

INTRODUCTION	
I. ENVIRONMENT	6
Topography	6
Climate	6
Geology	8
Hydrology	9
Groundwater	12
Soils and Soil Erosion	12
Water Quality	13
Air Quality	14
Forest and Wildlife Resources	15
Historic and Archeological Sites	16
Summary of Problems and Opportunities	16
ENVIRONMENT GOAL	
II. POPULATION AND HOUSING	21
Historical Trends	
Household Size	22
Population Composition	23
Migration	
Race	25
Population Distribution	25
Housing Trends and Type of Housing	
Housing Age and Conditions	
Housing Affordability	31
Current Housing Assistance Activities	33
Summary of Problems and Opportunities	
Population Projections	
POPULATION AND HOUSING GOALS	
Retail Trade	48
Tourism	49
Commuting to Work	50
Summary: Problems and Opportunities	50
Existing Land Use	57
Development Patterns and Land Use Trends	61
Constraints to Development	66
Summary of Problems and Opportunities	68
LAND USE GOAL	70
V. PUBLIC FACILITIES AND SERVICES	
Schools	77
Water Facilities	79
Sewer Facilities	83
Solid Waste	85
Emergency Services	86
Libraries	88
County Office Space	89

Telecommunications	90
Summary of Problems and Opportunities	
PUBLIC FACILITIES AND SERVICES GOAL	96
Objective: Enable businesses and households to have access to up-to-date technology	including
high-speed Internet access	101
VI. TRANSPORTATION	101
Roads and Highways	102
Airports	106
Smart Scale Projects	107
Rail Transportation	116
Public Transit	116
Pedestrian and Bike Transportation	117
Summary of Problems and Opportunities	117
TRANSPORTATION GOAL	121
VII. QUALITY OF LIFE	125
Education	125
Table 7:1. Educational Attainment for Persons 25 and up	125
Child Care	126
Health Care	127
Recreation	128
Cultural Amenities	129
Summary of Problems and Opportunities	130
AMENDMENT	136
Incorporation of 544 roads within the County as part of the Revenue Share	-
Project with VDOT to ensure identification of potential upgrades	

INTRODUCTION

In March of 1994, with assistance from a Citizens Advisory Committee and the Smyth County Planning Commission, the Smyth County Board of Supervisors adopted a new Comprehensive Plan for the County. The document was called <u>Smyth County 2003, A Comprehensive Plan</u>, and contained seven chapters addressing Environment, Population and Housing, Land Use, Public Facilities and Services, Economy, Transportation, and Quality of Life. It was updated and significantly revised from the County's first Comprehensive Plan, which was originally adopted in 1976.

By requirement of the Code of Virginia, every locality must have a comprehensive plan in place, and must review the plan every five years. A five-year review of the Smyth County Comprehensive Plan was conducted in 1999, resulting in a revised set of goals, objectives, and strategies for each of the seven sections. Because the U.S. Census data for 2000 was not yet available, the full plan in its entirety was not updated.

In 2004, the Planning Commission undertook a subsequent five-year review of the Comprehensive Plan. Because the 2000 Census data was available, time was devoted to updating the considerable amount of data that was in the Smyth County 2003 Plan. A Comprehensive Plan Advisory Committee was formed by the Planning Commission to review the revised data and determine if changes needed to be made in the goals, objectives, and strategies for each section. The following document contains updated data, summary sections of each of the seven chapters (entitled "problems and opportunities") and the revised goals, objectives, and strategies for each section. The document retains the original seven-chapter format, although the order of the chapters has changed slightly.

Several changes have been made in the 2005 Update due to either changing conditions, or in some instances, specific strategies have been accomplished. The updated plan also includes improved mapping that was not available when the Smyth County 2003 Plan was done. In particular, the Land Use Plan map has been revised to be a better tool in assisting the Planning Commission and Board of Supervisors in land use decisions. This is especially important due to the adoption of county zoning in 2001.

Citizen input into the updated Plan was requested through a series of public information meetings held in the spring of 2005. Input from those meetings was used to make further revisions and a formal draft was completed in May 2005. The Planning Commission and the Board of Supervisors held a formal public hearing on the Plan in late August 2005. Following the hearing, the final draft was recommended by the Planning Commission at its September meeting and adopted by the Smyth County Board of Supervisors on October 11, 2005.

I. ENVIRONMENT

Topography

Smyth County is primarily located in the Ridge and Valley Physiographic Province, an area characterized by linear mountain ranges and valleys. Three large mountain chains traverse the County forming three major valleys in between (chiefly the drainage areas of the three forks of the Holston River). The Iron Mountain range, at the northern edge of the Blue Ridge Geologic Province, forms the southern boundary and the Clinch Mountain range forms the northern boundary, while the Walker Mountain chain traverses the County just



Valley Scenery

to the north of and approximately parallel to

Interstate 81. South of Marion is another prominent mountain, Brushy Mountain, and two adjacent peaks, Pond Mountain to the west and Glade Mountain to the northeast of Brushy Mountain.

Elevations in Smyth County range from a high of 5,729 feet at Mount Rogers to a low of approximately 1,740 feet where the North Fork of the Holston leaves Smyth County at the Washington County line near Saltville. Fifty-eight percent of the land in the county has a slope of fifteen percent (15 %) or more, while only three percent (3%) of the land is two percent or less slope. Map 1.1 shows the magnitude of slope in the county by percentage categories, clearly indicating topographic constraints to development.

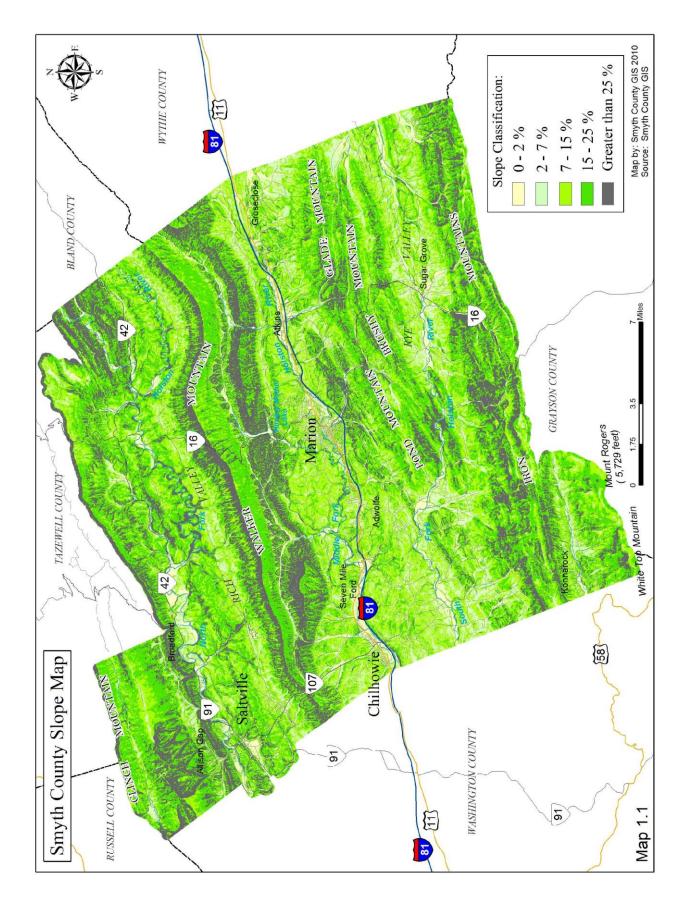
Most of the more gently sloping land occurs in the "Great Valley" sub province between Iron Mountain and Walker Mountain which includes the Middle Fork of the Holston valley (or basically the Interstate Corridor from Groseclose to Chilhowie) and the Adwolfe and Thomas Bridge area along the lower drainage area of the South Fork of the Holston. Rye Valley, located between Iron Mountain and Brushy Mountain, is another area of gently sloping terrain. Very gently sloping to rolling land is found in Rich Valley in the north central portion of the County and along the lowlands of the North Fork of the Holston River from the Rich Valley Elementary School to Saltville.

Climate

Smyth County has a moderate climate with July being the warmest month and January the coldest month. Table 1.1 below provides temperature statistics:

erature Statistics - S	Smyth County	
January	July	
42.2	83.2	65.6
20.8	58.9	39.8
	January 42.2	42.2 83.2

Source: Virginia State Climatology Office



The average annual rainfall in Smyth County is 45.86 inches. The wettest months are May through August, a period that experiences approximately 4.6 inches of rain per month as opposed to the monthly average for the remainder of the year of 3.5 inches. Average annual snowfall is 18 inches although the higher elevations in the County experience larger average accumulations. The growing season ranges from a low of approximately 140 days in the northeast portion of the county to a high of approximately 180 days in the southwest portion.

The prevailing winds in the county are from a generally westerly direction with southerly and northerly winds occurring less frequently. The mountains, along with the prevailing westerly winds, generally protect the county from severe storms originating in the Atlantic Ocean.

Geology

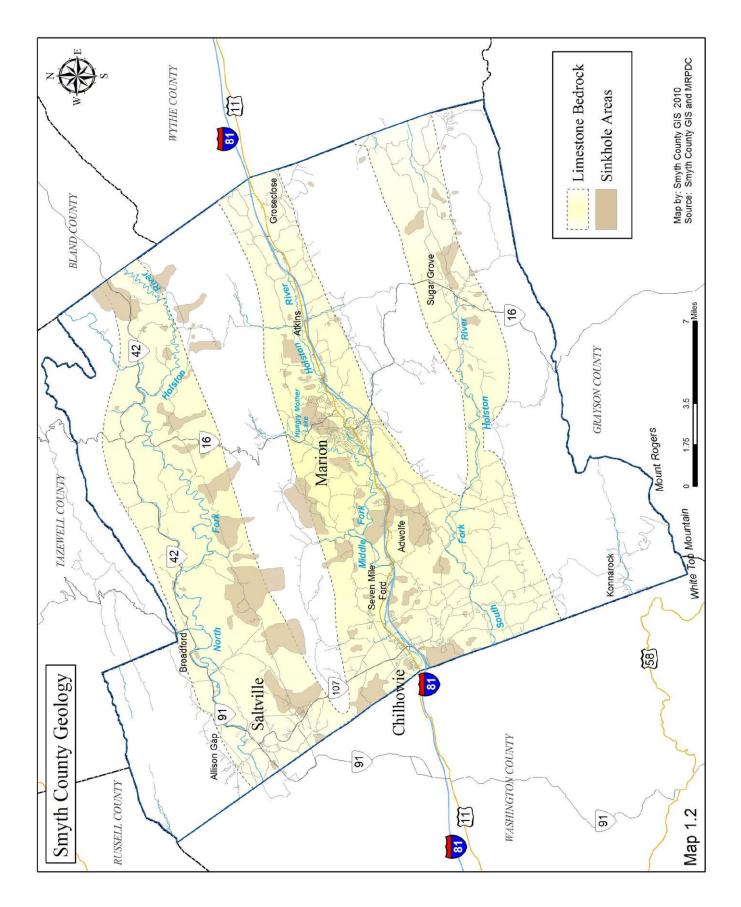
As noted previously, Smyth County is located principally in the Ridge and Valley Physiographic Province of Virginia, with the exception of the extreme southern part of the county, which lies in the Blue Ridge Province. Layers of sedimentary rocks underlie the Ridge and Valley Province. These rocks have been folded with the folds running northeast to southwest. As a result of erosion, the various layers of rock appear on the surface in strips of various widths running in a northeast-southwest orientation.

The major sedimentary rock types in the county are sandstone, shale, limestone, and dolomite. The sandstones, being more resistant to weathering than the shale, limestone, and dolomites, make up the ridges for the most part. Deposits of salt, gypsum, and anhydrite occur along a northeast trending area about 20 miles long in Smyth and adjacent Washington County but being highly soluble they are only preserved in the subsurface.

The only section of the county, which has rock types other than sedimentary, is the southwestern corner. In this area (the Blue Ridge Province) there are outcrops of rocks of an igneous and volcanic origin in addition to the sedimentary rocks. This occurs mainly in the Mount Rogers area.

Faulting has occurred within the sedimentary rock, with the faults generally running northeast southwest along the certain beds. The same pressures which caused the folding created strains, which resulted in faults. As a result of these faults, the orderly distribution of the rock types in the northern section of the county is not continued in the central and southern area.

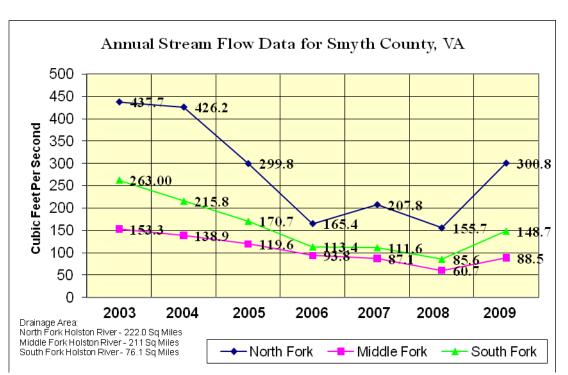
The Saltville fault is a major rupture, which runs northeast to southwest along the North Fork of the Holston River. It is well known that the Saltville area has experienced subsidence problems likely due to the fault, the cavernous nature of the geology, and the presence of the mining activities there, however, there has been no scientific monitoring done to measure the extent of the problem. Many areas of the county have limestone (carbonite) bedrock and sinkholes, which inhibit development uses. Map 1.2 shows the areas of carbonite bedrock and sinkhole drainage areas.



Hydrology

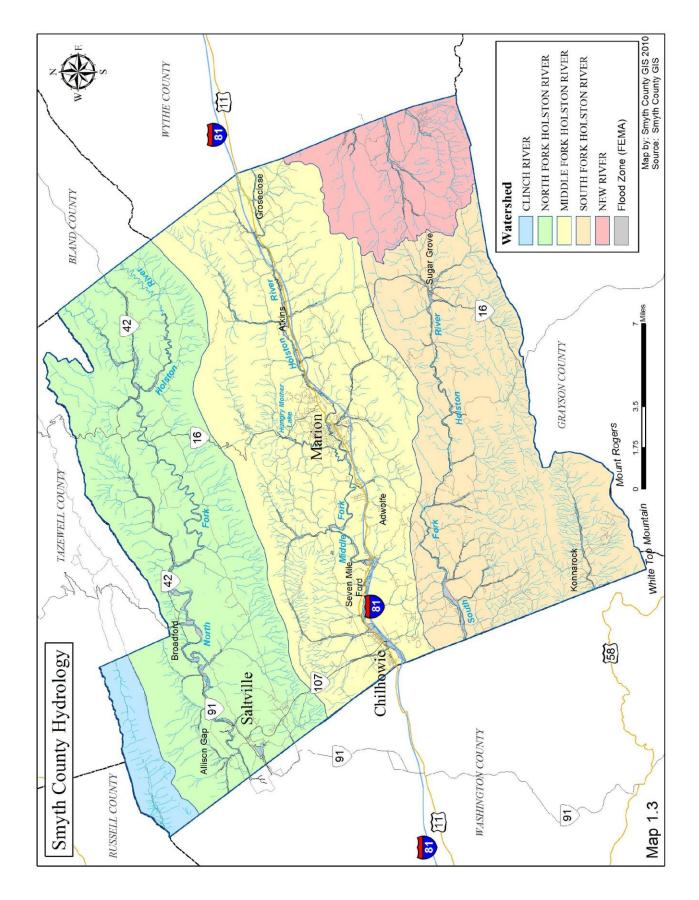
<u>Surface Water</u> The three major streams in Smyth County are the North Fork, the Middle Fork, and the South Fork of the Holston River. The South Fork originates in southeastern Smyth County; the North Fork originates in Bland County; and the Middle Fork has its headwaters in western Wythe County. The flow of the streams is in a southwesterly direction. The streams are slow moving, shallow, with some rocks and ledges. The width of the streams average between five and 100 feet with the gradient ranging from 19 feet per stream mile to 28 feet per stream mile. The hydrology map (Map 1.3) shows the approximate boundaries of the watersheds of the three major streams in the county. Also shown is the Cripple Creek drainage area in the northeastern corner of the county, which is a part of the New River basin.

Monitoring of stream flows is done daily at three locations in the county. One station is on the North Fork of the Holston near Saltville and the other is on the South Fork of the Holston at Riverside (near Chilhowie). A station that records flow on the Middle Fork near Seven Mile Ford was discontinued in 1988 but began use again in 1997. Chart 1.1 provides information on drainage area size and annual average stream flows as recorded at the monitoring stations.



Source: USGS Stream Flow Data.

These flow records have been kept from a period of 1921 to the present (except for the period between 1988 and 1997 on the Middle Fork). Upon review of historical data, there are no particular trends that materialize regarding stream flow volumes. Major flooding in the county has occurred on numerous occasions. Probably the worst flood in recent years was in November of 1977 when floodwaters damaged many homes and businesses in the Atkins, Marion, and Seven Mile Ford/Chilhowie area. Since that time, several preventative measures have been undertaken to guard against future flood losses. The county and towns have adopted floodplain management ordinances to control development in the floodplain and floodway areas.



Flooding has occurred as recently as 2002 and 2003. Smyth County will continue to pursue flood mitigation projects through state and federal programs. These can include flood protection, flood proofing, relocation, acquisition, elevation, and other Federal Emergency Management Agency (FEMA) and Virginia Department of Emergency Management (VDEM) efforts.

The Tennessee Valley Authority and FEMA have mapped the locations of the floodplain and floodway. Due to the level of detail, it is too difficult to show exact floodplain boundaries, however their general location is shown on the hydrology map (Map 1.3). The county has one major impoundment of water and that is the 108-acre Hungry Mother Lake, which is fed by Hungry Mother Creek and is located in the state park just north of Marion.

Groundwater

With the exception of a small portion of the southern part of Smyth County, folded and faulted sedimentary rocks underlie the entire county. Consequently, groundwater conditions vary widely depending on the type and structure of the bedrock. The limestone and dolomite underlying the valley offer the best potential for supplies of groundwater. However, yields are unpredictable in carbonate rock and depend greatly upon whether or not wells penetrate solution openings.

In the northern portion of the county and in the Walker Mountain range, which roughly bisects the county, the underlying formations are of Mississippian, Devonian, and Silurian geological ages. According to a report issued by the Virginia Department of Conservation and Economic Development in 1972, yields from wells drilled in the sandstones and shale's which predominate among the rocks of Silurian and Devonian age usually yield 200 gallons or less per minute. A report issued by the Virginia Division of State Planning and Community Affairs in 1967 indicates that water supplies are available at depths of 50-200 feet, although larger supplies can be obtained from intermediate depths. Water is often moderately hard and can contain objectionable quantities of iron and sulfide. Acidity is a problem in some areas. Acidity in groundwater is likely due to iron rich shale and siltstone and sandstone lithologies often associated with Devonian and Silurian age rocks. In the Saltville area, saline water is frequently found. In the extreme southern part of the county, the rocks are of Precambrian Age and are volcanic in nature. The Precambrian rock unites are metamorphosed igneous and sedimentary units. Wells in this area usually yield less than 10 gallons per minute from fractured, shallow rocks.

Most of the county is underlain by limestone and dolomite rocks of the Ordovician and Cambrian ages. Wells in these formations yield from 100 gallons per minute up to 300 gallons per minute. Usually, the carbonate hardness is high, and water is classified from moderately hard to hard. Acid conditions and iron are also encountered. Springs in the areas underlain by these rocks constitute an important source of groundwater and furnish water for several public and private water systems. Flows of up to 1,000 gallons per minute are not uncommon. Experience has shown however that the water from these formations is susceptible to contamination from surface water and may require treatment.

Soils and Soil Erosion

The soils of Smyth County can be delineated into four major soil associations. A soil association is a landscape that has a distinctive proportional pattern of soils. It normally consists of one or more major soils. The soils in one association may occur in another, but in a different pattern. Soil conditions may impose certain restrictions on development. When adverse soil

conditions occur in combination with other prohibitive factors such as steep slope or location in an area with sinkholes, development may become completely unfeasible.

Soil data and information produced by the National Cooperative Soil Survey for Smyth County can be found on Web Soil Survey (WSS) <u>http://websoilsurvey.nrcs.usda.gov</u>, It is operated by the USDA Natural Resources Conservation Service (NRCS) and provides access to the largest natural resource information system in the world. NRCS has soil maps and data available online for Smyth County and more than 95 percent of the nation's counties. The site is updated and maintained online as the single authoritative source of soil survey information. However, because of the variable nature of soils, even a detailed soils map does not provide a completely reliable guide for development. For that reason, an on-site analysis by a soil scientist should be conducted for any intensive development project.

The county has a number of critical soil erosion areas both on agricultural and nonagricultural land that contribute large amounts of sediment to streams. Many pasture fields have experienced topsoil depletion. Several specific conservation measures have been promoted by the NRCS including, minimum or no tillage, field strip cropping or crop rotation, and sediment control basins. (In order for farmers to receive USDA benefits, they must implement an approved conservation plan.)

Significant land use has changed from cropland use to grazing land use. Water quality issues of sediment, nitrogen, and phosphorous continue to be problems due to livestock access to streams. Conservation methods to reduce pollutants to our water sources include riparian buffers with fences to keep livestock from the streams and developing alternative watering sources. Animal waste facilities are installed on concentrated animal feeding operations, and assistance provided for nutrient management planning. The NRCS provides technical support to the locally elected Evergreen Soil and Water Conservation District Board of Directors.

Erosion from new construction sites is regulated through the county's Erosion and Sediment Control Ordinance, which requires specific measures to be taken when any land area of 10,000 square feet or more is disturbed, including single-family homes. The County Building and Zoning Department is the administrator of the ordinance and serves as the certified plan reviewer and inspector, which is a change since the early 1990's when erosion control plans were sent to the Soil and Water Conservation office in Abingdon for review prior to approval. The in-house review process has meant that substantial delays that were customary for building contractors are avoided.



achieved.

Water Quality

For the most part, the streams in Smyth County exhibit water quality standards that meet regulatory standards, however there are two stream segments that have been identified as "water quality limited" by the Virginia Water Control Board. One of these is the North Fork of the Holston River downstream from the Olin Corporation settlement ponds ("muck ponds"), and the other is a five-mile segment below the Marion Sewage Treatment Plant on the Middle Fork of the Holston River. Water quality limited segments are those where it is known that water quality does not meet or is not expected to meet applicable water quality standards even though secondary treatment levels and/or "best practicable technology" is

Hungry Mother Lake

In the 1970's, it was determined the Olin Chemical Corporation located in Saltville was seriously threatening the water quality of the North Fork of the Holston River by its long-term discharge of mercury into the stream. The plant closed at that time at least in part due to the environmental problems. State officials declared the stream off-limits to fishing due to the level of mercury found in the fish and the dangerous consequences the fish posed due to human consumption.

Today, there are four ambient water quality-monitoring stations and one biological monitoring station located downstream from the toe of the "muck" ponds. All stations indicate elevated levels of mercury in the sediments and in fish tissue, however the fish tissue analysis indicated that trends in mercury contamination continue to decline. The latest data indicate that the average mercury value of all fish at all stations in the river segment are below the mercury level set as acceptable by the Food and Drug Administration (FDA). A fish consumption ban remains in effect in this area.

In addition to the mercury problem, fecal coliform bacteria levels are not in full compliance with Virginia Water Quality standards at the monitoring stations below Saltville. It is the mercury content of the stream, however, that is the reason for its classification as a "water quality limited" stream. When the fish consumption ban is lifted, the water body will be classified: "effluent-limited".

The other stream segments with water quality limitations are on the Middle Fork of the Holston. The segment from the headwaters to the confluence with Greever Branch exceeds the fecal coliform standard due to agricultural run-off, including violations found in the headwaters. The State Water Control Board has recommended a special study of the area to locate possible sources and encourage remediation. The other segment is a five-mile stretch below the discharge point of the newly completed Marion/Upper Smyth County Wastewater Treatment Plant, which is classified "limited-dissolved oxygen." This limitation is due to the distance needed to assimilate wastewater into the stream and does not necessarily mean that water quality is poor, but the classification requires tertiary treatment of wastewater for any discharge into this segment or for any increase in the capacity of the new 3.4 million gallon per day plant.

Water quality in Smyth County has been negatively impacted by soil erosion. A 1988 TVA report studied the Middle Fork of the Holston and several tributaries. That study compared fish and other stream fauna in 1986 with 1969 sampling and found indications of declining chemical pollution in the mainstream but an increase in siltation due largely to agricultural runoff. It also found "very poor" water quality in Laurel Springs Creek, a tributary flowing into the Middle Fork just downstream from Marion. Two other tributaries that were studied, Walker Creek north of Marion and Carlock Creek near Chilhowie, were determined to be "fair-good" quality, while Bear Creek in the Atkins area was classified as "good". The report found that chemicals from fertilizers were not nearly as bad as pollution from animal wastes.

Air Quality

The Department of Environmental Quality (DEQ) has had various ambient air monitoring stations in Smyth County. Until recently and for more than 20 years there was some form of ambient particulate monitoring in Smyth County. During this period, air quality was determined to be within the allowable standards. The DEQ has been monitoring for particulate matter at various sites throughout the Commonwealth for the past 15+years, including Bristol, Galax, and other locations in Southwest Virginia. The monitored concentrations at these sites

show compliance with applicable standards and have never documented concentrations that have resulted in a determination of "non-attainment" of the particulate matter standards.

In addition to the particulate matter monitoring, there is an ozone monitor located east of Smyth County in Rural Retreat. The ozone monitoring station located in Rural Retreat has been in operation for a number of years. This station has monitored no concentrations of ozone resulting in a determination of non-attainment. The entirety of Smyth County, including White Top, is currently considered an "attainment" area, meaning it is attaining National Ambient Air Quality Standards (NAAQS) for all criteria pollutants.

