue to support and develop programs that will help individuals acquire their GED certificates.

Continue to provide a feasible means of solid waste disposal for area citizens, which include curbside pick up to residences and businesses within the County. Also, encourage and support recycling programs, such as Jackson River Enterprises.

Encourage citizens to use appropriate means of disposing of household items, such as appliances, tires, and hazardous household wastes in a proper manner, and help discourage illegal dumping within the County.

Continue to support recreation within the County through the Department of Parks and Recreation, the Alleghany Highlands YMCA, and the school system.

Investigate and pursue economically feasible alternatives for collection and treatment of wastewater, and treatment and distribution of water.

Improve existing water and wastewater infrastructures and extend services where appropriate and feasible.

Continue to provide the citizens of the County with convenient access to government officials and facilities and encourage citizen participation on County projects, boards, and commissions.

Continue to monitor and improve the overall County fire and rescue program, in particular the communications system, to ensure the most efficient services are provided to the residents of the County.

Pursue funds for the installation of DSL and broadband services throughout the County.

#### Land Use

#### Goal:

To encourage desirable development and growth, while preserving the rural character of the County.

### Objectives:

Update the County Zoning and Subdivision Ordinances or other regulations as the need arises to ensure orderly and harmonious development.

Continue to support the development of planned industrial and commercial areas with attention to the size, scale, and intensity of improvements that allows for orderly growth and development of the County.

Protect and maintain the integrity of existing residential development.

Encourage development that is compatible with the population densities, reasonable rates of growth, and available resources.

Promote programs that enhance the value of the National Forest as recreational uses and for its natural beauty.

Support the development of industrial and commercial areas within the County.

Continue to enhance and maintain the Geographical Information System that is accessed by County staff and the general public to assist in the future development of the County.

Continue to improve and develop County infrastructure to ensure orderly development and land use in the County.

Monitor the potential development of the wind resource facilities in the County and develop regulations as needed.

### Housing

### Goal:

To encourage programs and establish policies that will provide every citizen access to adequate housing.

### Objectives:

Continue to address the housing needs of the citizens within the County through the Indoor Plumbing and Rehabilitation (IPR) loan program and other County-sponsored programs.

Conduct comprehensive needs assessment of housing within the County.

Provide programs that encourage owners to make improvements to existing dwellings.

Continue to seek funding from other resources to provide housing assistance and needs.

Encourage the development of a variety of housing to meet the existing and future needs of residents of the County.

### **Environmental**

#### Goal:

Protect and preserve the natural resources of the County with wise environmental management.

#### Objectives:

Preserve areas of unique scenic beauty and environmentally sensitive areas.

Examine and judge, by a cost/benefit analysis, public and private land development decisions in terms of their environmental consequences.

Encourage measures to improve water and air quality, and soil conservation.

Continue to monitor and regulate the development and construction within areas designated as flood hazard areas, and discourage the same within areas designated as a floodway to ensure the safety and protection of land and buildings from destruction during flooding events.

Continue to enforce and encourage sound erosion and sedimentation control and stormwater management practices.

Work with the Virginia Department of Forestry to encourage citizens to develop "best management practices" relating to timber removal and for protection of our natural resources; and encourage reforestation, both natural and planted, of harvested areas.

#### Education

#### Goal:

Continue to build relationships with all the school systems in the County to provide every student with a quality education so they can become productive citizens and to enable our schools to remain an integral part of our community.

# Objective:

Continue to develop a strong working relationship with the local school system in order to support projects planned by the school system.

Encourage the development of curriculums that provide the necessary skills, tools, and training needed to excel in life.

Support school programs and activities to show support of our school systems and students.

Encourage the involvement of the community in supporting school activities and curriculums.

Continue to provide support for capital improvements to school facilities to ensure safety and security for students and faculty.