Forest and Wildlife Resources

Smyth County has an abundance of forest and wildlife resources. Data from the USDA Forest Service indicates that a total of 178,103 acres of the county are composed of woodlands, which represents 61 percent of the total area of the county. (This is a slight increase in acreage from early 1990's data that indicated 177,224 woodland acres). The predominant class of tree in the county is the oak-hickory class in addition to smaller amounts of oak-pine and maple/beech/birch groups. Of the total woodland acreage, 87,819 acres (49 percent) is in public ownership, while the remaining 51 percent is in private ownership. (This represents an increase in public ownership from 45 percent in the 1994 Plan). Forestland also provides employment to many Smyth County residents through timber harvesting, furniture and wood product manufacturing operations that employ +/- 500 residents annually (labor market statistics)

Most of the public timberland is USDA Forest Service property, which is used for recreational purposes but may be subject to periodic timber harvest and sales. Timbering on private lands is not restricted, although state water quality regulations must be met if private timbering operations directly impact streams. The Virginia Department of Forestry assists landowners in developing plans to minimize soil erosion and protect wildlife through best management practice guidelines that are voluntary conservation measures.

Table 1.2 provides some data on timberland harvesting over the last several years (2001 - 2008) in Smyth County. This data shows that there continues to be a surplus volume of timber in the county and that average annual removals do not exceed average annual net growth in both "growing stock" and saw timber. (In fact, the ratio of average annual growth to removals is substantially higher than it was during the 1996-01-time frame). The Area Forester for the Virginia Department of Forestry believes that the next five to ten years will not see major increases in timber harvesting unless demand increases dramatically. Demand for hardwoods are steady due to products such as flooring, but pine demand is down due to an increase in overseas supplies. Timber is now bringing average to high prices for better quality sawtimber, and more low-grade timber is being utilized for various wood products.

	Volume (2001)	Average Net Annual Growth (1996-2001)	Average Annual Removals (1996-2001)	Ratio of Average Annual Growth to Removals
Growing Stock (000's cu. ft.)	365,373	9,064	1,796	5.04 to 1
Saw timber (000's board ft.)	1,266,581	44,695	7,778	5.74 to 1

 Table 1.2: Timberland Data for Smyth County

Source: USDA, Forest Service

There are important wildlife habitats including numerous endangered or threatened animal and plant species in the county. Some of the areas designated for protection: 1) Clinch Mountain Wildlife Management Area, 2) Saltville well fields, and the 3) Jefferson National Forest. In many cases, silvicultural activities (those activities associated with tending to the forest) can disturb plant and animal habitats.

Historic and Archeological Sites

Although not natural resources, historical and archeological sites are an important component of the environment of cultural the county. А comprehensive study was completed in 1996 of the county's historic or archeological resources. The study identified numerous properties in the county that would be eligible for the National Register of Historic Places. In addition, the study recommended that a historic district be established in each of the county's three towns, which was completed in 2000. These historic district designations have been promoted for tourism and provide incentives for



historic preservation for *Hamm-Roberts Mill, Teas Community* property owners. The district designation

provides no land use regulations that must be accomplished through local zoning, and to date, none of the three towns have adopted historic district zoning for their historic districts.

The best-documented archeological site in Smyth County is the Saltville area where substantial field investigations have been done on prehistoric remains with the involvement of the Smithsonian Institute and the Virginia Museum of Natural History. Opened in 1998, the Museum of the Middle Appalachians displays the archeological findings, along with the natural and cultural history of the area. In addition to the museum in Saltville, other groups are involved in historic preservation, including the Smyth County Historical Society with the Smyth County Museum project, the Settlers' Museum, and the Chilhowie Organization for the Arts, Culture, and History.

Summary of Problems and Opportunities

Despite the scenic beauty and natural resources found in Smyth County, the county is not without recognized and documented environmental problems. The following is a summary of those identified problems or issues:

<u>Water Quality</u> The county has numerous streams that are negatively impacted by soil erosion and agricultural runoff, largely from animal wastes from adjacent farms. In addition, the North Fork of the Holston below Saltville, although much improved since the 1970's, is still off-limits for fish consumption. Groundwater resources are plentiful in the county; however, little information is available regarding groundwater quality. Failing or inadequate individual sewage disposal systems (many in densely populated communities and areas with poor soil suitability) are a concern to groundwater quality.

<u>Air Quality</u> The county did have a concentration of manufacturing plants that emitted volatile organic compounds common in the solvent-based furniture industry, but two major operations

closed in 2001 and 2002. The county is still home to six wood products industries that are impacted by air quality regulations. These sites are periodically monitored for toxic emissions and are all complying with current standards.

<u>Solid Waste Disposal</u> The county is continually faced with problems from roadside dumping and littering. Despite the establishment of eleven convenience stations in the county and the elimination of unsightly "green box" sites, there are still numerous examples of roadside dumps. There are also concerns about the transportation and disposal of hazardous materials in and throughout the county. In 2008, Smyth County implemented the "Assign-A-Highway" program in an effort to minimize roadside dumping and littering.

<u>Soil Erosion</u> The county has a number of critical erosion areas both on agricultural and nonagricultural land that contribute large amounts of sediment to streams, and many crop fields have experienced topsoil depletion. The NRCS office promotes and assists landowners with conservation measures, including stream bank management techniques, minimum or no tillage, field strip-cropping or crop rotation, and sediment control basins. Erosion from new construction sites is regulated through both the county's Erosion and Sediment Control Ordinance and Department of Conservation Recreation (DCR) Stormwater Management regulations, and the Virginia Division of Forestry regulates land disturbances related to logging operations that impact water quality.

<u>Forest and Wildlife Resources</u> Timbering on private lands is not restricted, although the Virginia Department of Forestry assists landowners in developing plans to minimize soil erosion, reforest harvested lands, planting riparian forest buffers, and protect wildlife. State forestry regulations provide some degree of control if private timbering operations adversely impact water quality. It is predicted that the next five to ten years will see a steady continuation of current timber harvesting without a major increase in activity. Some timber products such as low-grade pine are in competition with overseas supplies. Forest management techniques are needed to enhance the biodiversity of the forests and to ensure the negative impacts of silvicultural activities are minimized.

<u>Historic and Archaeological Resources</u> The county has numerous historic buildings and sites that are worth preserving, however it is extremely difficult for private owners to maintain older structures and there are often obstacles to their rehabilitation and/or reuse. There appears to be substantial local interest in historic preservation but no guiding direction as to what needs to be done. A lack of awareness about historic sites, as well as about the cultural and economic history of the county as a whole; and a fragmentation of local efforts toward various projects seem to be primary problems. The completion of the Smyth County Historical Architectural Survey in 1997 provided a much-needed compilation of the county's history and information on historic buildings in the county. The creation of three historic districts--one in each town in the county—has been a positive development in terms of historic preservation for Smyth County.

ENVIRONMENT GOAL

• To improve the environmental quality of Smyth County by conserving its natural and cultural resources and protecting them from deterioration and misuse

Water and Air Quality

Objectives:

- Protect the availability and quality of groundwater resources in the county
- Protect and improve the surface water quality in the county
- Promote awareness and education about the need for maintaining water and air quality in the county
- Protect the air quality in the county from deterioration

Strategies:

- 1) Encourage more air and water quality testing and monitoring throughout the county.
- 2) Identify the major sources of non-point source water pollution in the county and support efforts of the Conservation Reserve Enhancement Program (CREP) and Environmental Quality Incentives Program (EQIP) programs to avoid or mitigate the problems.
- 3) Correct inadequate and improper means of household sewage disposal negatively impacting groundwater and surface water quality through the provision of public sewer lines, where feasible in relation to the density of development and proximity to existing sewer.
- 4) Encourage the establishment of a clearinghouse or central reference location, possibly at the regional library, for environmental education information that would be available for teachers and all interested citizens.
- 5) Encourage continuation of the "Adopt-A-Stream", Conservation Reservation Enhancement Program (CREP) and Environmental Quality Incentives Program (EQIP) program in the county through the direction of the Soil and Water Conservation District or other agency and involve school groups, civic clubs, and individuals.
- 6) Encourage the establishment of light industries in the county that traditionally do not produce large amounts of industrial discharges.
- 7) Discourage the use of hard chemicals on the land that eventually impacts groundwater quality.
- 8) Support the ongoing efforts of Olin Corporation and the "Superfund" program to clean up the "muck ponds" near the North Fork of the Holston.

- 9) Support the ongoing efforts of the Middle Fork of the Holston Water Quality Committee, the Friends of the North Fork Committee, and the Friends of the South Fork Committee.
- 10) Support the enforcement of current and future federal and state regulations regarding air quality and continued monitoring of air quality by the Virginia Department of Environmental Quality.
- 11) Encourage the shift toward water-based solvents within the wood-products industry to reduce air emissions.
- 12) Map all public groundwater sources and consider protections measures for these sites.
- 13) Improve water quality through proper monitoring and testing of petroleum storage tank systems.

Solid Waste and Hazardous Materials

Objectives:

- Prevent the dumping of household waste along county roadways and riverbanks
- Take proper precaution against damages from chemical spills that could occur along the county's roadways and railways and at industrial and commercial establishments

Strategies:

- 1) Provide environmental education to county residents, including school age children, concerning proper solid waste disposal including source reduction, reuse, recycling, and disposal. Support ongoing efforts of the "Kids Against Trash" program in the schools.
- 2) Encourage volunteer groups through the Adopt-A-Road, Adopt-A-Stream, and Adopt-A-Spot programs to have periodic workday clean-ups.
- 3) Cooperate with natural resource agencies and civic organizations in their efforts to clean-up area roadways and riverbanks.
- 4) Incorporate litter control as a function of the county's Solid Waste Management Department with necessary staffing to enforce the litter ordinance.
- 5) Actively promote and publicize the convenience stations. Establish a periodic pick-up at each station of household hazardous waste, such as paint cans, spray cans, and tires.
- 6) Keep emergency personnel adequately trained to handle chemical and other toxic spills occurring on I-81 or other locations in the county.
- 7) Keep the county's Emergency Operations Plan and Solid Waste Ordinance up to date.

- 8) Work with other localities in the region to explore the possibility of a regional collection site or transfer station for the collection of hazardous chemicals from local agricultural operations and certain industrial sources.
- 9) Continue support of the Assign-A-Highway litter program and coordination of annual dumpsite cleanups.

Soil Erosion

<u>Objective:</u> Reduce the amount of soil erosion and sedimentation into county streams from agricultural and non-agricultural land uses.

Strategies:

- 1) Support the enforcement of "Best Management Practices" in the agricultural, timber, construction, and building development industries to prevent runoff into streams.
- 2) Encourage the use of federal and state funds by area farmers and property owners for streambank management practices.
- 3) Support the efforts of the Evergreen Soil and Water Conservation District and the Middle Fork of the Holston Water Quality Committee, in addition to the Friends of the North Fork Committee and the Friends of the South Fork Committee, to encourage specific conservation measures.
- 4) Continue to train and keep up-to-date certifications for local county staff to administer and review erosion control plans, inspect erosion control work, and encourage more staff to obtain certification.
- 5) Encourage low impact development measures.
- 6) Ensure enforcement of Department of Conservation and Recreation's Responsible Land Disturber certification requirements.

Forest and Wildlife Resources

Objectives:

- Protect the county's timberland resources from overuse and misuse
- Encourage the protection of plant and animal habitats affected by forestry and logging activities that interfere with the natural biodiversity of the region

Strategies

1) Support the enforcement of state and federal regulations on logging operations by the Virginia Department of Forestry or other responsible agencies.

- 2) Encourage local landowners to seek technical assistance from the Virginia Department of Forestry regarding the proper use of their timber resources.
- 3) Encourage the participation of local landowners in the Forest Stewardship program and "showcase" exemplary land management plans.
- 4) Encourage the establishment of Agricultural and Forestal Districts and conservation easements as voluntary measures by landowners to protect their forestlands.

Historic and Archaeological Resources

Objectives:

• Encourage the preservation of historic structures, archaeological sites, and the cultural heritage that is distinctive to the region

• Increase awareness among county residents concerning archeological, historical, and cultural resources of Smyth County

Strategies:

- 1) Pursue the organization of a countywide historic preservation committee, including membership from existing historic preservation groups in the county, which would be charged with planning and coordinating local historic preservation activities. This committee would also be charged with maintaining and updating the inventory of historic and cultural features identified in the county wide historic building survey done in 1996.
- 2) Encourage the creation of historic districts in the county in order to protect historic landmarks against encroachment from incompatible land uses.
- 3) Encourage the county school system to work cooperatively with other interested parties (primarily the proposed county historic preservation committee) to undertake an oral history project.

II. POPULATION AND HOUSING

Historical Trends

The population of Smyth County has increased very little over the past 60 years, growing by just 6.6 percent from 1950 to 2010. (See Table 2.1). The highest period of growth in population occurred between 1970 and 1980 with a 6.4 percent increase. Then, the County dropped in population by three percent during the 1980's to 32,370 persons. The County regained some of those losses by adding 711 persons for a 2.2 % growth from 1990 to 2000, but then declined in population again over the last decade with a 2.6% drop from 2000 to 2010. The Census found 32,208 persons in 2010.

 Table 2.1: Smyth County Population Trends from 1950 to 2010

Year	1950	1960	1970	1980	1990	2000	2010
Total Persons	30,187	31,066	31,349	33,366	32,370	33,081	32,208

% Change over	 2.9%	0.9%	6.4%	-3.0%	2.2%	-2.6%
10 years						

Source: U. S. Census

The growth patterns of the towns in Smyth County have not exactly mirrored the County's ups and downs in population. Table 2.2 displays the historical data for the past 60 years. The towns grew from 1950 to 1970 but have steadily decreased in population since 1970. Interestingly, despite the closing of the Olin Corporation in the late 1970's, Saltville experienced a lower percentage decrease in population from 1980 to 2010 as compared to the rate of decline seen in Marion over the same period. Chilhowie's population remained fairly constant from 1950 to 1980 and then took a significant jump in 1988 (reflected in the 1990 Census) due to an annexation of new residents into the town. All three towns declined in population over the decade 1990-2000, indicating that all of the 2.2% county population increase during that period occurred in the unincorporated area of the county. The most recent decade of 2000 - 2010 saw further decreases in the town population mirroring the county decline. Marion's population dropped by 6% and Saltville by 5.7%, while Chilhowie's loss was 2.5% over that period. A part of the decline in Marion is associated with population in two state institutions (mental health institute and correctional facility) that have dropped in size.

Towns	1950	1960	1970	1980	1990	2000	2010
Marion	6,982	8,385	8,158	7,284	6,630	6,349	5,968
Chilhowie	1,022	1,169	1,317	1,265	1,971*	1,827	1,781
Saltville**	2,320	2,437	2,527	2,376	2,302	2,204	2,077

Table 2.2: Town Population Trends - 1950 to 2010

Source: U. S. Census Bureau

*In 1988, an annexation by the Town of Chilhowie increased the size of the town and led to a major population increase. **This includes a portion of the Town of Saltville that is in Washington County.

Household Size

From 1990 to 2010, the average household size in Smyth County decreased from 2.55 to 2.36 persons per household, continuing a trend from 1970 as shown in Table 2.3. This trend has been experienced statewide and nationwide due to such reasons as later marriages, less children, more divorces, aging population, and rising incomes. It is interesting to note that the county's household size fell over the last decade by a much higher rate than statewide and the county's household size has been lower than the Virginia average since 1990.

Table 2.3: Average Household Size (Persons per Household) 1970-2000Smyth County and Virginia

Area	1970	1980	1990	2000	2010
Smyth County	3.28	2.84	2.55	2.37	2.36
Virginia	3.2	2.77	2.61	2.54	2.54

Source: U. S. Census

Population Composition

The median age in Smyth County has increased from 40.2 years in 2000 to 43.1 in 2010, documenting that the population is continuing to get older. (The median age in 1980 was 32.7 years and it was 36.5 years in 1990). Table 2.4 shows the trend in population by age from 2000 to 2010.

	2000		2010		% Change
Age Group	Persons	% of Total	Persons	% of Total	
Under 5 yrs.	1769	5.3	1,753	5.4	-0.9%
5 to 14 yrs.	4157	12.5	3,717	11.5	-10.6%
15 to 24 yrs.	3860	11.7	3,828	11.8	-0.8%
25 to 34 yrs.	4315	13.0	3,332	10.3	-22.8%
35 to 44 yrs.	4983	15.1	4,350	13.5	-12.7%
45 to 54 yrs.	4788	14.5	4,795	14.9	-0.1%
55 to 64 yrs.	3703	11.5	4,587	14.2	23.9%
65 yrs. And up	5404	16.3	5,846	18.2	8.2%
TOTAL	33,081	99.9	32,208	99.8	-2.6%
85 yrs. and up	603	1.8	678	2.1	12.4%
Under 18 yrs.	7,147	21.6	6,717	20.9	-6.0%
Median Age	40	.2	43.1	lyrs.	7.2%

Table 2.4: Age of Population, 2000 and 2010

Source: U.S. Census

The aging of the population of Smyth County is evidenced by the rising median age and the increase in the number of persons who are 65 years of age and older. "Senior citizens" now comprise 18.2 percent of the total population, which is an increase from 16.3 percent in 2000, 15.1 percent in 1990, and 12.7 percent in 1980. An even more dramatic trend is the increase of the population that is 55 years and older due to the aging of the "baby boom generation." The 55 to 64 year age bracket grew by 24 percent from 2000 to 2010. This aging trend will continue as more and more of the baby-boomers reach retirement age, and people continue to live longer.

Another significant trend is the drop in the population under 18 years of age (down six percent) from 2000 to 2010. (The decrease was 18.0 percent from 1980 – 1990, so the declining rate is substantially less than that decade). The 18 and younger population group now comprise 20.9 percent of the population, as compared to 21.6 percent in 2000, 23.0 percent in 1990, and 27.8 percent in 1980.. The decreasing population of young people has had a dramatic affect on school enrollment within nearly every county public school.

One explanation for this continuing downward trend is the low birth rates in the County with 10.9 births out of 1,000 persons in 2000, as compared to the same statistic for Virginia of 14.0 per 1,000 persons. The birth rate for the county in 2010 was down to 9.8, as opposed to 12.8 per 1,000 for the state, so the downward trend is continuing. The declining birthrate is consistent with the decrease in the number of females in the county that are in the childbearing age group.

Migration

Another contributing cause of the decline in the number of young people is outmigration. The out-migration trend that plagued the county during the 1950's and 1960's lessened during the 1970's, reappeared strongly during the 1980's and has continued during the 1990's, and the 2000's. In 2000, there were 3,860 persons who were 15-24 years old. Ten years later in2010, there were 3,332 persons remaining in the 25-34 age group, for a loss of 528 persons from that age cohort over the period.

By examining the natural increase (births minus deaths) in population that occurred over the decade, one can measure the "net migration rate" of the total county population. During the decade from 1990 to 2000, it was estimated that the County had a net migration of -+830persons, meaning that even accounting for more deaths than births (a -199 natural decrease), a total of 830 persons moved into the county. This was a net migration rate of 2.6 percent as opposed to the statewide rate of +7.5 percent.

In looking at the figures for 2000 to 2010, we see a different trend in that the County had a much higher amount of negative natural increase (739 more deaths than births) and a loss in total population, thereby indicating that net migration was a negative 134 persons over the decade. (See Table 2.5). The table compares the county's migration rate with that of the statewide rate of 6.5%.

	Population Growth	Natural Increase (Births – Deaths)	Net Migration	Population Change %	Natural Increase %	Net Migration %
Smyth County	-873	-739	-134	-2.6%	-2.2%	-0.4%
Virginia	921,994	460,994	461,500	13.0%	6.5%	6.5%

 Table 2.5: Births, Deaths, and Net Migration: 2000 to 2010

A closer look at the age chart in Table 2.4 reveals more about out-migration. It appears that the county has had only a small increase in the middle age groups (25 to 54 years of age). The 25 to 34 age group in 2000 had 4,315 persons, but that same age cohort had 4,350 persons in 2010 now in the 35 to 44 age category, an increase of just 35 persons. The 35 to 44 age category in 2000 decreased 10 years later by 188 persons. (4,983 persons in 2000 decreased to 4,795 persons in 2010). It is clear that the population decrease from 2000 to 2010 was largely due to natural decrease (more deaths than births), but there was not enough in-migration to make up for those losses, and in fact almost all of the middle-age categories groups lost population over the ten years.

Race

As is true of other southwestern Virginia counties, the population of Smyth County is predominantly white. Table 2.6 depicts the population of the county and towns by race. The total number of minority persons within Smyth County now represents 4.2 percent of population, an increase from 3.1 percent in 2000 and 2.3 percent in 1990.

		One Race	Two or more	Hispanic or	
	White	Black	Other*	races	Latino Origin**
Smyth County	30,847	640	414	307	527
Marion	5,867	424	138	101	148
Chilhowie	1,627	31	108	20	124
Saltville	2,063	8	10	14	11

Table 2.6:	2010 Population	n by Race and	Hispanic Origin
		- ~	

Source: U. S. Census

* White and black categories include persons identifying themselves as only one race. "Other" category includes all persons identifying themselves as a race other than white or black or identifying themselves as two or more races, rather than one race. **The census definition of "Hispanic origin" includes persons of any race.

The number of persons identifying themselves with a group other than white alone has increased from 1,038 in the year 2000 to 1,361 in 2010. The county has also experienced a notable increase in the Hispanic population (which includes persons of any race), which now comprises 527 persons or 1.6 percent of the total population. Similar to 2000, the non-white population is concentrated in the incorporated towns.

Population Distribution

Approximately 65 percent of the total county population is concentrated in the I-81 corridor, which runs through the central part of the county. There are three major population clusters in the county: the Marion/Atkins area, the Chilhowie/Seven Mile Ford area, and the Saltville/Allison Gap/McCready area. Other significant concentrations of population are in Sugar Grove south of Marion, and the Adwolfe/Thomas Bridge/St. Clair Bottom area which has experienced residential growth over the last 20 years, due largely to the availability of land, rolling terrain, and the presence of community water service over a wide area. Other smaller concentrations of population exist in Cleghorn Valley, Broadford, Attoway/Currin Valley, St. Clair Creek, and in many other creek valleys accessible from the county's roadways.

Population distribution and its change over the last ten years can be examined by census tract. Map 2.1 shows the 2000 and 2010 population by Census Tract and the rate of change over the decade. Although the tracts themselves do not conform to concise geographical description, they do comprise a consistent sub-county boundary for comparison between 2000 and 2010 and to compare with change over the previous decade. There are no updated data estimates available at a sub-county level.

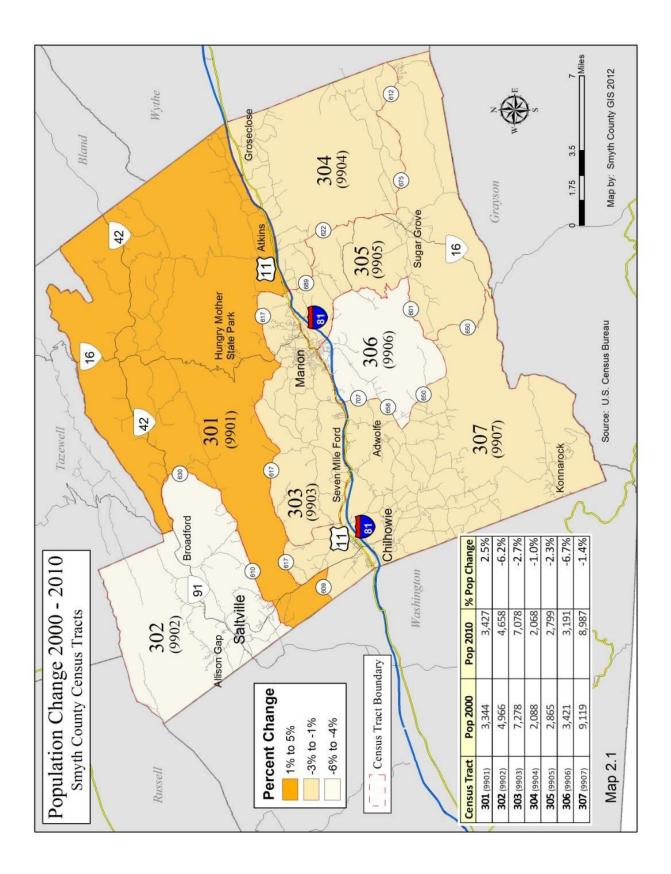
Only one of the County's seven census tracts experienced growth in population and that was Tract 301, most of the Rich Valley area, but also including the north side of Route 617

(Walker Creek and Cleghorn Valley). This growth is a change from the 1990 - 2000 decade in which four of the seven Census tracts) gained in population.

Six of the County's seven census tracts experienced declining population over the decade: The two tracts experiencing the most decline were Tract 302 (Saltville area) with 6.2% decrease and Tract 306 which includes part of the Town of Marion and south of town, including Scratch Gravel Road.

Population Density

Average population density in the county is about 71 persons per square mile, which has increased only slightly since 1950 due to slow population growth. This figure is somewhat misleading, however, because so much of the county's population is concentrated in the three major river valleys, particularly the valley of the Middle Fork of the Holston River paralleling the Interstate corridor. Average density in the interstate corridor is estimated to be 170 to 185 persons per square mile. Because so much of the county's area is in steep slopes or public land, development has concentrated in the corridor where public utility services are more readily available. In addition, there are numerous stretches of higher population densities along secondary roads in the county where land and some public services are available.



Housing Trends and Type of Housing

Smyth County has a total of 15,427 housing units according to the 2010 Census, which is an increase of 2.1% from 15,111dwelling units in 2000. (This is well under the rate of increase over the previous decade when housing units increased by 15.0% from 1990-2000). So, although the number of persons residing in the county decreased by 2.6% over the last decade, the number of households increased. Again, Smyth County is following the national trend in that the average household size is shrinking due to several factors including delayed marriages and postponed childbearing; decisions to have less children or no children; and divorce.

The predominant housing type in Smyth County is the single-family conventional home. The county has a low percentage of multi-family housing; however mobile homes (now termed "manufactured homes") comprise a significant and growing proportion of the housing stock. Table 2.7 shows the distribution of housing types in the county from 1990 to current.

	1990		2000		2006-2010 estimates	
	No.	%	No.	%	No.	%
Single Family – Conventional	9,662	73.6	10,687	70.7	10,445	67.6
Manufactured (Mobile) Homes	2,169	16.5	3,178	21.0	3,692	23.9
Multi-family	1,301	9.9	1,246	8.2	1,302	8.4
TOTAL	13,132	100.0	15,111	99.9	15,439	99.9

 Table 2.7: Historical Trends in Housing Mix in Smyth County

Source: U. S. Census

The mix of housing stock has shifted since 1990 toward a larger proportion of manufactured homes out of the total. Although the actual number of single-family conventional homes has increased over the period, their proportional share of the housing stock has decreased from 73.6 percent in1990 to 68% in the latest estimates (Note: It was 81 percent in 1980). In 1980, just over one out of every ten housing units were mobile homes, but by 2000, this had increased to one out of five, and the post 2000 estimates are even higher. Multi-family comprises the smallest percentage of homes at 8.2 percent in 2000, and this declined from 1990 rather than increased, however stayed virtually the same for 2006-2010 estimates. In fact, the mix of housing stock seems to be fairly stable over the decade of the 2000's.

The growth in manufactured homes in the County can be evidenced by the number of manufactured home permits issued over recent years. Table 2.8 provides data on housing units authorized over the period from 2002 to 2011. In the early part of the decade, the number of manufactured home permits issued far exceeded the permits issued for conventional single-family home construction; however, this ratio has been substantially reduced since 2006.

		YEAR								
TYPE OF UNIT	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Single-Family	49	49	67	45	46	70	50	50	35	25
Duplex/Multi-Family	6	4	2	1	0	0	0	0	1	0
Manufactured Home	252	112	109	104	77	76	73	45	36	44
TOTAL PERMITS	307	165	178	150	123	146	123	95	72	69

Table 2.8: Housing Units Authorized by Permits Issued - 2002 - 2011

Source: Housing Units Authorized, Weldon Cooper Center for Public Service, UVA

It is interesting to note that the number of manufactured home permits in 2003 and 2004 were much lower than in previous years and have continued to decline over the decade. According to one Smyth County dealer, this is because it has become harder to obtain financing for these units. Many of the financing companies that used to provide loans are no longer in business, and local banks are hesitant to provide financing. As a result, many manufactured home dealers are selling an increasing number of modular homes rather than manufactured homes. Modular homes meet the same standards as conventional, site-built homes, but are built in the factory. In 2011, manufactured homes still represented a majority (64%) of the new permits issued for housing units.

Housing Tenure and Occupancy

Approximately two-thirds of all housing units in Smyth County are owner-occupied, while the remaining third are renter-occupied or vacant. This characteristic has remained virtually the same for at least the last twenty years, although an increase in vacant units was experienced from 2000 to 2010. Table 2.9 shows occupancy status of housing units in the county.

	2000		2000	
Occupancy Status	No. of units	%	No. of units	%
Owner-Occupied	10,003	66.2	9.517	61.7
Renter-Occupied	3,488	23.1	3,802	24.6
Vacant	1,618	10.7	2,108	13.7
TOTAL	15,111	100.0	15,427	100.0

Table 2.9: Occupancy Status of Housing Units, 2000 and 2010

Source: U. S. Census

The percentage of owner-occupied homes is decreasing, and the percentage of renter-occupied homes is increasing slightly, but the real change can be seen in the number of vacant homes. The proportion of the housing stock that is now vacant has doubled over the last 20 years and is now almost 14% of the housing stock. It can be speculated that the percentage of vacant homes increasing is associated with the housing market (low sales and foreclosures) due to the recession and the increasing age of both the population and the housing stock without enough new homes and younger residents to replace those homes being vacated.

Housing Age and Conditions

Table 2.10 indicates the number of housing units by age of structure. Almost half of the homes in Smyth County were built prior to 1970. A housing construction boom in the 1970's brought 3,240 new houses to the county during that decade, representing nearly 25 percent of today's housing stock. The 1980's decade experienced a slow down of housing construction with only 17.7 percent of the total housing units built during the 1980's as compared to 26.3 statewide. Only 11.8 percent of the homes were built during the last ten years.

Year Built	Owner-Occupied	% of Total	Renter-Occupied	% of Total
1999- March 2000	276	2.8	26	0.7
1995-1998	772	7.7	203	5.8
1990-1994	935	9.3	186	5.3
1980-1989	1,291	12.9	565	16.2
1970-1979	1,888	18.9	771	22.1
1960-1969	1,329	13.3	448	12.8
1950-1959	1,354	13.5	496	14.2
1940-1949	836	8.4	305	8.7
Before 1940	1,324	13.2	488	13.4
TOTAL	10,005	100.0	3,488	100.0

Total Occupied Housing Units = 13,493

Source: U. S. Census

Updated data from estimates done after the 2000 Census show that there continues to be a lack of new housing construction to offset the aging housing stock, as 46% of housing units were built prior to 1970, and almost one in five (18.91%) were built prior to 1950. Only about eight percent (7.9%) of the housing stock has been built since 2000.

An examination of housing condition trends in the county reveals that improvements have been made over the years. Table 2.11 provides data on housing without complete plumbing facilities, which is an objective measure of substandard housing. The number of homes without complete bathroom facilities continues to decline in Smyth County, dropping to a low of only 1.0 percent of all occupied housing units in 2000, and down to 0.6% according to 2006-2010 estimates from the American Community Survey. Improvements have been made to homes, some with assistance from the Indoor Plumbing program administered by the state, but also contributing to the decline is the fact that older homes without plumbing continue to drop out of the occupied housing stock due to abandonment and sometimes demolition.

	1980		1990		2000	
	No.	%	No.	%	No.	%
Lacking Complete Plumbing	914	8.0	318	2.4	136	1.0

 Table 2.11: Occupied Units Lacking Complete Indoor Plumbing in Smyth County

Source: U. S. Census

Housing Affordability

In addition to housing conditions and availability, another crucial issue in housing today is affordability. Homes may be available but not within the financial resources of the majority of the population. Inflation has sent housing costs skyrocketing and incomes may not be keeping up.

In Smyth County, the median value of a house in 2000 was \$62,600 as compared to \$43,200 in 1990, while median monthly contract rent rose from \$196 in 1990 to \$281 in 2000. There is no 2010 Census data to compare to this data, but according to ACS estimates for2006-2010, the median value has increased to \$86,900 and the median rent to \$496. (Note: The housing value is not an assessed or appraised market value, but a value that the homeowner or occupant considers the value as collected on the Census questionnaire. Also, the ACS data excludes "no cash" renters, so that may create problems in comparing with 2000 Census). One method to analyze affordability is to compare the increase in household income with the increase in housing costs. The following tables provide a look at this comparison for the county over the past two decades.

 Table 2.12: Ratio of Change in Median Home Value to Change in Median Household Income 1980-2000

Time Period	A) Change in Median Home Value (%)	B) Change in Median Household Income (%)	Ratio A/B
1980 - 1990	47.4	60.5	.78
1990 - 2000	44.9	43.8	1.025

Source: U.S. Census

Table 2.12 indicates that median home values have risen slightly more than household income over the last decade; unlike they did over the 1980-1990 period; and the decade of the 2000's has seen a large disparity between income increase and home value increase.

Area	A) Change in Median Contract Rent (%)	B) Change in Median Household Income (%)	Ratio A/B
1980 - 1990	62.0	60.5	1.02
1990 - 2000	43.3	43.8	1.01

Table 2.13: Ratio of Change in Median Rent to Change in Median Household Incom	le
1980 - 2000	

Source: U.S. Census * Median contract rent figure excludes "no cash" renters, so may be distorted in comparison to 2000 Census)

Another way to measure housing affordability is to examine the number of households that pay more than thirty percent (30 %) of their household income on housing costs. (The 30 percent is a standard measure used by housing experts). Table 2.14 shows that in 2000 13.4 percent of owner-occupied households in Smyth County spent thirty percent or more of their household income on monthly ownership costs. This is an increase from the 1990 data showing that 10.8 percent of households were in that category.

Table 2.14: Selected Monthly Owner Costs as a Percentage of Household Income 1990 and 2000

% of Income Spent on Housing	# Households 1990	%	# Households 2000	%
0-19 %	4,454	73.8	4,645	69.1
20-24%	559	9.2	749	11.1
25-29%	371	6.1	427	6.4
30 +%	239	10.8	899	13.4
Total computed	6,034	99.9	6,720	100.00

Source: U.S. Census 1990 and 2000; Specified Owner-Occupied Housing Units (sample data)

The ACS data for 2006-2010 is not easily comparable to the above data but does indicate that 10.4% of households without a mortgage spend 30 percent or more of their household income on monthly owner costs, and out of those housing units with a mortgage, this increases to 25% of households. This indicates that during the 2000's decade, there has been a growing affordability problem rather than an improving trend.

Housing renters in the county are more likely than homeowners to be "stretching their pocketbooks" to pay for housing. Table 2.15 indicates one out of every four (24.9%) rental households in 2000 spent more than 30 percent on housing costs. This statistic is lower than for 1990 in which 30.4 percent of households were spending more than 30 percent on housing costs, but recent estimates indicate that the problem has worsened over the decade, as rents have increased, and incomes have not kept up with those increases. According to ACS estimates for 2006-2010, 40.9% of occupied units paying rent spent more than 30% of their household income on rent. If these estimates are true, that is a significant affordability problem for renter households.

% of Income Spent	# Households	%	# Households	%
on Housing	1990		2000	
0-19 %	1,193	47.8	1,464	51.0
20-24%	318	12.7	404	14.1
25-29%	228	9.1	289	10.0
30 +%	759	30.4	716	24.9
Total computed	2,498	100.0	2,873	100.0

 Table 2.15: Gross Rent as a Percentage of Household Income, 2000 and 1990 Census

Source: U.S. Census 1990 and 2000; Specified Renter-Occupied Housing Units (sample data)

Current Housing Assistance Activities

There are several public housing locations or publicly assisted housing projects in the county:

<u>Government-assisted housing projects</u> The Marion Redevelopment and Housing Authority (MRHA) operates and maintains a total of 238 rental units in eight locations in the town of Marion. The units range in size from one bedroom to five bedroom apartments. There is a waiting list of approximately 200 families or individuals requesting housing from the Housing Authority. Other government-assisted housing projects are Southview Apartments, located at Seven Mile Ford, which is a Housing and Urban Development (HUD) Section 8 project with 72 two- and three-bedroom units. In Saltville, there are the Battleground Apartments (24 units) and the North Fork Manor (56 units); and there are the Heatherwood Apartments (32 units) in Chilhowie. Both Battleground and Heatherwood are Rural Development (formerly Farmers Home Administration) rental assistance projects, while North Fork Manor is a HUD Section 8 program. The Marion Manor Apartments, formerly a HUD Section 236 project with 113 units, is no longer a publicly subsidized project. The Town of Marion has completed a Community Development Block Grant (CDBG) project creating 20 lows to moderate-income second-story apartments in the downtown area.

<u>Rental Assistance</u> The Marion Redevelopment and Housing Authority administers the HUD "Section 8" Housing Choice Voucher rental subsidy program that serves low-income

residents. There are about 250 households scattered throughout the county being served by this program with about 175 families or individuals on the waiting list.

<u>Housing Rehabilitation</u> Mountain CAP, Inc., the local community action agency, administers a minor home repair program that provides funds for emergency and energy-related home repairs. There are 75 to 100 families on the waiting list for weatherization funds, and others are on the waiting list for emergency home repairs, but the total grant funds per house is often not nearly enough to cover the cost of needed repairs. Sometimes these funds are combined with USDA Rural Development (formerly FmHA) funds through its 504 grant/loan program, which provides grants for elderly residents or low interest (one percent) loans for other eligible applicants. Smyth County receives funding from the Virginia Indoor Plumbing Program/Rehabilitation program, administered by the Mount Rogers Planning District Commission, to serve households without complete plumbing facilities. (About 3 to 4 houses per year are improved with these funds). District Three Government Cooperative (serving elderly residents) and a few church-related volunteer groups, including Project Crossroads, do minor home repairs mostly during the summer months.

In addition to these programs, the Town of Saltville has used CDBG funding in the past to rehabilitate homes in several neighborhoods. During the 1990's, Smyth County completed an extensive rehabilitation project in the Watson Gap (Poor Valley) section of the county to improve about 40 homes. The Town of Marion has also received CDBG funds to do a community revitalization project in the Gilmer Street neighborhood.

<u>Home Ownership</u> USDA Rural Development and the Virginia Housing Development Authority (VHDA) provide both single-family home loans and lending programs for multi-family housing developments. The Rural Housing Program provides for subsidized monthly payments with a minimum of one percent interest for home purchases. Rural Development continues to process about five loans each year in Smyth County. There is also an active Fuller Center for Housing (formerly Habitat for Humanity) group in Smyth County that constructs new homes for eligible families.

Summary of Problems and Opportunities

<u>Population Decline</u> Smyth County has not grown significantly in population since 1950. Although the county experienced a small spurt of growth during the 1970's, population declined from 1980 to 1990, and then only slightly increased from 1990 to 2000. The 2010 Census shows that the County has declined 2.6% since 2000. In addition to lower birth rates, young adults are continuing to leave the county presumably seeking better employment opportunities elsewhere. The majority of the population loss, however, is attributable to the lack of natural increase (births minus deaths). The household size continues to decrease, the population is getting older, and the school-age population is declining.

<u>Residential Development</u> Although the number of housing units in the county has increased over the last decade, there continues to be very little subdivision development and multi-family housing construction. The housing market appears tight, especially for affordable rental housing, and there is very little speculative building activity for middle-to-upper income single-family homes. The national recession and housing market drop is certainly evident in the number of new home permits, and in fact 2010 and 2011 were the lowest in any recent history. Limited suitable land and inadequate utilities are some factors that hinder development. The number of building permits per capita is the lowest in the region. The county revised its subdivision ordinance in 1996 to make

it easier to develop subdivisions with existing public road frontage. There is a need to encourage more moderate- and upper-income housing, and to encourage handicapped accessible elderly housing in the county.

<u>Affordable Housing</u> There is a lack of affordable housing in Smyth County, especially in the rental market. One in four (or higher based on recent estimates) renter-occupied households spend more than 30 percent of their income on housing costs. Generally, households with the lowest level of income in the county spend a higher proportion of their incomes on housing costs. There are some housing programs available in the county; however, there are long waiting lists for low-income housing assistance.

<u>Substandard Housing Conditions</u> Many homes in the county suffer from old age and deteriorated conditions. There is no good measure of these conditions available, although the 2000 Census reports that 136 occupied households in the county still lack complete indoor plumbing facilities. Based on newer estimates, this number has declined substantially, although there continues to be slow growth in newer homes and therefore, a large proportion of the housing stock is old and deteriorating. In addition, there are numerous more homes with unsafe and unsanitary living conditions. Some recent efforts have been made to obtain state funding for housing rehabilitation projects; however, the needs are far from being met with current resources.

<u>Manufactured Housing</u> Because of the lack of affordable housing opportunities, the county has seen a proliferation of manufactured (mobile) homes over the last 20 years. Manufactured homes now comprise more than one of every five housing units in the county. and this is continuing to increase annually as the majority of new housing starts are manufactured homes rather than conventional single-family homes. Although the manufactured units were required to meet federal standards in 1976, a number of units currently located in the county and some that request permits to locate in the county are pre-1976 models that do not meet the same safety standards. The county zoning ordinance that became effective January 2002 does provide some regulations on manufactured homes, however it currently does not distinguish between the age of the homes.

Population Projections

The following chart represents a population projection for Smyth County that assumes the growth of the County will continue to mirror past trends of the last decade.

	Projected Population	Actual Population	% Growth
1980		33,366	6.4%
1990		32,270	-3.0%
2000	33,340	33,081	2.2%
2010	33,800	32,208	-2.6%
2020	33,800		4.9%

The projection made in 1994 was for 35,000 persons by 2010, however this projection was based on assumptions of new industrial development and the completion of Route 58, which is no longer being planned A modified population projection was made of 33,800, however 2010 Census figures show that the county population was only 32, 208. The 2020 population projection is modified to 33,800,

POPULATION AND HOUSING GOALS

- To strive toward a steady, moderate population increase in the county, reaching 33,800 by 2020.
- To promote the development of decent, safe, sanitary, and affordable housing to meet present and future population needs.

Population Decline

Objectives:

- Decrease the out migration of young people from the county
- Promote the county as a "return location" for Smyth County and other southwestern Virginia natives, mostly for young and middle-aged adults
- Promote Smyth County as an excellent place to work, live, and raise a family

Strategies:

- 1) Increase the diversification of the local industrial base, particularly encouraging the creation of new higher-skilled, well-paying jobs. *(See also Economy)*
- 2) Improve educational and job training opportunities for high school, non-graduates, and unemployed persons.
- 3) Improve the educational opportunities for college and post-graduate programs. (*See also Quality of Life*)
- 4) Improve the cultural and recreational amenities offered in the county and encourage participation by young adults.
- 5) Encourage the development of a "progressive care" retirement facility and other elderly housing opportunities.

Lack of Residential Development

Objective: Increase the availability of housing by encouraging new residential development

Strategies:

- 1) Identify areas of the county on the future land use map best suited for residential development and coordinate infrastructure improvements (water, sewer, roads) that will provide incentives to developers.
- 2) Review the county Subdivision Ordinance following the Comprehensive Plan update to determine if revisions could be made that would reduce site development costs to developers without compromising the intent of the ordinance. Allowing "cluster development" which could reduce infrastructure costs should be considered.
- 3) Work actively with area builders and/or investors to encourage their participation in residential development projects.
- 4) Continue to instill a cooperative attitude among county officials and staff to encourage and assist developers.
- 5) Provide current information to developers concerning existing water and sewer services, and proposed improvements and a timetable for those improvements.
- 6) Encourage the development of multi-family housing, especially townhouse and condominium developments.

Affordable Housing

<u>Objective:</u> Increase opportunities for low and moderate-income households to be able to afford quality decent, safe, and sanitary housing

Strategies:

- 1) Encourage area builders to develop housing for low and moderate-income families through promoting available low interest loan and tax incentive programs.
- 2) Support local efforts to build new affordable housing through such agencies as the Marion Redevelopment and Housing Authority and non-profit programs like the Fuller Center for Housing group.
- 3) Promote the construction of modular housing (prefabricated structures) that meet the statewide building code standards as an alternative to manufactured (mobile) homes.
- 4) Support the possible manufacturing of modular homes in Smyth County through industrial recruitment efforts.

- 5) Sponsor a local workshop for area builders or interested investors on state and federal assistance programs for new construction of affordable housing.
- 6) Promote the construction of housing units designed to serve the elderly and handicapped.

Substandard Housing Conditions

Objective: Improve the substandard housing conditions in the county

Strategies:

- 1) Identify households in the county lacking indoor plumbing and seek assistance from available resources to provide plumbing to those homes. Disallow any exceptions for outdoor toilets in issuance of manufactured home permits or building permits for permanent homes.
- 2) Identify concentrated areas of substandard housing in the county and attempt to address those problems through available grant programs, such as the Community Development Block Grant program, Rural Development (USDA), and the Virginia Housing Development Authority programs.
- Coordinate housing rehabilitation efforts of the Marion Redevelopment and Housing Authority, Mountain CAP, District Three Governmental Cooperative, Mount Rogers Planning District Commission, and various church and volunteer programs, and combine resources when possible.
- 4) Consider the adoption of available tax incentive programs to encourage the rehabilitation of residential properties.
- 5) Consider the adoption of a housing maintenance code to require upkeep of all residential properties.
- 6) Work with local health department, county building official, and county fair housing officer to enforce all codes applicable to ensuring decent, safe, and sanitary housing.

Manufactured Housing

Objectives:

- Encourage well-planned and landscaped sites for manufactured home parks located in areas with adequate water and sewer systems (*See also Land Use*)
- Disallow the placement of manufactured homes in the county that do not meet federal construction standards
- Encourage the improvement of unhealthy and unsafe living conditions in existing manufactured home parks

Strategies:

- 1) Periodically review the Manufactured Home Park Ordinance to determine if revisions may be needed to improve living conditions in manufactured home parks or to improve administration of the ordinance. (Note: Strategy under Land Use section recommends incorporation of ordinance within zoning ordinance to alleviate administrative problems).
- 2) Consider the adoption of a housing maintenance code that would include existing manufactured home parks.
- 3) Develop an effective program to encourage the safe disposal of old, abandoned mobile homes.

III. ECONOMY

Labor Force and Employment

Like other rural localities, Smyth County's economic base has evolved from predominantly agricultural activity in its earlier history to a concentration of employment in the manufacturing sector by the 1970's and 1980's. An influx of several industries in the latter part of the 1980's helped to diversify the industrial base, however since the early 1990's, the county has experienced a decline in total employment, and especially in manufacturing. Table 3.1 compares Virginia Employment Commission (VEC) third quarter statistics for 2003 with that of third quarter2009.

Employment Category	Third Qtr 2003		Third Qtr 2009	
	Persons	Percent	Persons	Percent
Construction	870	6.5	536	4.6
Manufacturing	4 251	31.7	3,244	27.8
Wholesale Trade	270	2.0	252	2.2
Retail Trade	1,297	9.7	1,267	10.8
Transportation and Warehousing	208	1.6	230	2.0
Finance and Insurance	167	1.2	175	1.5
Professional/Technical Services	258	1.9	187	1.6
Health Care and Social Assistance	2,226	16.6	2,523	21.6
Accommodations/Food Service	582	4.3	702	6.0
Other	2,609	19.0	1,602	16%
Public Administration	666	5.0	695	5.9
TOTAL	13,404	100.0	11,683	100.0

Table 3.1Smyth County Non-Agricultural Covered Wage and Salary Employment by Industry
Third Quarter 2003 and Third Quarter 2009

Source: Va. Employment Commission

Total employment in the county decreased by 12.8 percent over the six-year period from 13,404 persons in 2003 to 11,683 persons in 2009. These numbers show the dramatic impact of the global and national recession which brought employment decreases especially in 2009. The most apparent change in employment over the period is the continued decline in manufacturing industry with the percentage of persons employed in manufacturing falling from 31.8% in 2003 to 27.8 % in 2009. This decline is due to the downsizing of employment, especially with manufacturing companies that have direct ties to the home building industry, such as kitchen cabinets, stair components, and other. Employment also decreased in construction and decreased slightly in wholesale and retail trades. On the other hand, the, health care, accommodations and food service, and public administration sectors increased employment and also their proportional share of the employment in the county. Health care and social assistance employment represents over 20 percent of the employment, and over five percent of the jobs in Smyth County are considered public administration.

Smyth County has continually been faced with cyclical unemployment, especially during the recessions of the early 1980's and early 1990's. According to the VEC, the unemployment rate was generally double-digit level from 1993 to 1996, but then decreased to a low of 4.3 percent in -2000. The plant closings that began in 1998 were in large part due to the competition from low-cost labor in Latin American and Asian countries. Those losses are reflected in the unemployment rates of 8.0 and 7.5 percent in 2002 and 2003, respectively, however unemployment rates for 2004 dropped to 5.1 percent, as several of the remaining industries in the county experienced job growth from 2004 through 2007, and unemployment stayed at or below five percent until 2008. Table 3.2 provides unemployment trend data for the county.

Year	Civilian Labor Force	Total Employed	Total Unemployed	% Unemployed
1993	17,845	15,745	2,100	11.8
1994	17,426	15,677	1,749	10.0
1995	17,718	16,008	1,710	9.7
1996	16,694	14,918	1,776	10.6
1997	16,518	15,224	1,294	7.8
1998	16,510	15,626	884	5.4
1999	16,528	15,551	977	5.9
2000	15,764	15,084	680	4.3
2001	15,497	14,513	984	6.3
2002	15,545	14,297	1,248	8.0
2003	15,975	14,770	1,205	7.5
2004	15,620	14,823	797	5.1
2005	15,738	15,020	718	4.6
2006	15,455	14,750	705	4.6
2007	15,165	14,350	815	5.4
2008	15,115	14,200	915	6.2
2009	14,956	13,244	1,712	11.4%

Table 3.2: Unemployment Rates – 1993 to 2009 - Smyth County

Source: Virginia Employment Commission (LAUS Unit and Bureau of Labor Statistics) Not Seasonally Adjusted

Unlike the 1980's when the workforce was expanding, the number of persons in the labor force during the 1990's and since 2000 has steadily reduced from a high of 17,845 in 1993 to a low of 14,956 in 2009. This decrease likely reflects some of the demographic trend that was mentioned in the last chapter regarding the decrease in the number of persons in the younger adult age brackets (15 year through 34 years old). There are significantly less job market entrants now than there were fifteen years ago. This trend could also reflect that less people are actively looking for jobs (due to retirement, disability, or discouragement) and therefore are not counted in the labor force number. The last row of figures shows the dramatic increase in unemployed persons due to the economic recession with unemployment rising back to double-digits in 2009. In addition, the total persons in the labor force continues to decline significantly over the long term.

Income

Monetary income to Smyth County residents is a key indicator of economic health of the community. The county has suffered like most of southwestern Virginia from lower income levels due to a lack of skilled, higher paying job opportunities. Table 3.3 compares two types of income measures for the county with that of the state from U.S. Census data. The 1999 figure is from the 2000 Census, while the updated figure is from the Census Bureau's American Community Survey (ACS) which provides three-year average estimates for 2006-2008.

	Smyth County 2006-08 (ACS) Census		Vir	ginia
			2006-08 (ACS)	1999 Census
Median Household Income	\$35,201	\$30,083	\$61,084	\$46,677
Median Family Income	\$43,193	\$36,392	\$72,733	\$54,169

Table 3.3: Income Levels for County and State, 1999 and 2006-08 Estimates

Source: U. S. Census. Family income represents income from only those households with more than one related family member.

By all indicators, the county income level continues to be far surpassed by the state. (Note: the state's income level is inflated by Northern Virginia's large, wealthy population). Median household income in Smyth County is 57.6 percent of the state median household income and the percentage of growth in household income was much lower than the state. The county's household income rose by just 17 percent while the state's increased by 31 percent over the period.

Other indicators of the general income level of the county is the per capita personal income and the adjusted gross income (AGI) from married couples' tax returns which represents total income of married couple residents before any exemptions and/or deductions. AGI for married couples is a good indicator of average family income. Table 3.4 provides data on per capita income and adjusted gross income (AGI). The latest figure for AGI is 2007.

Per Capita Income and Adjusted Gross Income (AGI) for Married Couples - Smyth County				
2007 and 2001				
	2007	2001	Change	

Table 3.4:

	2007	2001	Change
Personal Per Capita Income	\$ 25,352	\$20,276	25.0%
Median AGI for Married Couples	\$ 41,754	\$33,223	20.4%

Source: U.S. Bureau of Economic Analysis and Va. Department of Taxation

The personal per capita income (PCPI) of Smyth County ranks 88th out of 105 counties in Virginia and is 61% of the state average PCPI of \$41,727 and 66% of the national average PCPI of \$38,615. These two measures of income in Smyth County grew 25.0 percent and 20.4 percent, respectively, over the period shown. The average annual rate of growth in PCPI from 1997-2007 was 3.9%, as compared to 4.7 percent for Virginia and 4.3 percent for the US.

It is important to view how income is distributed in a community. Table 3.5 provides data on the household income distribution in the county.

 Table 3.5: Distribution of Household Income in Smyth County, 2006-08 ACS estimates and

 2000 G

2000 Census				
Income Category	2006-08 A0	CS estimates	2000 Census	(1999 income)
Less than \$14,999	2,874	21.5	2,933	21.6
\$15,000-\$24,999	2,021	15.1	2,629	19.5
\$25,000-\$34,999	1,750	13.1	2,290	17.0
\$35,000-\$49,000	2,464	18.5	2,348	17.4
\$50,000-\$74,999	2,333	17.5	2,134	15.8
\$75,000-\$99,999	1,084	8.1	634	4.7
\$100,000 or more	811	6.0	539	4.1
TOTAL Households	13,337	100.0	13,497	100.0

Source: U. S. Census 2000 and American Community Survey, 2006-2008

In Smyth County, more than one of every five households have annual incomes of less than \$15,000, and that has not changed since the 2000 Census, according to average estimates from the American Community Survey. In 1999, over forty percent of the households had incomes under \$25,000, but this has decreased somewhat to just over 36 percent. This still represents a significant number of persons of low and moderate income. It appears from the newest data that the number of households in each category have "shifted-up", except for the very low income. Only 8.1 percent of households in 1989 had income of \$50,000 or more, while that number is now 31.6 percent – up from 24.6 percent in 1999, but the percentage of households making less than \$15,000 has not decreased.

Another indicator of income distribution is poverty status of the population. Table 3.6 provides data on persons and families below poverty level for the county with comparative data for the state, also using the ACS Data from 2006-2008 to compare with the 2000 Census.

	2006-08 estimates	%	1999 Number	1999 %	State % -
	(ACS)		(2000 Census)		1999
Individuals	6,030	18.8	4,307	13.3	9.9
Individuals 65 & up	713	12.7	725	14.0	8.9
All Families	1,199	13.3	947	9.9	7.0
Families with children under eighteen	869	26.1	632	14.1	10.8
Female house-holder (FH) families	522	29.4	369	27.4	22.5
FH families with children under eighteen	457	45.9	306	37.8	29.1

Table 3.6: Poverty Status Data, 1999 and 2006-08 Estimates, Smyth County and Virginia

Source: U. S. Census Bureau (ACS estimates and 2000 Census)

As shown by the data, the "poverty rate" in Smyth County is higher than that for the state and has increased substantially since 1999. Although there were some improvements and reduction in the numbers from 1989 to 1999, it appears there has been little to no positive change since then. The number of individuals below the poverty level has increased from 13.3% to 18.8% over the period. The number of families below the poverty level with children under eighteen has increased from 632 (14.1 percent) to 869 (26.1 percent) since 1999, and the proportion of female householders with children under eighteen has increased from 306 (37.8 percent) to 457 (45.9 percent). This pattern causes serious concerns regarding the economic health of the county.

Another measure of income in the county is wage rate information from the VEC. Table 3.7 indicates the change in average weekly wage rates since 1998.

	Table 3.7: Average Weekly Wages-County, R	egion, State 1998, 2003, and 2009
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Area	1998	2003	2009	% change 05-09
Smyth County	\$418	\$498	\$597	19.9%
Planning District	\$418	\$496	\$602	21.4%
Virginia	\$603	\$741	\$928	25.2%

Source: Virginia Employment Commission

Smyth County's wage rates remain shown in Table 3.7 remain well below the state average as would be expected as state rates include the urban areas of Northern Virginia, Richmond, and Tidewater. The wages locally are not keeping pace with the growth rate in statewide wage levels, but they have mirrored that of the Mount Rogers planning district. Rates for the county rose by 19.9 percent from 2003 to 2009, growing at about the same rate as the previous five-year period, but at a slightly lower rate than that for the region. (Statewide growth was higher at 25.2 % for the same period).

<u>Tax Base</u> Real estate and personal property in Smyth County represent the two major revenue generating sources of income available to the county. These two indicators provide a good measure of the overall economic base and relative wealth of its citizens. The following charts compare real estate fair market values and personal property values between 2000 and 2008.

	2000	2008	% Change 2000-2008
Fair Market Value (\$000s) Smyth County	\$ 922,492	\$ 1,255,202	36.1%
Fair Market Value Per Capita – Smyth County	\$ 27,886	39,342	41.1%
Fair Market Value – Virginia (\$000s)	\$413,823,720	\$1,054,196,139	155.0%
Fair Market Value Per Capita – Virginia	\$58,458	\$135,691	132.1%

Table 3.8: Fair Market Values of Real Estate, 2000 and 2008, Smyth County and Virginia

Source: Va. Department of Taxation, Annual Report

As can be seen in the above table, the growth rate in real estate fair market values of 36.1% is a much lower rate than the statewide rate of 155.0%. The 2008 fair market value per capita in Smyth County is \$39,342, well below the state average of \$ \$135,691. This is a much different picture from the rates of growth between 1990 and 2000 when the state average percent change was 28.7%, Smyth County was almost double this at 51.0%. It is apparent with the real estate boom that occurred nationwide, that market values skyrocketed statewide over the past eight years (likely ending with the market decline beginning in 2007), but Smyth County did not experience that level of real estate value upswing.

Personal property values grew at a much slower rate than real estate values over the decade. Table 3.9 provides the data on personal property values and values per capita for 1990 and 2000.

	2000	2008	% Change 2000-2008
Total Personal Property Value (\$000s) – Smyth County	\$196,600	\$ 222,358	13.1%
Personal Property Value Per Capita – Smyth County	\$ 5,943	\$ 6,969	17.3%
Total Personal Property Value (\$000s) - VIRGINIA	\$52,842,421	\$73,386,250	38.9%
Personal Property Value Per Capita - VIRGINIA	\$7,464	\$9,446	26.6%

Table 3.9: Personal Property Values, 2000 and 2008, Smyth County and Virginia

Source: Va. Department of Taxation, Annual Report

The increase in the total personal property value is no doubt due to the rising cost (value) of automobiles and the increase in the number of vehicles. It should be noted that the basis used by Smyth County for determining personal property value is the "loan value" which is about 77 percent of the retail value. (Some localities use retail value or "trade-in" value -- both of which are generally higher than loan value). The personal property value per capita grew at a slower rate than the total, reflecting the increased total value juxtaposed with the slow rate of growth in the county's population from 2000 to 2008. Smyth County's rate of growth in total value is only one-third of the rate of growth statewide. Also, the value per capita is considerably less than the statewide per capita.

Both of these tax base indicators, show that Smyth County has less local taxable resources than the state average for localities in Virginia, and therefore more fiscal stress on the county budget.

Agriculture

The 2006-2008 American Community Survey estimates there are only 162 persons (16 years and up) in the farming, fisheries, and forestry occupations in Smyth County, as compared to 321 in 2000 and 474 in 1990. Although the number of persons employed in agriculture in Smyth County is small and continues to decrease, the economic impact of agriculture cannot be ignored. In 2007, 127,307 acres of land were devoted to farms from which \$ 26.1 million in farm products were sold.

Table 3.10 provides some comparative data from the 1997, 2002, and 2009 Census of Agriculture. (Note: The trend showing farm acreage increasing from 2002 to 2007 may be a function of some changes in the definition of farmland, in addition to purchases of land by new owners that were not previously in farm use).

	1997	2002	2007	% Change 97- 07
Land in Farms (Acres)	125,116	124,884	127,307	1.8%
Number of Farms	774	877	761	-1.7%
Average Farm Size (Acres)	162	142	167	3.1%
Total Market Value of Products Sold	\$19,579,000	\$21,873,000	\$26,108,000	33.3%
Average Per Farm	\$25,295	\$24,941	\$34,307	35.6%

Table 3.10: Agricultural Data - Smyth County

U.S. Census of Agriculture, 1997,2002, and 2007 (latest data available)

The total number of farms in the county decreased by over 19 percent from 1987 to 1997, but that decrease dropped off for the next decade of 1997 to 2007. The farms on average are larger in size and the market value of products sold has increased. The average market value of products sold per farm increased by 40% between 1987 and 1997; and then again 35% from 1997 to 2007. The majority of farm sales are from livestock, primarily dairy products and cattle. Livestock sales accounted for 92% of the total market value of products sold. Crop sales accounted for the other 8%.

Manufacturing

The manufacturing base in Smyth County accounts for the largest concentration of employment and private investment in buildings and equipment. The manufacturing sector has undergone changes, particularly since the late 1990's.

There has been a continued shift in manufacturing jobs away from the traditional apparel and woodworking employment. In fact, there only remains two company in apparel manufacturing and five in woodworking (but not furniture). This shift is well documented by the closing of eleven plants in Smyth County from1998-2003. The gain in manufacturing jobs has been in the transportation-related equipment, which would include such major employers as General Dynamics, (TRW, and Utility Trailer. This category of manufacturing employment experienced gains during the early 1990's, but the data for third quarter 2009 shows the impact of the national recession on those jobs. Transportation equipment manufacturing still ranks as the largest category. Unfortunately, a concentration in manufacturing of building components (cabinets, stair parts, dimension board, and door and window components) has resulted in a decrease in employment in those companies that were affected by the dramatic decline in the housing market. The loss of employment tied to the housing market resulted in a rise in unemployment county-wide.

Retail Trade

A good indicator of the health of the local retail trade industry is taxable retail sales data. It portrays the size and volume of the retail trade industry and demonstrates how much revenue is being redistributed in the local economy via sales tax revenues. Taxable retail sales reflect the total taxable value of retail goods exchanged within a locality.

Table 3.12 displays retail sales data for the county comparing 2000 with 2009 and the percent change with that of the state.

			Smyth County	Virginia
	2000	2009	% Change 2000-2009	% Change 2000-2009
Total Retail Sales (\$000s)	\$178,900	\$187,575	4.8%	25.1%
Retail Sales Per Capita	\$5,408	\$5,843	8.1%	12.3%

Table 3.12: Retail Sales, 2000 and 2009

Source: Va. Department of Taxation, Annual Report

As shown, the county's retail sales have increased by 4.8% percent over the period as compared to over 25 percent for the state. The rate of increase in retail sales per capita was slightly higher at 8.1% percent, while the state's per capita also increased but at a lower rate than total retail sales. More detailed information is available on retail sales by the type of business category.

Table 3.13 provides this data and compares the years 2002 with 2009 for trends for Smyth County and the other localities in the Mount Rogers Planning District. As you can see from this data, Smyth County lags behind other localities in the region in terms of growth in retail sales over the period. All localities grew in taxable sales over the period more than Smyth County, except Grayson County which experienced a drop in retail sales.

Locality	2002	2009	2002-2009	Per Capita
Bland	12.5	15.5	24.0%	\$2,282
Carroll	111.8	132.9	18.9%	\$4,577
Grayson	42.6	35.3	-17.1%	\$2,235
Smyth	170.8	187.6	9.8%	\$5,911
Washington	444.5	601.6	35.3%	\$11,347
Wythe	279.7	315.7	12.9%	\$10,936
Bristol	300.8	339.8	13.0%	\$19,209
Galax	161.3	181.5	12.5%	\$26,381
REGION	1,524.0	1,809.9	18.8%	\$9,535

 Table 3.13: Regional Taxable Sales

Source: Va. Department of Taxation, <u>Taxable Retail Sales</u>

Tourism

The tourism industry is often an overlooked element of the local economy. Smyth County, with the presence of Interstate 81 and its proximity to state and federal recreational attractions, benefits economically from tourism. Table 3.15 provides a glimpse at travel-related data including expenditures and jobs, comparing 2000 and 2008 (the latest data available).

			Smyth County	Virginia
	2000	2008	%Change 2000-2008	%Change 1995 - 2000
Total Travel Expenditures (\$000s)	\$17,368	\$22,220	27.9%	27.8%
Travel-Generated Payroll (\$000S)	\$3,436	\$4,370	27.2%	10.6%
Travel-Generated Employment	239	251	5.0%	3.8%
State Tax Receipts (\$000s)	\$936	\$1,328	41.9%	14.5%

Table 3.15: Travel Data for Smyth County

Source: U.S. Travel Center, Travel in Virginia report

Although the county experienced decreases in travel-related expenditures from 1990-2000, those numbers have increased by almost 28% since 2000. The county's rate of growth has kept up with the state growth rate in travel expenditures. Travel generated jobs have increased very slightly over the same period. In addition, sales tax receipts have increased at a much higher rate than at the state rate. Another measure of tourism dollars in the community is the retail sales data for restaurants and motels. Table 3.16 indicates that while restaurant establishments and sales have increased between 2002 and 2009, hotel/motel receipts have decreased (even though the number of motel establishments increased). Sales from restaurants have increased by 45 percent from 2002 to 2009.

	2002	# of	2009	# of	% Change
Business Type	Taxable Sales (\$000s)	Establishments	Taxable Sales (000s)	Establishments	in Sales
Restaurants	\$15,712	64	\$22,806	-57	45.1%
Hotels/Motels	\$3,789	14	\$3,012	18	-20.5%

Source: Va. Department of Taxation, Taxable Sales Data

These two different sources of travel-related information seem to conflict in that the travel expenditures are up in the estimates in Table 3.15 while the hotel and motel sales has significantly decreased from 2002 - 2009 as shown in Table 3.16.

Certainly, the potential exists in Smyth County for more tourism development if existing attractions can be promoted and improvements made. Major improvements made at Hungry Mother State Park have brought additional visitors to the area. The establishment of the Museum of the Middle Appalachians as a museum of natural and cultural history in Saltville has provided a much-needed economic boost to that community.

Commuting to Work

The 2000 Census data on commuting to work reveals that Smyth County is a major supplier of jobs for the region. It is the only county in the Planning District that has a net incommuting rather than out-commuting. Map 3.1 provides the 2000 data on commuting patterns.

Smyth County is a primary job location for Washington County residents because over 450 more workers from Washington County go to Smyth County to work than vice-versa. Grayson, Tazewell, and Wythe County all have more in-commuters to Smyth County than out-commuters from the county. Bristol, Virginia and Sullivan County, Tennessee are stronger out-commuting locations for Smyth County residents than in-commuting origins. Although this data reveals that Smyth County has a strong employment base, the county does rely on outside locations for jobs for its residents. At the same time, the county's employers benefit from a supply of labor available beyond the county's boundaries.

There remains a concern that may be evidenced in this data in that many workers choose to live in Washington County although their place of work is Smyth County. The reasons for this trend may be related to the supply of housing and the "quality of life" amenities available. The provision of adequate housing and quality of life amenities (addressed in other sections of this Plan) are important in attracting both employers and residents to the county.

There is no more detailed data since 2000 in regard to area commuting patterns, except the following: Based on Census estimates for 2006-2009 from the American Community Survey, almost 78% of Smyth County residents work inside the county, while 22 percent traveled to work outside the county. This is still a higher rate of "in commuting" than the neighboring residents in Washington County (67% work inside the county) and Wythe County (73% work at home). The data does not provide the degree of detail to compare with the 2000 Census data shown on the commuting pattern map. (Map 3.1).

Summary: Problems and Opportunities

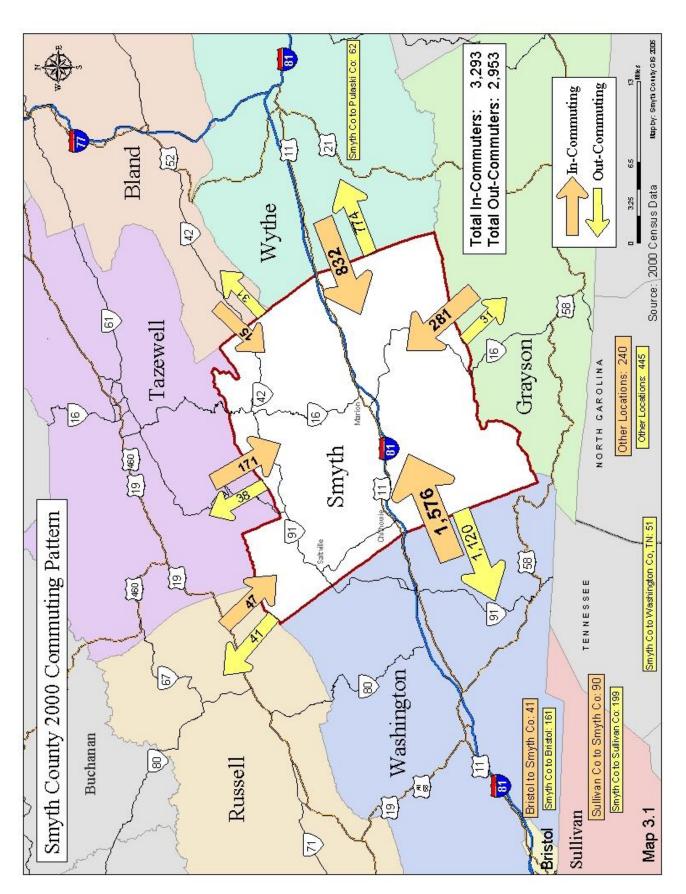
<u>Agricultural Economy</u>: Agriculture in Smyth County represents an important sector of the local economy. In2007, \$ 26.1 million in farm products were sold from farms in the county, representing a 33 percent growth from 1997. The average market value of products sold per farm has increased by over 35 percent over the ten-year period. (Interestingly, the amount of acreage in farms has increased, although the number of farms has decreased). Most of the farm income in Smyth County is from livestock. Although various efforts have been made in the past to diversify farm production, particularly with the introduction of various vegetable crops, no significant success has yet materialized. It is difficult for farmers to market their products due to competition from larger farming regions out-of-state that produce much larger volumes of products. There has been some limited growth in "niche" or specialty farming such as viticulture, aquaculture, and Christmas tree farming, and opportunities exist for further development of that agricultural sector.

<u>Industrial Development</u>: Despite significant job losses experienced due to numerous plant closings from 1998 - 2003, manufacturing remains the predominant economic sector in Smyth County. Industries that survived that downturn period went through a period of growth and high employment over the period 2000-2007, before experiencing the brunt of the recession beginning in 2008 and continuing through 2009. The structure of the manufacturing base has

shifted from apparel and furniture goods to a concentration in the production of transportation equipment, metal components, and home building components. Existing industries rely on more advanced technology in order to stay competitive which means employees need to continue to learn new skills. The county needs to support the growth of its existing industry as its top priority, but also needs to continue to diversify the economic base by attracting new jobs.

<u>Commercial Development</u>: Smyth County continues to suffer limited commercial development as was identified as a problem by the <u>Smyth County 2003</u>: <u>A Comprehensive Plan</u>. Retail sales data indicate that the percentage of growth falls well below the statewide percentage of retail sales growth, which is not surprising considering the growth occurring in urban areas of the state. Perhaps more telling is the comparison of the Smyth County retail sales per capita to adjoining counties. This figure is much lower than our other Interstate neighbors, Washington County and Wythe County. Stagnant population growth and limited area for major developments due to terrain and public services hinder the county's commercial development. The county has the potential to attract more commercial growth due to the Interstate traffic, recent manufacturing employment growth, and the viability of the three towns located in the county.

<u>Tourism</u>: Smyth County has experienced increases in travel-related expenditures over the last five-year period (in which data is available). Travel-generated payroll and travel-related jobs increased slightly over the same period. The county experienced a higher rate of growth in total travel-related expenditures than the statewide growth. Existing attractions, such as the state park and the National Recreation Area, generate tourist dollars. Several projects in the county seem to have had a positive impact on increasing tourism, including the H.L. Bonham Regional Tourism Center at Chilhowie, the Lincoln Theatre in Marion, and the Museum of the Middle Appalachians in Saltville. The county needs to acknowledge the merits of tourism, recognize it is a vital component of the area's economy, and take actions to encourage tourism development.



ECONOMY GOAL

• To stabilize, diversify, and expand the county's economic base to provide employment opportunities for all and to increase income levels in all sectors of the local economy

Agriculture

Objective: Maintain the viability and improve the diversity of the agricultural industry in the county

Strategies:

- 1) Recognize agriculture as a viable industry in the county and an integral part of the county's economic base.
- 2) Support efforts of local farmers to grow a variety of farm products and encourage cooperative marketing efforts.
- 3) Promote the success of retail farmer's markets in suitable locations in each of the three towns in the county through cooperative efforts with the Chamber of Commerce, area businesses, the Cooperative Extension Service, and area farmers. (Farmer's markets now exist in Marion and Chilhowie.
- 4) Support the expansion of agricultural-related businesses located in the county, especially "niche" farming like nurseries, viticulture, and agri-tourism.
- 5) Encourage the development of aquaculture activities and support the Virginia Tech Aquaculture Research Center at Saltville.

Industrial Development

Objectives:

- Increase the diversification of the local industrial base, particularly encouraging the creation of new higher-skilled, well-paying jobs
- Continue coordination efforts among the county, the towns, and other entities involved in economic development
- Promote existing industries and encourage their expansion and increased productivity

Strategies:

1) Assist existing companies in Smyth County in their workforce development needs by working with community colleges and the local school system to develop new training strategies

- 2) Promote the available training assistance provided through the Virginia Department of Business Assistance and other outsides sources.
- 3) Continue ongoing efforts to develop quality industrial sites and reserve those sites for industrial development through zoning and public ownership, if possible. Continue to promote joint efforts with the towns and adjoining counties for industrial site development.
- 4) Organize and maintain an active industrial marketing program for the county in conjunction with the county's community preparedness process and in cooperation with ongoing efforts of Virginia's Corridor and the Virginia Economic Development Partnership.
- 5) Identify and target particular types of industries--those that would be complementary to the existing industrial base but would also offer needed diversity--to actively recruit to the county. Focus primarily on small to medium size companies and those types of industries that are less susceptible to recessions.
- 6) Continue an active industry visitation program and have a consistent visitation team including local government representatives (this group is no longer active). Support the rejuvenation of a local industry managers group with business sector leadership.
- 7) Establish one "point-of-contact" for industrial development for the county and an active contact team to meet with prospective industrial clients
- 8) Help existing industries to obtain assistance for business development, export marketing, financing, and product research and development. Identify small local firms with growth potential and provide them with needed information.
- 9) Provide support and assistance to prospective "start-up" small businesses and manufacturing firms by directing them to available resources such as financing and technical assistance.
- 10) Target certain types of non-manufacturing jobs that may help economic diversification such as distribution and warehousing, and data processing and "back-office" computer services industries.
- 11) Encourage the state and federal government or private companies to locate "back office" operations in the county or surrounding area with technology-based jobs for local residents.
- 12) Consider the establishment of a foreign trade zone or sub-zones in Smyth County that would provide incentives for companies involved in international trade.
- 13) Encourage a study to consider the development of an intermodal transportation facility in Southwest Virginia.

14) Consider the potential location of a federal prison as an economic development strategy. (State prison located in Grayson County since 2005 plan review)

Commercial Development

<u>Objective</u>: Encourage new and expanding commercial or retail establishments which will add increased tax base and employment and will provide needed goods and services to county residents.

Strategies:

- 1) Support efforts of the three towns to make physical improvements and undertake marketing programs needed to increase downtown business activity. Encourage and promote the continued designation of Marion as a "Main Street" community under the Virginia Main Street Program and promote other similar revitalization efforts in Chilhowie and Saltville.
- 2) Promote commercial development in the county at strategic locations, particularly interchanges and major intersections (*See also Land Use strategies*)
- 3) Assist prospective businesses in locating suitable sites or buildings. Inventory and keep current information regarding available commercial space.
- 4) Actively recruit commercial development to the county, particularly focusing on family restaurants and hotels/motel establishments
- 5) Investigate the feasibility of establishing an outlet center for locally produced products
- 6) Work with the Virginia Department of Transportation to relocate its maintenance shops at Marion and Chilhowie to other suitable places, thereby allowing commercial development at the current sites.

Tourism

Objective: Promote the development of the tourism industry in the county

Strategies:

- 1) Actively work with the Smyth County Tourism Association and Chamber of Commerce to continue to develop and support the H.L. Bonham Regional Tourism Center located near the Interstate in Chilhowie.
- 2) Promote and support the Museum of the Middle Appalachians in Saltville as a major tourist attraction, the Salt Trail project from Glade Spring to Saltville, and the Settlers Museum near Groseclose

- 3) Encourage the development of tourism amenities such as lodging establishments (including "bed and breakfasts"), shopping attractions, and restaurants
- 4) Work with the U.S. Forest Service and Hungry Mother State Park to actively promote the use of federal and state recreational facilities by tourists
- 5) Promote Smyth County to travelers through participation in regional marketing efforts.
- 6) Support the Tourism Association's partnership with the Crooked Road and the Roundthe-Mountain regional organizations, promoting local music and crafts

IV. LAND USE

Existing Land Use

As is true with most of Southwest Virginia, physical factors have played a significant role in the development of Smyth County and its land use. Early settlement took place in the fertile limestone valleys along the three major streams in the county: the North Fork of the Holston (Rich Valley), the Middle Fork of the Holston, and the South Fork of the Holston. Brushy Mountain, Walker Mountain, Clinch Mountain, and Iron Mountain were and continue to be major obstacles to development.

The historic Wilderness Trail meandered down the central valley between Walker Mountain and Brushy Mountain in route to Tennessee, and to Kentucky through Cumberland Gap. Along this trail, settlements began to grow, and the Wilderness Trail became the Wilderness Road. Later it was followed by the Norfolk and Western Railroad. U.S. Highway 11 (Lee Highway) was constructed, followed by Interstate 81 which was completed in 1963. Both of these roadways parallel the path of the Wilderness Road.

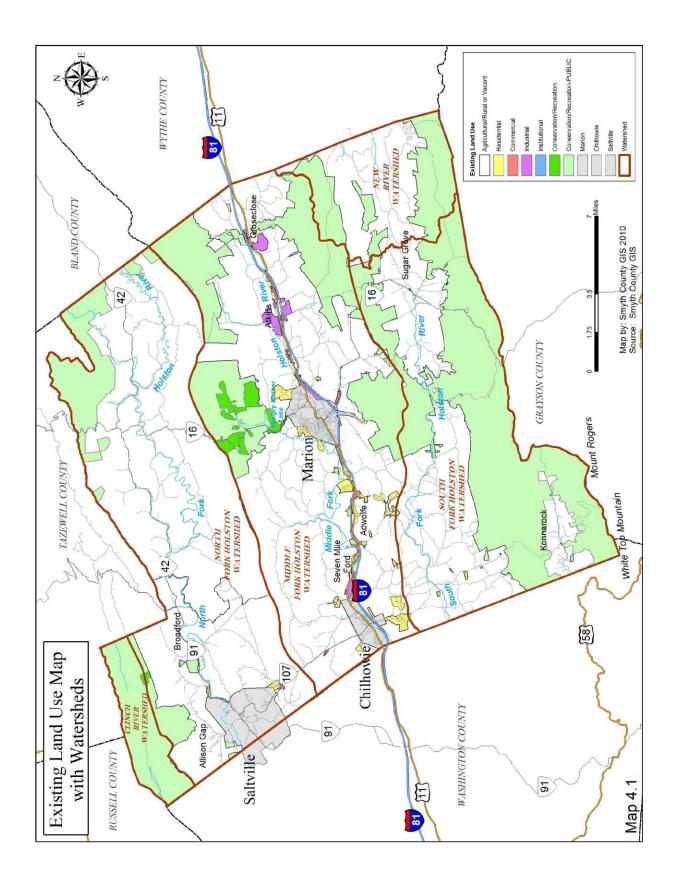
Despite the fact that road improvements have opened up other areas of the county, the concentration of development is found along the Route 11/Interstate 81 corridor. The following section briefly describes the existing land use in the county by drainage area and discusses development patterns and land use trends. Map 4.1 shows existing land use.

<u>Clinch River</u> Only a very small section of the county just south of Clinch Mountain lies in the drainage area for the Clinch River. This area is largely forested and in public ownership, although there is private access to a small area of recreational homes on Flat Top Mountain.

<u>North Fork Drainage Area</u> The developed area in this drainage basin is the Town of Saltville and surrounding areas. Located eight miles north of Chilhowie, and accessible by VA. Route 107, Saltville's early development was influenced by the nearby natural resources of salt and gypsum. The town was developed largely as a company town by the Mathieson Chemical Corporation, which used the salt in its production of various chemicals. The town is characterized by predominantly single-family homes (usually two-story frame and many similar in style) on small lots.

The town has a downtown core of businesses and a few manufacturing operations at various locations. Most of the former Olin property has been converted to other uses or is vacant. Several densely populated areas outside the town limits are considered part of the Saltville development area. They include Allison Gap to the north, McCready and North Holston to the northeast (along Route 91) and Pleasant Heights, a large subdivision to the south of Saltville. All of these areas are served by a public water source (either the town or county), but they do not <u>all</u> have public sewer service.

The upper North Fork of the Holston River Valley above the Saltville area can be described as gently rolling terrain containing a mixture of very low-density residential development and agricultural lands. The North Fork "splits" the valley into two parts--Rich Valley to the south of the river is an elevated valley characterized by large farming operations and scenic beauty, while north of the river are the winding creek valleys through which Va. Route 42 passes going from Saltville to Bland County. This area contains scattered housing and a few small business establishments. Other than the scattered housing in the communities of Chatham Hill and Nebo, there is no development in this area of the county.



<u>Middle Fork of the Holston Drainage Area</u> The major area of development in Smyth County is the Interstate 81 corridor from Atkins to Marion and from Seven Mile Ford to Chilhowie. This area has the majority of the commercial, industrial, and residential land uses in the county. Atkins has developed as an industrial area due to the railroad and Highway 11, which run closely parallel through a narrow valley. The extension of water and sewer to the area in the mid-1980's has allowed the expansion of industrial land use to the south side of the interstate near Nicks Creek. Nine new industries have located in or near the 130-acre Mountain Empire Industrial Park since 1985, greatly increasing the amount of land devoted to industrial use in the county. Atkins also contains other ancillary land uses related to the industries (including two trucking terminals), wholesale distribution facilities, small commercial businesses, public uses (elementary school, post office) and residential development. A large portion of the housing stock in Atkins is manufactured (mobile) homes predominantly located in poorly designed mobile home parks. The I-81 interchange at Atkins (Exit 50) has become a strategic location for commercial development with two convenience stores, a motel, and a small car dealership/auto repair shop. Some of the land area at the interchange is undeveloped and available.

West of Atkins lies the Town of Marion, the largest incorporated town in the county. Although located along the Middle Fork of the Holston River, the Town's development is limited by the surrounding mountainous terrain. Industrial land uses are generally clustered near the railroad or the Interstate; commercial development has expanded from downtown eastward along four-lane Route 11 (North Main St.); and residential uses are located throughout town. Currently, Smyth County Community Hospital is developing a new facility just outside the town limits near Exit 47. The Town of Marion has a relatively low proportion of manufactured housing as compared to the other incorporated towns and the unincorporated portion of the county.

The Seven Mile Ford area is an unincorporated community located along Route 11 and the Middle Fork of the Holston (approximately seven miles from Marion, thus the origin of its name). Predominantly residential in land use, Seven Mile Ford also includes several small businesses (general store, restaurant, farm machinery sales) along the highway, as well as a concentration of mixed land uses at the interstate interchange. Those land uses (all of which do not necessarily depend on interstate traffic) include a motel, a fraternal lodge, and a single-family subdivision on the southside of the interstate, and an RV campground, a retirement home, an apartment complex, and the county Career and Technology Center on the north side of the interstate.

The presence of public sewer and water service (from the town of Chilhowie) as well as available open land, was a major factor in this area's development. Aside from the apartment complex, the housing in Seven Mile Ford is predominantly single-family and varies in age. A relatively large subdivision (Deerfield Subdivision) was developed between Route 11 and I-81 around the late 1960's.

The corridor between Seven Mile Ford and Chilhowie has a mixture of farm uses, industrial uses, and scattered residences. Several major manufacturing plants were located in this area until a series of plant closings occurred from 1998- 2002. Of the five industrial buildings in the area, one remains vacant, one has been converted to commercial use (flea market) and one has been converted to an apparel manufacturing facility. The last building is now occupied by American Wood Fibers, which utilizes the by-products of local wood manufacturing facilities. The area contains potential industrial land now being farmed. Scattered residences occur along the roadway, until one approaches Apple Valley Road (Rt. 638) near the Chilhowie Town Limits and the Chilhowie Elementary School. On this road, there is a dense concentration of mixed housing types, including a 48-space mobile home park and a newer subdivision containing mixed housing types (single-family and multi-family). Apple Valley Road is served by public water and sewer.

The Town of Chilhowie is located at the western edge of the county where the central valley broadens, and the surrounding terrain is gently rolling as opposed to mountainous. Chilhowie's commercial core has shifted from a few blocks of two-story buildings along the railroad to more "strip commercial" development along U.S. Route 11 (generally east of Route 107), including a shopping center. Industrial land use in the town consists of one apparel factory on Lee Highway, a building component assembly operation in the former Buster Brown building, and an industrial area on the west end of town adjacent to the interstate, containing three industrial buildings and some vacant land. Power Distribution has recently remodeled and constructed a 60,000 square foot addition to one of the vacant buildings. In addition, a forty-two-acre tract of land on the east side of town was developed by the county and town over ten years ago and named "Deer Valley Industrial Park." The park contains two industries, and one small vacant tract of land.

Residential neighborhoods in the Town of Chilhowie are predominantly located north of Route 11. Most of this land is in low-density single-family homes, however two large, manufactured home parks are located on the western edge of town. The Town of Chilhowie provides water service to a large area south of the town and this area has developed residentially. A large subdivision, Greenhill Subdivision, and other smaller subdivisions are located off Route 762. The county has recently completed a public sewer project in this neighborhood. In addition, a large manufactured home park is located just south of the interstate on Overlook Drive. Since 2005, a new development has been completed, Colefarm Estates. Additionally, an older development, Chestnut Ridge, has been revived with the road planned to be taken into the VDOT road system.

South Fork of the Holston Drainage Area The developed areas in the South Fork drainage area consist of the unincorporated community of Sugar Grove, the Thomas Bridge/Adwolfe area, and the St. Clair Bottom and St. Clair Creek communities. Sugar Grove has historically been a community center for the surrounding farming community in Rye Valley, a rolling fertile stream valley. The community, located along Route 16 southeast of Marion, consists of predominantly single-family housing, several small businesses, post office, elementary school, and several small mobile home parks. An industrial facility once operated by Brunswick Corporation as a munitions testing, and manufacturing plant was located in Sugar Grove. The operation is now dormant, but the land has been divided into smaller portions and is being used by several smaller businesses. The Sugar Grove community is served by a small community water system operated by the Rye Valley Water Authority, but no sewer service is in place. Several large farm operations exist in the vicinity of Sugar Grove. Also nearby is a maintenance operations center for the U.S. Forest Service.

The Thomas Bridge/Adwolfe area is a broad unincorporated area located southwest of Marion. Due largely to the establishment of a community (private, nonprofit) water system in the 1960's, the availability and gently rolling terrain of the land, and accessibility to U.S. 11 and I-81, the area has seen gradual growth in residential development. Although several small businesses and other land uses exist, the majority of the area is a mix between low-density residential development along the secondary roadways, and agricultural uses. Five major subdivisions exist in the Adwolfe and Thomas Bridge sections, while development has also been characterized by the location of homes on individual lots along the roadways rather than subdivision development. Little, if any, multi-family housing exists and the mobile homes in the area are located more on individual lots than in park developments. In 2010, a small subdivision named Beasley Lane was created in the Adwolfe area.

The St. Clair Creek area is a linear stretch of homes along Route 600 at the foot of Iron Mountain. This area is served by public water. Compared to the scattered development along most of the rural roads in the county, this area exhibits a denser housing pattern. A few commercial establishments serving area residents are interspersed among the single-family conventional homes and some manufactured homes. A small subdivision, McClure Estates, has been developed in this area. Additionally, in 2010, two small subdivisions, South Fork Crossings and Whitetop Ridge, were developed.

As a tributary of the South Fork of the Holston, Big Laurel Creek drains the extreme southwestern portion of Smyth County, known as Laurel Valley. This area includes the intersection of Route 600 and Route 603 (at Weaver's Store) and scattered homes along Route 603 eastward toward Troutdale or westward toward Damascus in Washington County. This area is referred to as Konnarock, a small community located partially in Washington County. The upper end of Laurel Valley is located in the Mount Rogers National Recreation Area (NRA) and includes Grindstone Campground. Route 600 continues southward through Elk Garden and into the Whitetop community in Grayson County and serves as a major transportation access connecting Interstate 81 to the NRA and the Grayson Highlands area.

<u>New River (Cripple Creek) Drainage Area</u> There is a small section in the southeastern corner of the county that is a part of the Cripple Creek drainage area, a tributary of the New River. This area is composed of agricultural and rural residential land uses with no major clusters of development. The communities of Cedar Springs (partly in Wythe County), Summit, and Camp are located in this area, as well as a major recreational subdivision.

Development Patterns and Land Use Trends

The development of land in Smyth County has occurred in and around the three incorporated areas where infrastructure (roads, water, and sewer) is available. In addition, areas with only partial services have developed. For example, the Atkins area was already developed along Route 11 before sewer became available. Improved water, sewer, and access to the area have spurred further land development and the conversion of farmland for industrial use. The Adwolfe/Thomas Bridge area has experienced gradual land use changes as residential lots have been sold from previously farmed land. The upgrading of the water supply from the Thomas Bridge Water Corporation with a new treatment facility should help to continue this development.

Residential The number of housing units in the county increased between 1990 and 2000, but a larger percentage of the increase was in manufactured housing as opposed to conventional single-family housing starts. According to the U.S. Census Bureau, the proportion of conventional single-family homes out of total housing actually decreased slightly over the period from 73.6 percent to 70.7 percent. This slow trend in new home development is also reflected in data on land subdivision activity. Only thirteen subdivisions have been approved since 1990 and only three of those since 2000. (These numbers do not include subdivisions located in towns). Most of the newer subdivisions have been located either in the Chilhowie or Rye Valley districts of the county. A majority of the subdivisions created were located along existing road frontage as opposed to newly constructed streets. The county continues to see an increase in the number of manufactured homes (often called mobile homes). Manufactured homes as a proportion of the total housing stock has increased from 16.5 percent in 1990 to 21% in 2000. The number of manufactured home permits issued every year exceeds the number for conventional homes. The manufactured homes are predominantly located on individual lots along public roadways as opposed to park developments. However, the county has an estimated 60 manufactured home parks (of varying size), some of which have experienced expansion. Permits issued for homes built prior to 1976 when federal construction standards became effective have decreased substantially in recent years such that well under ten percent of the manufactured home permits would fall into this category.

The "scatteration" of structures is not limited to manufactured homes. The county's secondary roadways have literally become, in many places, "linear communities." Map 4.2 shows the location of new home starts in Smyth County since 2005. Residential development has occurred due to the access, land availability, and often the presence of public water. However, most of the residences in unincorporated areas rely solely on septic systems for sewage disposal. In many places, the amount of development that has occurred has placed a burden on the local roadway system and may be negatively impacting groundwater resources.

This trend has been encouraged by a change in the Subdivision Ordinance that was made in 1996 to allow for land divisions (not defined as "subdivisions") along already existing roadways in order to encourage more housing development. Of the fifteen land divisions created since that change was made, 12 of them (representing 109 lots or 77% of all lots created) fell under this exception which allows one- or two-acre minimum lot size depending on public water and sewer availability. Some problems have been encountered with these land divisions in that the health department may require even more than two acres to accommodate individual water supply and wastewater disposal (septic) systems, resulting in the creation of non-buildable lots. Map 4.3 shows the location of the land divisions since 2005.

<u>Commercial</u>. Commercial development in the county has concentrated in and around the three towns, in addition to clusters of development in the unincorporated areas of Atkins and Seven Mile Ford. Small business enterprises are found at crossroads or along roadways in the rural communities providing services to nearby farms and residences. The existence of the interstate has spurred more commercial development especially around the interchanges. However, in comparison to some of the interchanges in the adjacent counties of Washington and Wythe, the interchanges in Smyth County have not experienced much commercial development. The only interchanges that have experienced limited development have been Exit 50 at Atkins and Exit 54 at Groseclose, although that interchange is severely limited due to lack of public sewer. Although steep terrain or other natural features prohibit development at several interchanges, there still remains vacant, developable land at and near some interchanges in Smyth County.

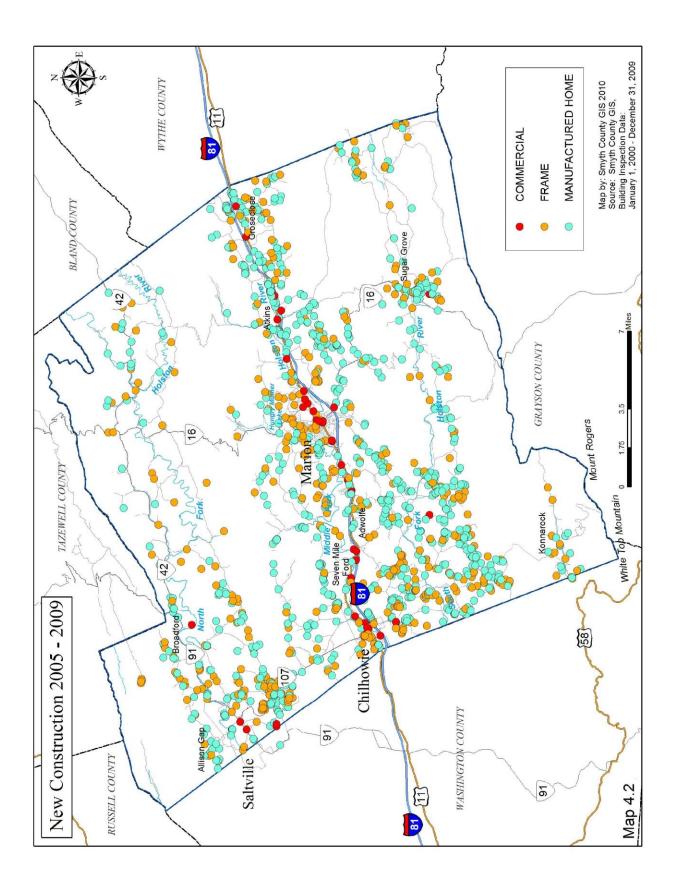
Industrial. As mentioned previously, the county experienced industrial development over the 1990's decade, particularly in the Atkins area with the Mountain Empire Industrial Park. In addition, the County and Town of Chilhowie developed Deer Valley Industrial Park in Chilhowie and the Town of Saltville developed a small park, Battleground Industrial Park, with a speculative building. There are also several empty industrial buildings in the county due to a rash of plant closings experienced between 1998-2002. The county continues to investigate possible sites for industrial development. Future industrial development will likely continue to be concentrated in close proximity to the interstate and within the present or future water and sewer service areas of the county. Of interest in the long term would be the possibility of commercial and/or industrial development in and around the proposed interchange at McMullin. "Karst" topography (sinkholes) in that area, however, could provide major constraints to development.

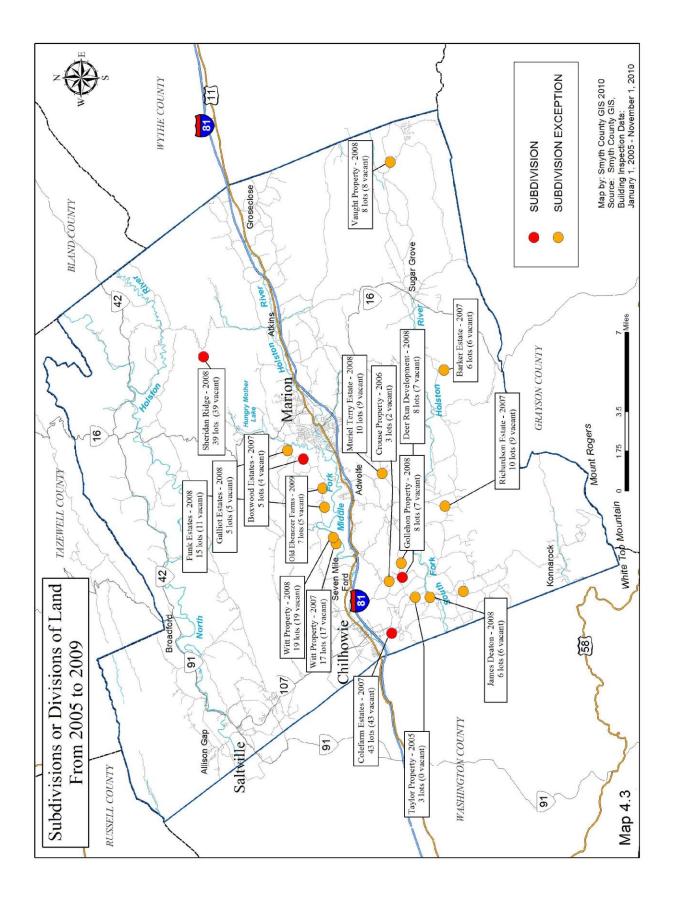
<u>Agriculture</u>. According to the 2007 Census of Agriculture, approximately 44% percent of the county is composed of farmland. This has increased by 2% from 2002. Table 4.1 below indicates the trends in agricultural land.

	2002	2007	% Change
Land in Farms (acres)	124,884	127,307	+2
No. of Farms	877	761	-13
Average Farm Size (acres)	142	167	+18

Table 4.1: Agricultural Land Use 2002 and 2007

Source: U. S. Census of Agriculture





The information reveals that there has been a decline in the number of farms, while the acreage in farms has increased and the average farm size has increased by 18%. Average farm size in Smyth County matches the state average and compares to that of neighboring Wythe County (168 acres) yet exceeds that of Washington County (111 acres).

The major farming areas in Smyth County are Rye Valley, Rich Valley, and the Thomas Bridge/St. Clair Bottom area, although farm operations exist in smaller valleys throughout the county.

<u>Forestland</u> A majority of the acreage in the county is forested and most of the forestland is classified as "timberland." Table 4.2 provides current data on forest cover and type of ownership.

Type of Ownership	Acres	% of Total County Acreage
Federal	70,356.0	24.3%
State	17,463.1	6.0%
Private	90,284.4	31.2%
Total Timberland	178,103.5	61.5%

 Table 4.2: Timberland in Smyth County by Ownership, 2001

Source: United States Forest Service

The U.S. Forest Service owns much of the area on Iron Mountain, areas on Brushy, Glade, and Pond Mountains, and areas in the northeastern portion of the county. The land along the southern boundary of the county is in the Mt. Rogers National Recreation Area (NRA), which is also Forest Service ownership. In addition to timberland, the NRA land in Smyth County contains three campgrounds and one picnic facility. The state acreage includes Hungry Mother State Park and a portion of the Clinch Mountain State Wildlife Management area near Saltville.

Constraints to Development

This brief survey of existing land use and development trends indicates that most of the intensive uses of land in Smyth County are taking place along the I-81 corridor and in the other areas of low relief. It must be recognized that development is restricted to an extent by certain physical factors--notably slope, watershed and surface water constraints, geologic and groundwater conditions, and floodplains--in addition to the public land ownership patterns in the county.

<u>Slope Constraints</u> The major constraint to development in Smyth County has been and will continue to be slope. Approximately 58 percent of the county has slopes of 15 percent or greater. (See Map 1.1 in first chapter). Although slopes in excess of 15 percent and greater do not exclude development, the provision of services is more difficult and more costly. The costs of constructing and maintaining roads are higher. The use of septic systems for sewage disposal is generally limited due to unsuitable soil drainage, yet, in some instances, public sewage treatment systems are economically unfeasible due to distance and construction cost. Achieving proper erosion and sediment control during and after construction is also an additional cost factor.

<u>Watershed Constraints</u> The boundaries of the watersheds are an important restriction to the provision of public sewage service since gravity flow is a highly desirable feature for sewage collection. Once a watershed boundary is crossed, it becomes necessary to either provide treatment in that watershed or to install pumping facilities to pump wastewater back to the watershed where treatment facilities are located. Either alternative can be costly. For example, the Atkins area is within the drainage area of the Middle Fork of the Holston and therefore the area has been provided with sewer through gravity flow to the Marion sewage treatment plant. However, in order to provide sewer to the Adwolfe area, an area which has experienced substantial residential growth, pumping would be required to transport wastewater back to the Marion Wastewater Treatment plant, or a new treatment plant would have to be constructed on the South Fork of the Holston.

<u>Geological and Groundwater Constraints</u> The limestones and dolomites underlying the valleys offer the best potential for groundwater, however sinkholes and sinking creeks (or springs) are also common in areas with these rock types. Areas with "sinks" and springs ("karst topography") create special constraints to development as they may be unstable for building purposes, and they provide a serious potential for groundwater pollution from surface water run-off or septic systems. In general, intensive development should be restricted from karst areas. Sinkholes act as natural storm sewers and have limited capacities to handle run-off. Development increases run-off during rainy periods and may cause an overloaded drainage area and localized flooding. Several areas in the county that have experienced development have had a concentration of sinks and springs such as Adwolfe and Pleasant Heights near Saltville. In these areas, there is a real danger of groundwater contamination by discharges from the large number of septic systems in operation. As mentioned previously, the proposed Adwolfe interchange area is surrounded by limestone/dolomite geology that could hinder its development. The provision of public sewer to those areas would certainly mitigate the concern about contamination from individual septic systems.

<u>Floodplain Constraints</u> Flooding poses a limitation to development in approximately 10 percent of the land in Smyth County. The county's Floodplain Management Ordinance prohibits development of residences in the floodplain unless they are elevated above the level of the 100-year floodplain. Subdivisions must have buildable sites outside of the floodplain. The ordinance allows floodproofing of non-residential structures located in the floodplain and allows only certain types of non-intensive land uses such as recreation or agriculture in the floodplain prior to the enactment of the ordinance. Care should be exercised to prevent the floodplain prior to the enactment of the ordinance. Care should be evercised to prevent the flooding of existing development on floodplains that are vulnerable to additional development or modification of the channel upstream.

<u>Public Land Ownership</u> Nearly thirty percent of land area of the entire county is in federal and state ownership for conservation and recreation purposes. Most of this is woodland and mountain ridges, however the U. S. Government owns property along the Appalachian Trail, including where the trail crosses Interstate 81 at Groseclose. This public land ownership further limits private land development.

Summary of Problems and Opportunities

Unlike more urbanized counties that contend with rapid population growth and land use changes, Smyth County is a rural county that has a different set of land use and development-related concerns. The county's population has declined slightly since 1980 with out-migration being one of the causes of that trend. Subsequently, the county has not experienced a great deal of land development over the past decade.

The county has established new industrial development in the Atkins area on land that was previously in agricultural use and has developed an industrial park in Chilhowie on river bottom land located adjacent to the railroad and the Interstate highway. Commercial development has occurred for the most part in the three towns, while land around the county's interstate interchanges has not been fully developed due to a number of constraints. Residential development has been limited in Smyth County over the last decade with little subdivision activity and the predominance of manufactured homes over single-family conventional home construction.

A number of the physical constraints mentioned above have hindered residential development, particularly terrain, however the lack of adequate water and sewer services has also been identified as a major stumbling block to development in the county. This is changing, however as the county has over 70 percent of its residents served with public water, and 40 percent with public sewerage. (See data in Chapter Four). In addition, the capacities of the county's sewage treatment systems have been upgraded, so that development should no longer be limited by sewage treatment capacity, but only proximity to sewer collection lines.

<u>Residential Development</u> Historically, residential development in the county has concentrated in and around the three incorporated towns, in addition to some unincorporated communities such as Atkins, Sugar Grove, and Adwolfe. Residential development has also occurred in a "linear pattern" along highways and secondary roads in the county created by the subdivision of lots with road frontage. Areas such as Cleghorn Valley northeast of Chilhowie and Scratch Gravel Road southwest of Marion are prime examples of this type of settlement pattern. Traditional subdivision development occurring in the county in which a developer constructs streets, provides utilities, and sells lots has improved since 2005. There is virtually no development of speculative homes on subdivision lots.

In some areas, the type of residential development that is occurring (continuous lots along public roads) limits the usefulness of land located behind the row of lots and creates traffic problems due to multiple entrances onto the roadway. Often, however, residential development follows narrow, creek valleys where there is little developable land "behind" the road frontage lots. The proliferation of two-acre lot divisions of land (not subject to the subdivision ordinance) is creating problems for property owners who may not have enough space for both private water and wastewater systems as required by the health department.

There has been a proliferation of manufactured homes in the county over the long term -- the majority of which are located on individual lots as opposed to manufactured home parks. The most recent numbers for manufactured home permits show a greatly declining trend. Based on information from manufactured home dealers, this trend seems to be attributable to the fact that many of the financing companies that used to finance the purchase of manufactured homes have gone out of business and it is increasingly difficult for residents to finance these homes. Many of the area manufactured home dealers are now selling more "modular homes" which are factory built to the state building code specifications and are more easily financed through conventional lending institutions.

There is a need to promote higher quality, better planned residential development in the county and to identify areas most suitable for future residential development. The county has land that would be physically suitable for residential development, however, may not have adequate public services or sufficient access to those locations. There needs to be some identification of particular areas of the county and efforts made to provide the necessary utilities to those areas.

<u>Agricultural Land</u> Another land use concern is that because the terrain limits site suitability, often the best, low-lying agricultural lands are also the best lands for development. The *loss of valuable farmland* had been identified as a problem in the previous Comprehensive Plan. No doubt, commercial, industrial and residential development has occurred on good farmland in the county. Recognizing that the areas along major transportation corridors are best suited for development, efforts should continue to preserve those areas of productive farming from development.

According to national trends, farms are getting larger. Economically, farms in Smyth County are struggling to increase incomes and remain productive, as larger farm operators have an economic advantage. Efforts should be made to help small family farm operations to stay economically viable.

<u>Commercial and Industrial Development</u> Commercial and industrial development in Smyth County has concentrated in and around the three towns and along major highways such as U. S. Route 11 in unincorporated areas such as Seven Mile Ford and Atkins. The existence of Interstate 81 has no doubt spurred the development in that corridor and near the interchanges, although there are some interchanges in the county that have not experienced much development due to various factors. One recognized constraint on commercial and industrial development is the lack of adequate infrastructure that has been identified as a major land use issue. Another identified issue is the need for well-planned and developed industrial sites and for commercial development at strategic locations such as key highway intersections. Often, commercial development in the county has located scattered along highways and in close proximity to residences. Buffering intensive commercial and industrial uses from residential development would result in a more orderly and desirable living environment.

Conservation and Recreation Land Use The County's federal and state-owned lands protect natural resources, yet also provide opportunities for adjacent private development. There are several recreational subdivision developments that have occurred close to National Forest property. No significant business development has occurred to serve the visitors to the National Forest, National Recreation Area (NRA), or State Park. The improvements to Route 600 over Iron Mountain and the upgrading of Route 622 across Brushy Mountain, as well as the proposed improvements to Route 16 from Interstate 81 to Grayson County, will likely increase development opportunities because of the improved access. In Smyth County, the availability of water and sewer services will likely determine the extent of development near the public lands. Most areas would only be suited for very low-density residential (possibly second home developments) and small commercial enterprises along the major roadways. Land development adjacent to public conservation and recreation lands needs to be planned properly to avoid detracting from the natural resources themselves. In particular, the Route 16 corridor through the county, although in places already heavily developed (e.g., just south of Marion), should be protected from intense and unsightly development as it has been designated as a Virginia byway or scenic highway. The Konnarock area of Smyth County is a unique area due to its remote location yet its proximity to natural resource lands. It has potential for conservation and recreation land uses.

LAND USE GOAL

• To promote the orderly development of the county and maintain a reasonable balance between urban and rural land uses

Residential Development

<u>Sub-goal</u>: To promote quality, well-planned residential development in areas best suited for residential use

Objectives:

- Encourage innovative design techniques in residential development, such as "cluster development", that reduce development costs, yet conserve natural resources
- Encourage residential development in and around the three towns and larger villages or in areas served by public water and sewer (i.e., the "growth areas")
- Discourage high-density residential uses (townhouses, apartment developments, manufactured home parks) from locating in areas without adequate central water and sewer systems
- Encourage low-density residential development in areas not served by central sewage systems
- Encourage the preservation of natural vegetation and terrain, as much as practical, in residential site developments
- Promote residential development on marginal agricultural and forested lands, and on hilly terrain provided proper precautions are taken to prevent erosion and to preserve scenic views and ridge tops
- Provide for safe vehicular access in all residential developments
- Encourage area builders to develop residential property to serve a diversity of income levels and housing types (*See also Population and Housing*)
- Encourage well-planned and landscaped manufactured home parks that provide safe and sanitary housing and are located in areas with adequate water and sewer systems.

Commercial and Industrial Land Use

Sub-goal: To have well-planned commercial and industrial development with adequate access and utilities.

Objectives:

- Concentrate commercial and industrial development in the growth areas where adequate water, sewer, and roads exist or where infrastructure improvements are planned
- Encourage planned commercial developments to locate at major intersections or in strategic, "clustered" locations rather than continual strip development along highways
- Reserve land for industrial park developments and provide adequate utilities to serve the site. Consider multi-use functions of industrial park land such as recreation and or childcare facilities within the park
- Require screening or buffering of industrial developments and major commercial land uses from adjoining residential areas
- Require adequate and safe vehicular access for industrial and commercial developments

• Identify key highway intersections or interchanges that may be appropriate for travel-oriented commercial development, such as motels and gas stations, provide adequate water and sewer service to those areas, and reserve those areas for commercial development

Agricultural Land Use

<u>Sub-goal</u>: To preserve the quality of prime agricultural land and protect it from conflicting land uses.

Objectives:

- Protect certain productive farm areas of the county, particularly Rich Valley and Rye Valley, from high intensity land uses (heavy commercial and industrial)
- Limit future development in the rural areas of the county where public facilities and services are not in place, and direct growth to those areas where services and facilities are already in place or areas where they are planned to be constructed
- Encourage opportunities in agricultural areas for support services and businesses serving the farm community
- Preserve the rural character of the county's smaller communities

Conservation and Recreation

<u>Sub-goal</u>: To protect the county's natural resource lands from degradation and misuse, and to encourage appropriate, low-intensity recreational development on privately owned lands.

Objectives:

- Require considerable care in the development of mountainous and hilly areas and in stream valleys to prevent soil erosion and sedimentation.
- Encourage innovative land management techniques that allow the preservation of open space as a component of a proposed development
- Discourage or prevent construction of housing or other permanent structures in floodplains
- Protect known mineral and extractive resources (sand, gravel, etc.) of economic value from possible conflicting developments and insure that plans for resource extraction will not be detrimental to nearby residences or other land uses
- Discourage harmful development practices on environmentally sensitive lands such as unstable soils, sinkholes, wetlands, and important fossil beds
- Identify potential appropriate areas for low-density recreational subdivisions and encourage their planned development
- Encourage privately owned low-intensity commercial recreation establishments in appropriate locations in the county that will be compatible with the rural nature of the County, particularly in areas near public conservation and recreation lands

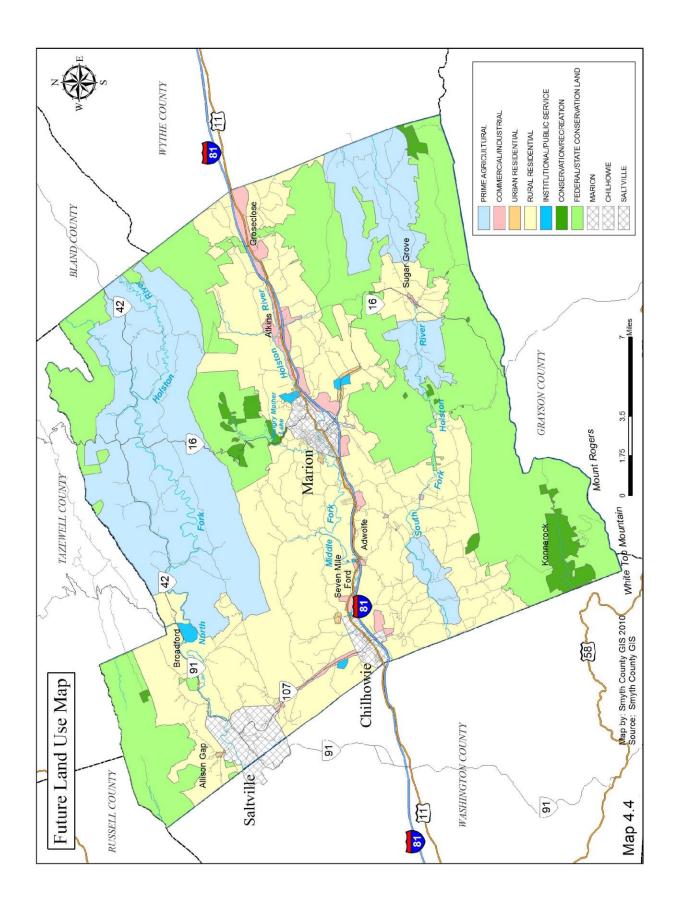
Future Land Use

The land use plan or "future land use" map, adopted in 1994, revised in more detail for 2010, provides a general guide for future development in the county. The plan indicates the most likely and most desirable area for growth yet recognizes that other areas may be appropriate for some development. The

future land use map is closely related to the future water and sewer maps done under the Public Facilities section. The plan is a generalized picture of the county's potential. It does not represent any actual regulation of land uses but was developed to encourage development in the appropriate places. In essence, it is a visual portrayal of the land use objectives, and the land use plan is a part of this document. Map 4.4 shows the Future Land Use map, and the following is a description of the land use categories shown on the map.

<u>Prime Agricultural Areas</u> Although the county has approximately 43 percent of its acreage in farms, only a small portion of that is located on what the Natural Resource Conservation Service classifies as prime agricultural soils. Largely due to the slopes in the county, most farms do not contain prime soils. These soils are generally located along low-lying river bottoms in the county. There are three primary areas of concentrated prime farmland characterized by not only existing farm use and good soils, but also large tracts and sparse population density: 1) Rich Valley, 2) Rye Valley including a large area east of Sugar Grove and a smaller area in and around Teas along the upper South Fork of the Holston River, and 3) a small portion of the lower South Fork of the Holston area below the Thomas Bridge area. As contained in the goals and objectives, the county should preserve these prime agricultural areas and protect them from conflicting land uses. These areas would not be appropriate for residential subdivisions and other types of development.

<u>Rural Residential Areas</u> The future land use map indicates that most of the county is classified as Rural Residential. The primary land uses of this area are agriculture and low-density residential land uses (often located in stretches along secondary roads). The rural areas are expected to continue as a mixture of farming and low-density residential areas. These areas of the county are areas in which public water may already be present to serve existing residences, however the provision of public sewer may or may not be likely depending on the density of homes. The county would prefer to discourage intensive commercial uses from these areas due to the lack of services and inadequate road access, however



small neighborhood-scale businesses would be appropriate if they are not nuisances to the surrounding residents.

Within the rural areas of the county, there are several existing communities or small crossroads settlements that contain concentrations of homes as well as businesses that serve the surrounding countryside. These communities are serving an important function by providing opportunities for rural residential development and commercial services needed by the area residents. Depending on their location, terrain, and utility services, these rural service areas have some potential for future growth, however they are somewhat "off the beaten path" from the more accessible growth area communities.

Because much of Smyth County is composed of narrow creek valleys and ridges, there is not the same pattern of "crossroads" communities "per se" that one might find in other less mountainous rural counties. Often, our rural communities are "strung-out" along a mile or two of roadway, however there are some that can be definitely defined as "rural service centers."

Most prominent would be the community of Sugar Grove that is a primary node of commercial and residential activity. Located in the middle of the farming area of Rye Valley, Sugar Grove has a true identity as a commercial center for the surrounding farmers and residents. Due to its population density, Sugar Grove is termed a Census Designated Place by the Census Bureau for the 2000 Census. Another rural service center indicated on the map is the Adwolfe/Thomas Bridge community that has experienced residential growth due to water and land availability. This area is also a Census Designated Place due to its population density.

The Rural Residential category on the Land Use Plan includes both rural service centers as well as many communities that have developed in a linear pattern along the county's secondary roads, such as Walker Creek, Cleghorn Valley, Scratch Gravel Road, and Hutton Branch. These areas may be served by both water and sewer in the future yet are not as accessible as the growth areas and would not have the road capacity to support growth other than low-density residential and small neighborhood-type commercial land uses.

<u>Urban Residential Areas</u> The lack of higher density housing in the county is a problem that has been identified – this being duplexes, townhouses, condominium, and apartment developments. Some areas of the county just outside the town limits that would be appropriate for this kind of higher density growth due to the presence of both water and sewer facilities, and good road access. The land use plan shows several of these areas including just east and west of the Marion town limits, the area just north of Exit 37 at Seven Mile Ford, the Apple Valley area near Chilhowie, and the lower portion of the Allison Gap area. By promoting development in and around these higher density areas, the county can attempt to minimize costly infrastructure extensions to serve outlying areas that would not be appropriate for high density. In addition, the concentration of urban development in and around the three towns should help preserve the rural character of the county.

<u>Commercial/Industrial Growth Areas</u> Areas designated as commercial and industrial areas generally have served and are expected to continue to serve as the primary business centers of the county. The Commercial/Industrial growth areas include areas already densely developed in and around the towns, and along the Interstate 81 corridor and at the interchanges. Businesses should be encouraged to locate within these designated growth areas of the county.

The Land Use Plan recommends commercial and industrial growth for the area around the seven existing interstate interchanges in Smyth County, as well as the proposed interchange at McMullin. The plan recognizes the existing and potential traffic volume carried by the interstate through the county and the potential the county has for "capturing" a larger percentage of travel-related expenditures by interstate

users. The purpose of the designation of these growth locations on the land use map is to reserve the most suitable commercial and industrial properties in the county and, in addition, to plan growth in areas where sufficient public facilities and services exist and where commercial and industrial development will be conveniently located near major transportation routes.

Of the existing Interstate interchanges, some have partially developed while others are prevented from development due to terrain, lack of services, or lack of land availability. The county should provide needed services and encourage well-planned developments at the interchanges where it is feasible. The Future Land Use map includes other strategic commercial locations such as the Route 107 corridor between Chilhowie and Saltville, and smaller community commercial areas like Midway and Sugar Grove.

The future land use map includes existing industrial areas such as Mountain Empire Industrial Park in Atkins, and heavier, resource dependent industries such as General Shale in Groseclose and the rock quarry on Bear Creek Road in Atkins. The land use plan also shows some potential industrial growth areas that have been identified by the county from previous studies. As reflected in the plan goals and objectives, the county should actively promote these areas for development and work with the towns as well as property owners and development interests to bring about needed infrastructure improvements.

<u>Conservation/Recreation Areas</u> A large proportion of the county is comprised of federal and state natural resource conservation lands that are shown on the future land use map. These public lands offer extensive woodlands, excellent streams and lakes for fishing and other recreational activities such as camping and hiking, wildlife habitations with a variety of flora and fauna, and mountain and valley scenery. The natural resources of these areas should be protected from potential adverse affects from conflicting land uses. The Future Land Use map labels these natural resource lands as Federal/State Conservation lands.

There are areas in private land ownership adjoining the National Forest and state park land that should be developed with precautions taken to protect the natural environment. Generally, these adjacent areas are steeply sloped woodlands. However, due to the nature of their scenic location, they may be desirable for recreational development such as second home subdivisions or campgrounds. Examples of such development have already occurred in the Camp and Laurel Valley areas of the county. Extreme care should be used in any proposed development, particularly in environmentally sensitive areas, to avoid adverse affects from erosion and sedimentation and to protect the scenic qualities of the landscape.

The future land use map shows these areas as already developed for recreational use. In addition, the future land use map shows the entire Laurel Valley/Konnarock area as Conservation/Recreation. This area would be ideal for further development of recreation activities, and Agri-tourism businesses such as Christmas tree farming, horse stables, and wineries.

The establishment of Route 16 as a scenic highway provides challenges to the county to protect the aesthetic quality of that roadway. Careful consideration should be given to controlling development along the corridor, especially undeveloped areas and areas adjacent to the Hungry Mother State Park and Mount Rogers National Recreation Area. The "Park Boulevard" area between the Town of Marion and the state park should be planned as a scenic gateway to the park, as was originally envisioned when the park was established. A biking path has recently been completed along this route to encourage more local use of the park and enhance tourism.

<u>Institutional/Public Service Land Uses</u> This land use category on the future land use map includes a number of different types of land uses such as the county waste transfer station and former landfill property, the Game and Inland fisheries property on Route 16 South, school properties such as the Smyth

Career and Technology Center at Seven Mile Ford, and the major AEP substation and adjacent proposed power plant site at Broadford. This is a miscellaneous land use category, but it is important to show on the future land use map due to the importance of these types of land uses for the county's future.

Land Use Strategies

- 1) Use the future land use map (based on the land use goals and objectives) as a guide for planning and development-related decision making.
- 2) Periodically review and revise the current county ordinances related to land use as necessary to better accomplish the objectives of the Comprehensive Plan.
- 3) Coordinate water, sewer, and road improvements with the land use objectives and future land use map and adopt a five-year capital improvement program to implement projects.
- 4) Continue the use-value ("land use") taxation program for agricultural, forested, horticultural, and open space lands in the county, but evaluate the effectiveness of the program as a tool for agricultural land preservation and consider the use of updated soil mapping or other changes to improve the program.
- 5) Promote the Agricultural and Forestal District Program and other voluntary conservation programs, such as conservation easements, as a means for landowners to preserve productive farmlands and forested areas.
- 6) Prepare a land use study of the Route 16 corridor, a Virginia by-way, to implement orderly development patterns and to maintain scenic quality: particularly protecting the entrance and viewshed of the state park
- 7) Involve the County Planning Commission as an active participant in all land use and physical development planning and decision-making. Encourage a closer working relationship between the Planning Commission and the following agencies: Evergreen Soil and Water Conservation District, County Extension Service, County Health Department, all three town planning commissions, Va. Department of Transportation, county water authorities, U. S. Forest Service, Hungry Mother State Park, Dept. of Game and Inland Fisheries, and the Smyth County School Board.
- 8) Support the creation of Planned Unit Developments (PUD's).

V. PUBLIC FACILITIES AND SERVICES

Schools

The Smyth County Public School System consists of one primary school, four elementary schools, four middle or intermediate schools; one "combined" school (grades K-8); three high schools; and the Career and Technology Center (formerly the Vocational School). Table 5.1 summarizes information concerning public schools in Smyth County.

School	Location	Enrollment March 2009	Building Capacity	Functional Capacity
Chilhowie High	Chilhowie	442	500	639
Marion Sr. High	Marion	753	1,071	827
Northwood High	Saltville	283	550	626
Northwood Middle	Rich Valley	213	500	520
Marion Intermediate	Marion	434	625	547
Marion Middle	Marion	504	1,000	724
Atkins Elementary	Atkins	217	250	276
Chilhowie Middle	Chilhowie	346	525	510
Chilhowie Elem.	Chilhowie	634	700	754
Rich Valley Elem.	Rich Valley	193	250	209
Saltville Elem.	Saltville	295	410	329
Sugar Grove (K-8)	Sugar Grove	191	400	369
Marion Primary	Marion	478	700	521
Total Enrollment		4,983	7,481	6,851

Table 5.1:	School	Enrollment	and	Capacity
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Source: Smyth County School Board

Due to the declining school enrollments, none of the schools have enrollments exceeding design capacities. Four schools are above 75 percent capacity. These are Chilhowie Elementary (91%), Chilhowie High (88%), Atkins Elementary (87%) and Rich Valley Elementary (77%).

The average current student to teacher ratio for all grades within Virginia is 12.4 to 1. Smyth County is very close to this figure. For example, the elementary schools within the county have a combined student to teacher ratio of 10 to 1.

Total enrollment in the Smyth County schools declined over the past decade. Enrollment in 2004 was 5,159 students and by March 2009, enrollment dropped to 4,983, a decrease of 3.5%. During this period Sugar Grove saw its enrollment drop by 38%, Northwood Middle dropped by 23% and Marion Middle dropped by 19%.

There does not appear to be a major need for building space expansions over the next 10 years. Within the last 10 years, every school within the county, with the exception of Marion Intermediate underwent renovations or expansions; however, Saltville Elementary is the only school to have a complete renovation. The School Board has also established electronic classrooms and has expanded the opportunity for students to receive college credits through dual enrollment courses, honors courses, advanced placement courses, and courses offered primarily by the A. Linwood Holton Governor's School, SVETN's Elite Learning, and Virtual Virginia. The enrollment of Advanced Placement and Dual Enrollment classes for college credit(s) has greatly increased. Smyth County currently has the highest enrollment at the Governor's School comprising almost 25% of the school's total enrollment. Students are able to take classes from the Governor's School at each of the three high schools or from home via live audio and video feed. A school bus/county vehicle garage was constructed on property adjacent to Marion Intermediate School, however, there is a need for school bus parking and maintenance at the same location.

The School Board offices are located on the 3rd Floor of the Smyth County Office Building after relocating from a former school located on Church St. in downtown Marion. The School Board has no need for expansion at its current location. However, there does exist a need for better storage space for supplies.

The Smyth Career and Technology Center (SCTC) in Seven Mile Ford offers job training and preparation in a variety of career fields, including auto body repair, building trades, Computer Aided Drafting Design, Criminal Justice, Culinary Arts, Machine Technology, Practical Nursing, Pre-Engineering and Welding for high school juniors, seniors and postgraduates from Smyth County and surrounding areas. The Career and Technology Center has approximately 400 students. The number of students has risen over the past few years and is expected to increase as new advanced programs are incorporated into the curriculum. Both Wytheville Community College and Virginia Highlands College periodically offer courses at SCTC.

Another career training program in the community is the Blue Ridge Job Corps Center (Blue Ridge). In July of 2007, Blue Ridge became an all-medical career and technical teaching campus. Blue Ridge currently offers a high school diploma program, a GED program, Career Training: Certified Nursing Assistant, Health Occupations Trade, Licensed Practical Nurse, Medical Assistant, and Medical Technology Clerk as well as Advanced Career Training (ACT): Dental Hygienist, Education, Human Services, Information Systems Technology, Licensed Practical Nurse, medical Lab Technician, Phlebotomy, Physical Therapist Assistant, Police Science, Radiography, and Registered Nurse. Students can also receive further training through partnerships with community colleges in the Southwest Virginia Community College System. Students are involved in community service projects and volunteer efforts throughout Southwest Virginia. Blue Ridge has also partnered with several regional medical facilities to provide medical internships and employment opportunities to its students. Blue Ridge currently has over 160 residential students and 40 non-residential students enrolled, ages 16-24.

The county is divided between service areas of two community colleges. The Virginia Highlands Community College (VHCC) in Abingdon (Washington County) has approximately 3,818 full and part time students. The Wytheville Community College (WCC) located in Wythe County has students with 63 students attending the Smyth County Education Center. VHCC offers some evening college level classes and some dual enrollment at Northwood High School in Saltville and Chilhowie High School in Chilhowie. Wytheville Community College operates the Smyth County Education Center in Atkins adjacent to the Mountain Empire Industrial Park. The facility offers daytime and evening classes, and daytime training programs for local industries.

Water Facilities

Smyth County is served by a variety of public and private suppliers of water. Smyth County (under direction of the County Administrator and the Board of Supervisors) operates a water distribution system. In addition, each of the three Towns have its own water system and there are two other community water systems--Thomas Bridge Water Corporation, a private nonprofit organization serving a large portion of southwestern Smyth County, and the Rye Valley Water Authority that provides water to the Sugar Grove community. A total of six entities provides public water service.

The number of households in the county served by public or community water systems increased over the last twenty years, although it is somewhat difficult to observe and document this trend due to the lack of data from the 2000 Census. It is estimated that a total of 11,548 households in Smyth County (75.6% percent of the total) rely either on public water or a private water company for water provisions. This is up from the 10,917 in 2005 (71.5%), and from 8,918 in 1990 (67.9%). Higher percentages in Chilhowie, Marion, and Saltville reflect nearly 100 percent coverage in the three incorporated towns. Since 2000, several water projects in unincorporated areas were completed by Smyth County which increased our households that are served. Projects currently under construction include the following areas: Greenwood, Fox Valley, Pioneer, and Shale Bank which are projects, in addition to other projects that are currently planned but not yet funded, it can be estimated that 80 percent of Smyth County households can soon be served with a public or community supply of water.

<u>Town of Marion</u> Marion relies on raw water from the Middle Fork of the Holston and from several springs for its municipal water supply, providing a total supply of 5.25 million gallons per day (mgd). The system provides water for approximately 3,620 customers in Marion, Atkins, and Hungry Mother State Park.

Approximately 2.25 mgd is obtained from a large limestone spring and four smaller springs located near the intersection of State Routes 16 and 695 (Currin Valley Road), approximately 4.5 miles southeast of Marion. The larger spring is encased by a concrete structure that impounds 65,000 gallons. All of the springs are connected to the main spring basin where the water is chlorinated. Water flows by gravity from the basin to distribution system. Any excess water is stored either in a 1,000,000-gallon covered reservoir located on Euclid Avenue just west of the state highway shop or in a 500,000-gallon covered steel reservoir on a hill south of the Southwest Virginia Mental Health Institute. A booster pumping station on Prater Lane pumps water to a 365,000-gallon covered reservoir and a 100,000

supplementary tank located above State Route 16 north of town, and to a high-level distribution system.

Raw water is also obtained from an intake on the Middle Fork of the Holston at the east end of Marion. The water treatment plant has a permitted capacity of 3.0 mgd bringing Marion's total water supply to 5.25 mgd. Storage for the treatment plant is provided by two 1,000,000gallon reservoirs adjacent to the plant and a 350,000-gallon high-level tank located on a hill northeast of the plant. The town also has a 500,000-gallon water tank at the Mountain Empire Industrial Park in Atkins (and water lines to serve the park and surrounding community) and a 20,000-gallon tank to serve the Riverview Estates subdivision on the west side of Marion. The Town also operates and maintains two 3,000-gallon water storage tanks located on Williams Road to supply water to approximately 14 homes in that area of Matson Drive.

The town system currently uses approximately 3.0 mgd of water and therefore has an excess capacity of 2.25 mgd. Total storage capacity is 4.835 million gallons. The town has an abundant supply of water; however, it is facing a potential dilemma regarding its spring water supply. The Safe Drinking Water Act standards and subsequent state regulations now require all "surface-influenced" water to be treated as surface water. Although to date, the town spring has not been deemed "surface water influenced", there is always the possibility that Marion will eventually have to either provide treatment to the spring water or abandon that supply. If the town chooses not to expend funds to treat the spring, it will have to find another water supply to supplement the existing filtration plant. The existing filtration plant is only at 25% usage but is limited by withdrawal permit to 3 million gallons per day from the Middle Fork of the Holston River (which equals the total current usage of the entire town system). Any increase in that permit capacity may be difficult to obtain from the Department of Environmental Quality.

<u>Town of Saltville</u> The Town of Saltville declined the opportunity to provide updated information regarding their water and sewer facilities. As a result, the information contained herein is the same which was provided for the 2005 Plan. The town currently has two sources of water which are not interconnected - the Cardwell Town Well and #10 Well. These sources have safe yields of 862 gallons per minute or 1.2 million gallons per day (mgd). The town has several other sources that were used by the Olin-Mathieson Corporation but have not been active since that company terminated its operations in Saltville. In addition, the Witt Spring served the town, but in November 2001, the Virginia Department of Health issued a Notice of Surface Water Influence Determination, and a Boil Water Notice to the Witt Spring service area of the town, which ended the use of this well by the town. The town has an estimated supply of water of 756,000 gallons per day. The town currently uses approximately 650,000 gallons per day, so this leaves only 106,000 in excess capacity for future use. The total storage capacity is now 925,000 gallons with a total of six reservoirs.

The distribution system serves the entire town as well as the outlying areas of Allison Gap and Pleasant Heights. The town currently has 1,138 residential connections. The town sells water to the Washington County Service Authority (WCSA) for the Poor Valley section in adjoining Washington County. It also sells water to Smyth County for the Midway Community Water System south of Saltville, and approximately 90 connections to the east of Allison Gap, and the Poor Valley section of Smyth County. (The McCready community just east of Saltville is served by the Watson Gap well).

The town is at 86% capacity and must find additional sources of water. It is currently investigating several options to address this issue, including the possible utilization of Palmer

Springs, which would require filtration and disinfection treatment to the raw water due to potentially high chloride level. A second option is the utilization of Well #11, which is located on Buckeye Hollow Road near the #10 well and has the potential for high yield. In order to be utilized this well will have to be researched to ensure that there is no adverse effect on the water taken from well #10. A third option is the use of the U.S. Gypsum wells. The salt concentration of this water is very high and will likely require additional treatment to be considered potable to the public. Another option for Saltville is the drilling of a new well.

<u>Town of Chilhowie</u> Chilhowie's municipal water system serves customers in and outside the Town of Chilhowie. The municipal water system has approximately 2,200 connections and serves an estimated 5,500 persons. Water supply is derived from two springs that are located south of town. Because of the location of these springs, the town developed an extensive distribution system in the unincorporated portion of the county south and east of Chilhowie. It also expanded water service eastward to the Seven Mile Ford community and serves a small area in eastern Washington County near the springs. In fact, approximately 3,100 of the 5,500-population served are out-of-town residents.

The town springs, the Jones Spring, and the Widener Spring, are located in Washington County, and flow by gravity through raw water lines to the newly constructed Chilhowie / WCSA Regional Water Treatment Plant. Once filtered and chlorinated, the water is then pumped into the Town's distribution system. The water then flows through a series of pipes and pumps to storage tanks located throughout the system. The Town operates two booster pump stations, the Reid Store Pump Station located on Elswick Bridge Road and the Widener Spring Pump Station located on Mill Creek Road. The Town has five storage tanks with a total capacity of approximately 2.7 million gallons.

The oldest of the springs, the Jones Spring, was initially developed in the 1930's, and outcrops into a concrete collecting basin. The water is pumped by a booster pump through an eight-inch line to the Chilhowie / WCSA Water Filtration Plant located on Mill Creek Road in Washington County. The second spring on the Chilhowie system, the Widener Spring developed in 1985, flows through a 10-inch line to the water filtration plant. Outside of town, the water system serves several developed areas such as Green Hill Subdivision (off Route 762), the St. Clair Bottom area (Route 600), Shuler Hollow (Route 739), Applewood Subdivision (off Route 645), and Grosses Creek and Needmore areas. In addition, the Town provides water east of town along U.S. Route 11 to Seven Mile Ford, including the developments on either side of Interstate 81 at Exit 39. The Town has the ability to sell water to the Thomas Bridge Water Corporation and has an interconnection with that system near Route 721. The Town sells water to Smyth County for its St. Clair Creek Road customers and sells water to Smyth County for the Cleghorn Valley and Porter Valley water systems, located north and east of Chilhowie. The permitted water production of the town system is 1,400,000 gpd while the average daily water usage is 1,000,000 gpd, leaving 400,000 in excess production. Total storage capacity of the system is 2,985,000 gallons.

The Town has replaced the main water lines within the Town limits within the last three years to greatly improve water accountability. A radio telemetry system has been installed connecting the water tanks and pump stations allowing real time access to tank levels, pump status and changes to controls from any location in the world which has internet service. The Town has replaced the main sewer lines within the Town limits to eliminate inflow and infiltration problems

which have existed in an aging infrastructure. An emergency generator was installed at the wastewater treatment plant to prevent offline situations during power outages. In 2009 the Town began multiple projects to replace aging out of Town water lines and increase reliability of the distribution lines are being replaced under three contracts, an emergency generator has been installed at the Widner Pump Station to increase the reliability of this critical site, and the installation of an additional tank at the Old Widner tank site to insure sufficient water is always available to flow by gravity through the system.

<u>Smyth County</u> Smyth County provides water to several unincorporated areas and construction is underway in additional service areas. There are eleven separate systems with some interconnections. The water sources are either Town or Thomas Bridge system supplies, or wells owned and operated by the County. Table 5.3 provides data on each water service area.

Name of Area Served	No. of Active Connections	Current Water Source
Allison Gap	87	Watson Gap Well
Atkins	236	Marion
Currin Valley	82	Marion
Harris Lane	13	Marion
Hungry Mother	45	Marion
Hutton Branch	242	Marion/Dix well
Long Hollow	41	Watson Gap Well
Nicks Creek	25	Marion
Poor Valley	67	Saltville
South Fork	5	Thomas Bridge
St Clairs Creek	69	Chilhowie
Walkers Creek*	1148	Chilhowie/Saltville
Watson Gap**	425	Watson Gap well
TOTAL	2536	

Table 5.2: Water Service Areas – Smyth County-operated Systems

Source: Smyth County Water Department, March 2010

*Walkers Creek serves customers in Apple Valley, Cleghorn Valley, Ebenezer, Midway I, Midway II, Pleasant Heights, Rich Valley, Walkers Creek, Plum Creek, and Beaver Creek.

**Watson Gap serves customers in Watson Gap, Broadford, and McCready.

The Smyth County Water Department currently has 2,536 water customers served by over 120 miles of pipelines. Future projects, planned at this time, should provide water to approximately 225 additional customers. Because of the fragmented nature of the water system and variety of water sources, system capacity is location specific, and the continued development of additional water sources increases the County's capacity to supply water to its customers. Smyth County desires to become completely self-sufficient from other municipal sources, it does not have the mechanisms in place to do that presently. In addition, some areas are isolated, and it would not be feasible to separate them from their existing Town sources: i.e., Poor Valley, Hungry Mother Park, St. Clair's Creek, and South Fork systems.

<u>Thomas Bridge Water Corporation</u> The water corporation is a private nonprofit organization that has been in operation since 1969. The water service area for the Thomas Bridge system covers a wide section of southwestern Smyth County. The system has 1,504 connections, mostly residential. The areas served include Thomas Bridge, Adwolfe, McMullin, Scratch Gravel Road, and Stoney Battery, Redstone Road, and Dry Fork (lower St. Clair Creek). The corporation also connects to the county's South Fork water system, and the County purchases water from the water corporation at this location.

The estimated capacity of the system is approximately 2 million gallons per day. The system is served by two 260,000-gallon reservoirs and has over 69 miles of water lines. In addition, there is another 100,000-gallon reservoir near Stoney Battery. The water corporation owns and operates three generators that produce the power required to serve as a backup source. To the east, the Thomas Bridge system is within 3,000 feet of the Town of Marion system at two locations but does not interconnect.

<u>Rye Valley Water Authority</u> The Rye Valley Water Authority owns and operates a water system that serves approximately 550 customers (mostly residences) in the Sugar Grove community. The system relies on four springs located in the national forest and distributes the water by gravity flow to the users. The system has a 365,000-gallon reservoir and a newer 200,000-gallon tank for water storage. The distribution system is composed largely of six-inch lines.

In June 2009, the Virginia Department of Health declared the largest spring, Spring No. 1 "under the influence of surface water" and placed RVWA on a "boil water notice" until a filtration plant can be constructed. Presently RVWA is completing a National Environmental Policy Act report to complete an application for a land use permit from the U.S. Forest Service to locate the new 1.3-million-dollar membrane filtration plant next to the existing treatment facilities. Some water line replacement will be done but no new customers are expected to be connected. The new membrane filtration facility will allow an existing spring that was already declared "surface water influenced" to be put online and may increase RVWA's capacity once VDH reviews the data.

A water line rehabilitation project that replaced 33,600 feet of six-inch water lines, mostly to upgrade inadequate-sized lines was completed in 2006.

Sewer Facilities

The proportion of the housing units in the county served by public sewer systems is much lower than that served by public or community water, but that percentage is increasing. Again, as with water usage, the 2000 Census did not measure this household characteristic as has been done in previous Census years. It is estimated a total of 4,903 households in Smyth County (32.1 % percent of the total) are served by public sewer. Similar to the water service pattern, the areas with the highest proportion of housing units with public sewer are those that include the three incorporated towns. The three Towns each own and operate wastewater treatment plants in Smyth County, with a combined capacity of approximately 5.4 million gallons per day. The County has, or is constructing, sewer collection lines in unincorporated areas of the County which terminate into each Town's respective collection system for treatment. The County has individual agreements with each of the three Towns for wastewater treatment.

<u>Town of Marion</u> The Town operates a 3.4 million gallons per day (mgd) sewer treatment plant which replaced the former 1.7 mgd treatment facility. The project was a joint project with

Smyth County, which has a total of 600,000 gallons per day in capacity at the plant. The plant is a conventional activated sludge plant with an ultraviolet disinfection process. Current total flows at the treatment facility are approximately 1 mgd leaving approximately 2.4 mgd excess. The Town provides sewage collection to approximately 1,608 customers.

<u>Town of Chilhowie</u> Chilhowie operates an extended aerated wastewater treatment plant that was constructed in 2001. The treatment plant has a flow capacity of 999,000 gallons per day. The Town no longer uses the aerated lagoon for wastewater treatment. The treated effluent is discharged into the Middle Fork of the Holston River adjacent to Interstate 81. The collection system serves an estimated 95 percent of all housing units in town. The town also provides sewer service to the Seven Mile Ford community to the east. There are approximately 790 sewer customers in town and 460 customers outside town. The average daily flows are 500,000 gpd leaving nearly 500,000 gpd excess capacity. Smyth County's portion of the total treatment plant capacity is 25% or 250,000 gpd.

Smyth County has recently constructed a sewer collection system in a residential area south of town (Green Hill and Shuler Hollow) that is connected to the town system. This project is projected to generate 25,000 gpd flow into the treatment plant. The implementation of this project will leave the plant with an excess capacity of approximately 475,000 gpd. Currently, the Town is under no violations or consent orders from the Department of Environmental Quality. The Town implemented a pre-treatment program that requires industries and businesses to clean up their waste stream prior to discharging into the Town's sewer lines. By doing this, the Town has reduced some of its costs for sludge treatment and has eliminated its need to add additional chemicals to its treatment processes.

<u>Town of Saltville</u> The Town of Saltville declined the opportunity to provide updated information regarding their water and sewer facilities. As a result, the information contained herein is the same which was provided for the 2005 Plan. Saltville sewage treatment plant has a design capacity of 500,000 gallons per day, but the capacity will be expanded to 990,000 gpd with the construction of the Allison Gap Sewer Project, which is near completion. The effluent is discharged into the North Fork of the Holston near the Allison Gap Road bridge. The collection system serves 939 residential customers, which reaches 93 percent of the town residents. The average daily flows are at 400,000 gpd during the wettest months of the year, therefore providing an excess capacity of 100,000 gpd. The near doubling of the sewage treatment plant will allow public sewer service to be extended to residential areas in addition to Allison Gap, including Pleasant Heights and North Holston. Smyth County's portion of the total 990,000-gallon capacity is 376,000 gallons or 38 percent.

<u>Smyth County</u> Smyth County owns and operates sewer collection lines surrounding the Town of Marion, Atkins, Staley Creek, Hungry Mother Creek, and the Cedars and Hall Addition systems serve a total of 701 sewer customers – all of which flow eventually to the Marion Wastewater Treatment Plant. The total sewer flows from Smyth County into the Marion Wastewater Treatment Plant is approximately 325,000 gallons per day. Smyth County has 275,000 gpd available capacity out of its 600,000 total at the Marion treatment plant. The Green Hill-Shuler Hollow system has 140 customers, which flow to the Chilhowie Wastewater Treatment Plant is approximately 10,000 gpd. Smyth County has 240,000 gpd available capacity out of its 250,000 total at the Chilhowie

Treatment Plant. The Allison Gap system has 265 customers which flow to the Saltville Wastewater Treatment Plant. The total sewer flows from Smyth County into the Saltville Wastewater Treatment Plant is approximately 30,000 gpd. Smyth County has 366,000 gpd available capacity out of its 396,000 total at the Saltville Treatment Plant. The Smyth County Sewer Department currently has 1,106 sewer customers served by over 44 miles of pipelines. Future projects, planned at this time, should provide sewer to approximately 250 additional customers.

Solid Waste

The management of solid waste has become a primary concern and responsibility for Smyth County. Not only has the amount of waste generated by homes and businesses greatly increased, but state and federal requirements on solid waste disposal have undergone significant changes in recent years forcing more responsibility and financial burden on local governments.

<u>Waste Disposal</u> In 1992, the responsibility for the county landfill was shifted from the former Public Service Authority to the County Board of Supervisors. The landfill was developed in 1982 and was originally projected to have a life expectancy of 16-24 years. Due to the estimated cost of meeting new design requirements for landfills, the county chose not to continue the use of the landfill. In 1994, the county constructed a solid waste transfer station (located near the former landfill north of Chilhowie) where trash is brought and transported to the Bristol Landfill. The county has a contract with Waste Management of Tri-cities through 2013 to haul waste to the landfill. The landfill, first opened in May 1998, is in the site of an old quarry and has long-term capacity. There are no limits on the amount of tonnage that Smyth County may dispose at the landfill. <u>Collection System</u> The county has developed a system of eleven convenience stations with attendants and has eliminated the former roadside "green box" system. Currently, there are convenience stations at the following locations: 1) Old Quarry 120 Old Quarry Road, Saltville, 2) McCready's Gap, 135 Upper Poor Valley Road, Saltville, 3) McMullin, 120 Browns Subdivision Road, Marion, 4) Fish Hatchery, 1717 Hwy. 16, Marion, 5) Sugar Grove (Dickey's Knob), 5995 Sugar Grove Hwy., Sugar Grove, 6) Hungry Mother, 206 Walker's Creek Road, Marion, 7) Wilkinson's Mill, 39347 Loves Mill Road, Chilhowie, 8) Camp, 1236 Camp Road, Sugar Grove, 9) Atkins/Groseclose, 6725 Lee Hwy., Atkins, , 10) Locust Cove, 5943 Blue Grass Trail, Saltville, and 11) Old Wilderness Road, Saltville. The Konnarock Convenience Station is located in Smyth County but is maintained by Washington County.

The county provides convenience stations to residents who are not serviced by the three towns. The towns provide trash pick-up services primarily for residential customers, while commercial, industrial, and institutional solid waste is handled via private collection. The Town of Marion disposes of refuse at the County Transfer Station with their own vehicles and employees. The Towns of Saltville and Chilhowie contract with a third party to dispose of refuse at the County Transfer Station.

<u>Recycling</u> The county convenience stations provide drop-boxes for the separation of plastics, newspapers, waste oil, office paper, and scrap metal. The county does not accept glass for recycling because there is no longer a place readily available to recycle glass. The county markets its recyclables to Southwest Sanitation in Tazewell. Several area civic groups are actively involved in collecting recyclable items. In addition, many area industries recycle waste products. Presently, brush and yard waste are disposed of at the transfer station. In the past brush and yard waste were burned at the transfer station under an open burning permit.

Emergency Services

<u>Fire Protection</u>. Smyth County has seven volunteer fire departments. They are located in Marion, Chilhowie, Atkins, Saltville, Adwolfe, Sugar Grove, and Nebo. Table 5.3 lists the number of personnel and the equipment available for each department. The departments cooperate and provide mutual assistance on large fires.

Table 5.3: Fire Departments in Smyth County, 2010

Station	Location	Volunteers	Pumpers	Other Vehicles
Adwolfe	Rt. 660 near 657	36	3	3
Marion	Rt. 11/S. Sheffey	29	5	2
Chilhowie	Rt. 11/Hull Ave.	23 ¹	3	2
Atkins	Rt. 11	25	3	3
Saltville	Palmer Ave.	20	2	4
Sugar Grove	Route 16	23	2	3
Nebo	Route 42	17	6	2
TOTAL		173	24	19

<u>Rescue Squads</u> Volunteer rescue squads are located in Marion, Chilhowie, Saltville, and Sugar Grove. Table 5.4 provides current data on squad personnel and equipment.

Table 5.4: Smyth County Rescue Squad Units, 2010

Location	Volunteers	Ambulance Vehicles
Marion	28	8
Chilhowie	23	3
Saltville	28	9
Sugar Grove	16	4
TOTAL	95	24

¹ Chilhowie's Fire and EMS Services are one combined agency. Volunteers also include 2 full-time employees and 6 part-time employees.

<u>Law Enforcement</u> The primary law enforcement agency for Smyth County is the Sheriff's Department headquartered in Marion. In addition, police departments are located in Marion, Chilhowie, and Saltville. Table 5.5 provides information on these agencies.

Department	Personnel	Vehicles
County Sheriff	65	38
Marion Police	20	11
Chilhowie	6	6
Saltville	9	14
TOTAL	100	69

 Table 5.5:
 Local Law Enforcement in Smyth County, 2010

<u>Emergency Response and Communications</u> Smyth County has an Enhanced 911 System which includes a dispatch center equipped with computers that display the caller's address and a map providing the exact location of the structure. Establishment of the system required the mapping of the entire county, naming of all roads, assigning of street addresses, and the installation of road signs. Each habitable structure (residential, public, commercial, etc.) is required to have a 911 address, even if it is not the mailing address. Rural route and box addresses are no longer assigned. The 911 Office does addressing of all new structures.

With the growth of cellular phone usage, Smyth County's 911 System has been faced with the difficult problem of pinpointing cell phone location. The Federal Communications Commission has established a three-phase approach for localities to pinpoint cell phone location. The first two phases have been implemented by Smyth County, which includes receiving all wireless calls, and secondly receiving tower and call back numbers. The third phase requires that the County pinpoint wireless calls to within 65 meters of the location of the caller. State law does not require this phase, although the state will help fund those localities that choose to implement the second and third phases. Smyth County will be testing this third phase with a cell phone carrier in October 2004. Another issue that all 911 systems will have to deal with in the near future is new technology now available called "Voice Over Internet Protocol" or Voice Over IP which allows verbal communications using the Internet rather than telephones, presenting a difficult challenge in identifying the location of the "caller."

Radio communications is essential to the operation of emergency services within the county. In 2010, Smyth County invested in four communication towers strategically located in the County to provide enhanced communication coverage for public service agencies throughout the County.

Libraries

The Smyth-Bland Regional Library System that owns approximately 139,372 volumes serves Smyth County. The library system includes the main library on Sheffey Street in Marion and three branches in Saltville, Chilhowie and Bland. The Saltville branch is located in an older building, a former post office constructed in 1939. In September 2004, a new branch library opened in Chilhowie in the former Chilhowie High School. Smyth-Bland Regional Library also operates a branch library in Bland County located in a building constructed in 1997.

The main library is the administrative center for the library system. Technical services and processing of materials are centralized in the Marion facility. The library system is thoroughly automated with an integrated circulation system. The catalog is available on the web, and many services can be accessed from home. Patrons in both counties can also use remote databases from the online catalog. The Marion library holds two special collections, one in the Southwest Virginia Heritage Room, a resource for local history and genealogy research: and the other, The Sherwood Anderson Archival Collection. Total number of volumes for the Marion library is 87,203, Saltville library 12,031, Bland library 21,215, Chilhowie library 13,643, Outreach 4,500, and Bland Outreach 780 volumes

The library system offers a host of children's programs and provides meeting space (except Saltville) for nonprofit groups. Throughout the library system, all types of materials are available for borrowing: books, CD's, DVD's, VHS videos, and periodicals. Interlibrary loan of materials from other libraries provides patrons access to books throughout the United States. The library's newest program is the outreach program that provides materials to senior citizens and adults in assisted living facilities and nursing homes in both counties. The library system recently discontinued the bookmobile operation, as it was determined that it was no longer economical. With the new outreach programs underway, individuals who are unable to travel to the library are still able to receive materials at a lower cost to the county.

In regard to physical space needs, the Saltville and Chilhowie branch libraries are especially overcrowded and suffer from a lack of meeting room space. In 2002, the building was updated for handicapped access.

County Office Space

The opening of the Smyth County Office Building in 1997 helped to meet office space needs of the County administrative offices, School Board, and Department of Social Services, and should serve those offices for the future, except for the need for storage area particularly for the School Board as noted earlier. The Morison Building is owned by the Commonwealth of Virginia and is leased by the County. The lease term of 25 years expires on December 31, 2019, with no provision for renewal. The county offices located at the County Courthouse (court and non-court related) are now experiencing space problems. The court systems located in the Courthouse are increasingly in need of additional space, thereby prompting a study done in 2003 to identify the needs and propose solutions to the County. The 2003 Courthouse Study conducted by Moseley Architects projected the space requirements for courthouse occupants for the next 20 years and developed alternative concepts for providing the projected space. It studied two alternatives: 1) the courthouse be renovated with all non-court functions relocating elsewhere, or 2) the courthouse be renovated to provide space for the projected 20-year space needs of all current occupants, including the entire Sheriff's department. The study also assessed the current building condition.

Courts currently occupy a large majority of space at the courthouse; it is estimated that much more space is needed. This is a trend that will continue for the next 20 years as the number of individuals employed by the courts increases. The other occupants of the courthouse, general government (Treasurer and Commissioner of Revenue) and public safety, are experiencing a similar problem due to lack of space and a projected increase in employment over the next 20 years. Improvements at door clearances and toilet rooms are needed to meet Americans with Disabilities Act requirements. Several exterior features of the building, including the roof, have been recently addressed. Future demands will require additional parking and increased pedestrian safety near the courthouse.

In August 2010, the Board of Supervisors and the court system were finalizing an agreement addressing the space and security needs at the Courthouse. The plan involves an addition of 44, 000 ft² on the northern face of the Courthouse and the renovation of the existing 39,000 ft² building. Along with the projected 51 on-site parking spaces, the County and Town of Marion have agreed to jointly construct a parking structure accommodating approximately 90-100 vehicles. This structure is being proposed on County owned land situated between Court Street and Strother Street just east of the Courthouse.

Ownership of the 1908 school building adjacent to the Courthouse was transferred to the Town of Marion in October 2009, for rehabilitation and adaptive reuse.

The existing 911 Emergency Communication Center is presently located in the lower portion of the Courthouse. As part of the renovation and expansion plans, the 911 center will be relocated off-site. The new location has not been determined as of this plan.

Smyth County partnered with Washington and Russell Counties and constructed the new regional jail facility located in Washington County which opened in 2003. The space where the vacant Smyth County Jail is located is proposed to be demolished and used for additional parking after the proposed Courthouse renovations.

The Smyth County Health Department offices located near the hospital in Marion are not currently utilized to capacity and could provide some potential additional office space.

Telecommunications

Although not deemed in the past as a "public facility," telecommunications for voice, data, and video transmission has become vital to the future development of localities. In Smyth County, CenturyLink, the local telephone service provider, provides a high-speed redundant network with a combination of fiber and copper infrastructure. The network provides Digital Subscriber Lines (DSL), which are considered by some definition to be "broadband," to a large portion of the county.

Comcast Cable also provides high speed (broadband) internet service through a combination of cable and fiber infrastructure to many homes and businesses in Smyth County. Map 5.3 shows broadband availability in Smyth County. This map was developed as part of a countywide telecommunications planning effort done in 2008-2009.

Bristol Virginia Utilities (BVU) has recently installed its own fiber backbone through Smyth County from Chilhowie to Marion and then south along Route 16 to Grayson County. This supplements their existing fiber which is largely leased from American Electric Power through Smyth County (from Abingdon to Rural Retreat. They also have fiber from Chilhowie to Saltville and have recently been awarded federal stimulus grant funds to add additional fiber in Smyth County and surrounding counties (which is shown on Map 5.3). This would add fiber from Marion to the Wythe County line and also from Saltville along Route 42 to Bland County.

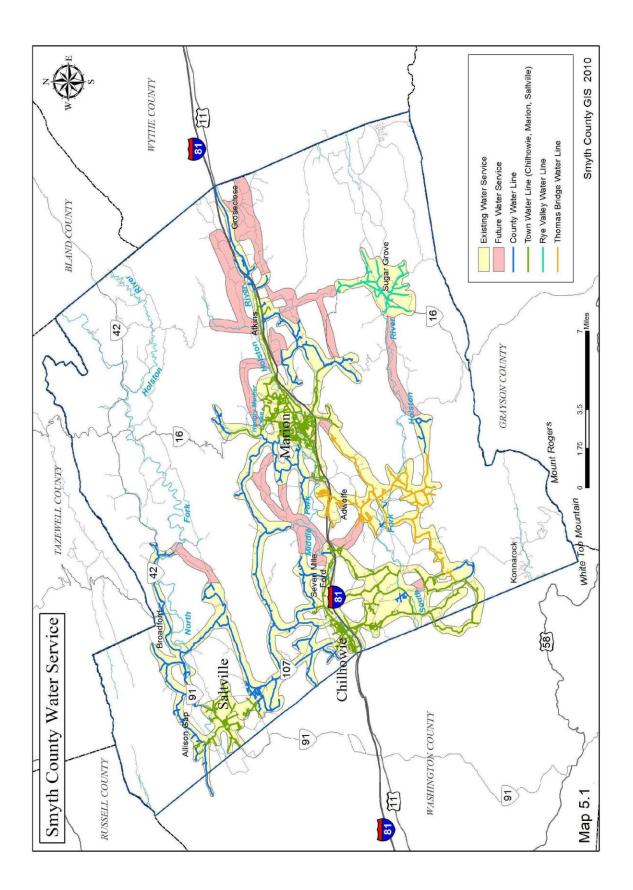
The availability of redundant service through multiple providers and diverse paths is a critical need the county has in order to attract companies that require this level of service. The continued development of better service will help provide even greater speed and reliability to industrial and commercial customers in the County, as well as residential users.

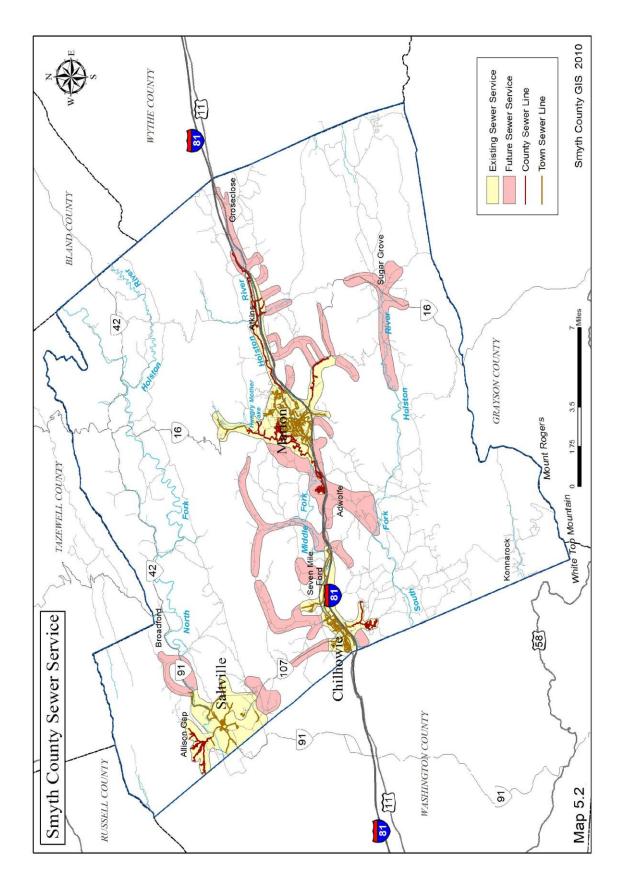
The ability for someone to operate a home business often depends on Internet speed and reliability. Unfortunately, however, there remain households in the county that do not have a computer in the home and/or cannot afford the monthly cost of Internet access. The library does provide computers for public use, but there are few locations for wireless computer access such as Internet cafes or other public locations with wireless Internet capability.

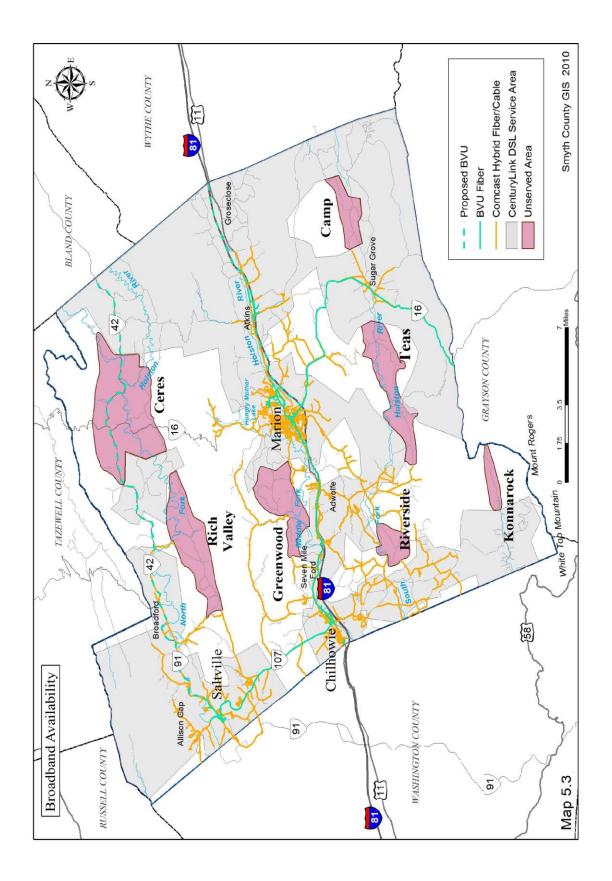
Although the coverage for wireless cellular telephone service has improved since 2005, several areas of the county continue to lack service due to the low population density and difficulty in providing service due to terrain.

Summary of Problems and Opportunities

<u>Schools</u> With school enrollment declining, the county is not faced with a tremendous space problem, with the exception of Rich Valley Elementary. Due to aging and in some cases deteriorating school buildings, there is a need for either extensive renovation or new buildings to replace existing ones. This applies primarily to Marion Intermediate, Marion Primary, and our high schools, including athletic facilities. These are the schools identified in the Smyth County School Board Facility Master Plan as having a high priority which was presented in April 2008. Accessibility requirements have been met with the installation of elevators in all multi-story buildings. In regard to academic programs, greater emphasis has been placed on participation in the regional "virtual" Governor's School and fulfilling the potential of "interactive classrooms." Renewed attention has been given to technology-based training and matching career education offerings with the needs of existing and future employers. Providing relevant, up-to-date and equitable educational facilities and programs with limited resources will continue to be the county's greatest educational challenge.







<u>Water and Sewer Facilities</u> The county has made strides in water service distribution with the addition of numerous new water systems. The county is currently in the process of the development of three new sources of water that are anticipated to be needed in the near future. In particular the northern part of the county (Broadford), and the eastern part of the county (Atkins/Groseclose) are areas in which new water sources are being explored. Recent projects have improved the outlook for wastewater treatment and in fact, with the completion of the Saltville Wastewater Treatment expansion, the county is well situated in regard to sewer treatment capacity. The biggest challenge will be providing sewer collection lines in areas with existing septic problems and/or development potential, especially when the terrain provides cost and construction-related obstacles. As in 1976, when the Comprehensive Plan was first adopted, the county has six entities that provide public water services, and four that provide sewer treatment or collection. There is a crucial need to address the fragmentation of water and sewer services to avoid costly duplication. In general, the county will need to continue to identify and evaluate alternatives for meeting the water and sewer needs of residents.

<u>Solid Waste</u> Due to the regulatory costs of landfill development, the county (like its neighbors) is faced with reliance on the private sector for its garbage disposal needs. The county has recently renewed its contract with Waste Management of Tri-Cities through 2013 to haul waste to the City of Bristol's regional landfill, which is currently serving Smyth County and has a long-term capacity. The county must meet the state-mandated recycling percentages, working jointly with the towns. The potential may exist for combining efforts with neighboring jurisdictions regarding recycling, yard waste composting, or even incineration.

<u>Emergency Services</u> The county has become better equipped to deal with emergency situations. The fire and rescue squads now have state-of-the art rescue vehicles and rescue equipment. There is a need for continued cooperation between departments. The Sheriff's Department operates an active "community watch program." The county now has a central dispatch system and an Enhanced 911 Response System. The county needs to continue to update its communication equipment for emergency response. The role of technology plays an important role in the future of emergency services, providing both problems and opportunities. Tracking cell phone calls and "Voice over IP" communications offers new challenges to E-911. The county will have to coordinate among the service providers to achieve the most efficient and economical way for these new technologies to be incorporated in the E911 Emergency Response System.

The existing 911 Emergency Communication Center is presently located in the lower portion of the Courthouse. As part of the renovation and expansion plans the 911 center will be relocated off-site. The new location has not been determined as of this plan.

<u>County Offices</u> The Courthouse is experiencing overcrowding and the existing offices are in need of additional space and security. With the commencement of the Courthouse renovation and expansion project these issues should be resolved by 2014. The Morison Building is owned by the Commonwealth of Virginia and is leased by the County. The lease term of 25 years expires on December 31, 2019, with no provision for renewal. Adequate central office storage needs for the School System needs to be addressed.

<u>Library</u> The role of technology and the need to provide access to the technology plays an important role in the library's mission. The library continues to provide basic and outreach

library services but needs to continue to keep pace with new technologies to meet the needs of the people of Smyth County into the next decade. In regard to physical space needs, the Saltville and Chilhowie branch libraries are especially overcrowded and suffer from a lack of meeting room space.

<u>Telecommunications</u> Smyth County is relatively well-served with three major service providers that cover the majority of the most populated areas of the county, however, there is still a need for additional "last-mile" provision of telecommunications. There may be a role for the county to play in certain situations in which the private sector is unwilling to provide the service due to the density of population, and therefore the County should investigate some public-private partnership revenue sharing arrangement. There is a need for more free computer access and education for county residents, as well as wireless Internet access in public locations.

PUBLIC FACILITIES AND SERVICES GOAL

• To provide efficient and quality public facilities and services, so that to the greatest extent feasible, all geographic sectors are adequately served.

Schools

<u>Sub-Goal</u>: To have quality school facilities that provide equitable educational opportunities for county residents and that are an integral part of the surrounding community.

Objectives:

- Promote the concept of the "community school" as long as equity in programming and cost can be attained
- Provide school facilities and programs that are modern and kept up to date with technological advances and provide a safe learning environment for children

Strategies:

- 1) Continue to upgrade and modernize the buildings and facilities of the county's schools.
- 2) Continue the policy of retaining the elementary/combined schools in outlying areas of the county (Sugar Grove, Rich Valley), unless equity in programming and in cost per student per school cannot be attained.
- 3) Develop new initiatives and programs at the Smyth Career and Technology Center that address career education and job readiness skills and are matched with the direct needs of area businesses and industries.
- Work with other jurisdictions to continue the success of the Linwood Holton Governor's School and SVETN's Elite Learning to serve Smyth County and other Southwest Virginia localities.

- 5) Promote greater use of existing school facilities after school hours when not in conflict with school activities.
- 6) Continue to expand the use of the "interactive classroom" system among county schools, the community colleges, and the Governor's School program through a fiber optic network as a means of providing greater equity at less cost.
- 7) Continue to support the use of School Resource officers in the schools.
- 8) Work to provide the school system better office storage space and school bus parking and maintenance space.

Water and Sewer Facilities

<u>Sub-Goal</u>: To expand and improve water and sewer systems in the county.

Objectives:

- Extend water service to residential areas where there are health concerns regarding water quality of individual or private water sources
- Expand sewer service in areas where density of development and soil characteristics pose serious limitations for septic systems
- Coordinate the existing water and sewer systems and their planned expansions in a regional approach in order to provide the maximum services at the minimum cost
- Construct water and sewer lines, as necessary and feasible, to serve existing and planned areas of growth
- Expand water and sewer service in the county in a pattern that is consistent with the land use component of the Comprehensive Plan

Strategies:

- 1) The recommendations of the Water and Sewer Study completed in 1997 should be updated based on particular criteria for evaluating priorities. The County should use these recommendations as a five-year Capital Improvement Program for water and sewer improvements and should work with the other water and sewer providers in the county to coordinate their planned improvements.
- 2) The county and towns should use the 1997 Water and Sewer Study as a guide for capital programming. The maps of proposed future water (Map 5.1) and sewer (Map 5.2) service include the following recommended major projects, as well as additional recommendations:
 - a) Expansion of sewer service to the Groseclose area of Smyth County
 - b) Expansion of sewer service to the McMullin and Adwolfe area.
 - c) Continued expansion of the Saltville sewer system to North Holston, Watson Gap, and Pleasant Heights

- d) Expansion of the water and sewer systems into and around Hungry Mother Park.
- e) Extension of water lines to residential areas in the eastern portion of the county, where feasible, and development of a new water source in that area.
- f) Installation of water and sewer services to all unserved Interstate interchanges, including Exit 39 (southside), Exit 44 (southside), Exit 47 (southside), and Exit 54 at Groseclose.
- g) Installation of water lines to several smaller communities that have inadequate and unhealthy private water supplies, including Mulberry, Rocky Hollow, Kelly Hill, Porter Valley, and Ebenezer.
- h) Develop a new water source and water treatment plant on the North Fork of the Holston River to serve Smyth County, the Town of Saltville, and the Tannersville community in Tazewell County. Consider and study the possible development of a reservoir for water supply and flood control.
- 3) The county and the other water providers should consider a unified county-wide water supply system, tying together existing systems and incorporating existing and planned treatment facilities on both underground and surface water sources. A preliminary engineering report or feasibility study should be done to determine the best way to accomplish this task.
- 4) The county should investigate the use of new technological advances in water treatment processes to allow compliance with safe drinking water standards.
- 5) The county should work with the state and local health departments to identify concentrated areas of contaminated individual wells and/or septic system failures and to devise plans to address those problems.
- 6) The county should continue to aggressively seek federal and state funds for major water and sewer improvement projects.
- 7) The county should work with the Towns, the Rye Valley Water Authority, and the Thomas Bridge Water Corporation to determine the best management and organizational approach to providing efficient water delivery services and sewer collection services, eliminating duplication of services, and reducing operational costs. The county should explore the possibility of establishing regional water and/or sewer service over the next decade. At a minimum, this regional effort could combine management services and shared special services to make each of the currently individual providers more efficient in operation and maintenance.
- 8) The county should investigate the need for upgrading small, inadequate water and sewer lines and incorporate those into the Capital Improvement Program.

9) To the greatest extent possible, new water and sewer lines should be sized large enough to provide for future growth, fire protection as well as establishing new service areas as development is proposed or occurs.

Solid Waste Facilities and Services

<u>Sub-Goal</u>: To provide an efficient means of solid waste disposal to serve all county residents.

Objectives:

- Provide a coordinated, planned approach to solid waste management involving the three towns and local business, industry, and residents
- Continue local recycling efforts to meet or exceed state mandates
- Seek participation on a regional basis in joint solid waste management efforts, including surrounding jurisdictions

Strategies:

- 1) Encourage the towns to provide curbside recycling and yard waste composting services.
- 2) Encourage area industries to take advantage of the existing state tax exemption program for machinery and equipment used in recycling.
- 3) Consider the adoption of an ordinance which reduces or exempts local machinery and tools taxes on industrial machinery and equipment used for recycling.
- 4) Actively participate in regional solid waste planning efforts by the Mount Rogers Planning District Commission.
- 5) Continue to explore new markets for recyclables and investigate ways to increase revenues and decrease recycling costs.
- 6) Research within the next five years the possibility of an incinerator facility for future solid waste disposal.

Emergency Services

<u>Sub-goal:</u> To provide adequate and equitable emergency services (police, fire, and rescue) to all county residents

Objectives:

- Improve and keep up to date the equipment needed for adequate delivery of emergency services
- Improve response time to emergencies through improved communications and cooperation among service providers and continued training for personnel
- Improve the availability of an adequate water supply in the county in order to upgrade fire protection capabilities, including the installation of fire hydrants

- Implement a vehicle tracking system to locate public safety employees
- All agencies shall comply with National Incident Management System (NIMS)

Strategies:

- 1) Continue to upgrade countywide communications equipment for emergency response through high-band radio system improvements, cell phone location equipment, and wireless IP location improvements.
- 2) Continue with water development projects in the county and provide adequate line sizes for fire protection, and fire hydrants.
- 3) Work closely with the U. S. Forest Service, local fire departments, and identified landowners to identify potential sites for dry hydrants and obtain funding for dry hydrant projects in areas which are at a distance from an adequate fire protection capability.
- 4) Continue the neighborhood watch program with regular contact with the Sheriff's Department.
- 5) Encourage continued professional training for all volunteer fire and rescue personnel and promote their accomplishments.
- 6) Support the County's fire and rescue squads in their efforts to acquire state-of-the-art equipment through available grant funding for homeland security and other sources.

County Office Space

<u>Sub-goal</u>: To provide county office space to meet present and future needs

Objective:

- Provide for an adequate amount of working office space for county employees and make the most efficient use of available space
- Inter-department adjacencies are also important
- Meet the judicial and security needs of the court system

Strategies:

- 1) Implement the recommendations of the recent study to examine Courthouse and other county space needs, including expanding the Courthouse space and demolishing the existing jail building.
- 2) Address the Courthouse space needs by preserving as much as possible of the existing Courthouse activities, however recognizing the need for security improvements.

Library

<u>Sub-goal</u>: To provide adequate library facilities to meet present and future needs

<u>Objective:</u> Increase the availability, accessibility, and quality of public library services to all county residents

Strategies:

1) Support continued development of library services in the county, including the continued development of the new branch library in Chilhowie, the expansion of the facility at Saltville, and the use of improved computer technology such as on-line database services.

Telecommunications

Sub-goal: To encourage the availability of high-speed, broadband telecommunications services countywide

<u>Objective:</u> Enable businesses and households to have access to up-to-date technology including high-speed Internet access

Strategy:

- 1) The County needs to encourage the current telecommunications providers to continue to expand and improve speed, connectivity, and reliability, and should welcome new providers for greater competition.
- 2) The County should support the expansion of wireless telephone service to presently unserved areas.
- 3) The county should support free Internet access locations at community centers and other public buildings and work with providers to increase wireless "hot spots."
- 4) The County should encourage developers of new subdivisions and residential developments to design their projects to be fiber and Internet ready, by installing conduit and/or fiber.
- 5) The County should support investments in educational opportunities for computer literacy and Internet training for small businesses and individuals.

VI. TRANSPORTATION

<u>Sub-goal</u>: To provide adequate library facilities to meet present and future needs

<u>Objective:</u> Increase the availability, accessibility, and quality of public library services to all county residents

Roads and Highways

The main transportation infrastructure in Smyth County is the road and highway system which includes all public roadways ranging from Interstate 81 to unpaved state secondary roads. Many road improvements have been made since the 1970's, while others are still awaiting construction or planning funding. The following section provides background data on the traffic volumes on all the major roadways and the most heavily used secondary roads.

<u>Interstate</u>. Interstate 81 traverses Smyth County from east to west, a length of approximately 21 miles, generally following the former route of the Wilderness Road which carried travelers who were settling the frontier. Outside Smyth County, Interstate 81 extends from just east of Knoxville, Tennessee where it connects with Interstate 40, to upstate New York, providing transportation access to the Northeast and the Great Lakes area via other interstate connections. The Interstate is no doubt the major reason for increased economic activity in western Virginia since the early 1960's and continues to be a major asset to the region.

The volume of traffic using Interstate 81 has substantially increased over the period of 1991 to 2009. An average of about 26,000 vehicles per day use the four-lane, divided roadway. Table 6.1 indicates comparative traffic counts for highway segments and an "average" for the entire length.

					% Change
Pood Sog	ment (From To)	1981	1991	2001	over 20- year period
Koau Seg		1701	1331	30,000	periou
Rt. 107 Exit	7-mile Ford Exit	12,975	21,825	30,000 *	131.2%
7-mile Ford	Rt. 11 W. of Marion (Exit			30,000	
Exit	44)	14,880	20,510	*	101.6%
Rt. 11W (Exit				30,000	
44)	Rt. 16 (Exit 45)	12,810	19,715	*	134.2%
	Rt. 11 E. of Marion (Exit			31,000	
Rt. 16 (Exit 45)	47)	12,420	19,370	*	149.6%
Rt. 11E (Exit				25,000	
47)	Rt. 90 (Exit 60)	10,060	17,190	*	148.5%
Average	of all segments	12,629	19,722	29,200	131.2%
					% Change
					over 18- year
Road Seg	ment (From To)	1991	2001	2009	period
			30,000	28,000	
Rt. 107 Exit	7-mile Ford Exit	21,825	*	*	28.3%
7-mile Ford	Rt. 11 W. of Marion (Exit		30,000	27,500	
Exit	44)	20,510	*	*	34.1%
Rt. 11W (Exit			30,000	28,000	
44)	Rt. 16 (Exit 45)	19,715	*	*	42.0%
	Rt. 11 E. of Marion (Exit		31,000	25,000	
Rt. 16 (Exit 45)	47)	19,370	*	*	29.1%

Table 6.1 Interstate 81 Traffic Volumes: 1991, 2001, and 2009Average Vehicles Per Day

Rt. 11E (Exit			25,000	23,800	
47)	Rt. 90 (Exit 60)	17,190	*	*	38.5%
			29,200		
Average	of all segments	19,722	*	26,460	34.2%

*Figure derived from average of several road segments Source: Virginia Department of Transportation

Traffic volumes on Interstate 81 have risen by over 34 percent over the eighteen-year period, however the 2009 estimates are showing a decrease in numbers. As was the case in 1991, a major contributor to the traffic counts are tractor-trailer freight trucks which comprise 20 percent of the vehicles – a decrease from 22 percent in 1991. (One of almost every four vehicles is a trailer truck).

The statistics above reflect the industrial activity in particular in the "corridor area" of Smyth County as well as the general use of the roadway generated by origins and destinations outside the county.

<u>Primary Roads</u> Smyth County has five primary roadways which range from heavily traveled U.S. Route 11, which runs roughly parallel to the interstate, to Route 42 that carries just 240 vehicles per day on its eastern most segment in the county. Route 11 is a major conduit of local traffic and serves as the main business corridor in both the Towns of Marion and Chilhowie. In the unincorporated areas, a combination of residential, commercial, and industrial development has occurred along Route 11 that has created some traffic safety and convenience problems. The most traveled segment of Route 11 is the four-lane section between the west town limits of Marion and the I-81 south interchange (Exit 44) which serves 9,600 vehicles per day, an increase of only 0.3 percent from 1991.

Table 6.2 provides 1991, 2001, and 2009 traffic count data on selected primary road segments in the county.

						% Change
Road	Segment (From	. To)	1981	1991	2001	1981-2001
11	Rt. 622	E. limits of Marion	4,180	4,030	6,800	62.7
	W. Limits of					
11	Marion	Rt. 81 (Exit 44)	8,345	9,570	11,000	31.8
11	Exit 44	7-mile Ford	2,385	4,070	3,200	34.2
				10,68		
11	7-mile Ford	Rt. 107	8,135	0	7,100*	-12.7
	S. limits of					
16	Marion	Rt. 601 Sugar Grove	2,735	3,500	3,000	9.7
42	Rt. 16	Broadford	665	850	565*	-15.0
91	Rt. 42 Broadford	Saltville	1,440	1,460	2,200*	52.7

Table 6.2: Traffic Counts for Selected Primary Roads: 1991, 2001, and 2009in Average Vehicles Per Day

107	Saltville	Chilhowie	3,820	5,135	6,625*	73.4
						% Change
Road	Segment (From	. To)	1991	2001	2009	1991-2009
11	Rt. 622	E. limits of Marion	4,030	6,800	7,750*	92.3
	W. Limits of			11,00		
11	Marion	Rt. 81 (Exit 44)	9,570	0	9,600	0.3
11	Exit 44	7-mile Ford	4,070	3,200	2,700	-33.7
				7,100		
11	7-mile Ford	Rt. 107	10,680	*	6,800	-36.3
	S. limits of					
16	Marion	Rt. 601 Sugar Grove	3,500	3,000	2,700	-22.9
42	Rt. 16	Broadford	850	565	470*	-44.7
				2,200		
91	Rt. 42 Broadford	Saltville	1,460	*	2,233*	52.9
				6,625		
107	Saltville	Chilhowie	5,135	*	5,100	-0.7

*Figure derived from average of several road

segments

Source: Virginia Department of Transportation.

Traffic counts for 2010 not yet available.

Comparing the 2001 and 2009 numbers on the table, there is a decrease in all but two segments. The eighteen-year period comparison also shows a decrease in nearly all the segments. A segment that has shown an overall increase in all three study years is that of US Route 11 from Rt. 622 to the eastern town limits of Marion. The segment of Route 11 between the west town limits of Marion and the I-81 south interchange (Exit 44) has experienced an increase from 1991 but still shows a decrease from 2001 to 2009.

A segment that showed the highest rate of growth in 2001, State Route 107 between Chilhowie and Saltville, now shows a decrease in traffic. The segment that experienced the highest percentage of decrease is State Route 42 from the intersection of State Route 16 to the Broadford area with an average of 470 vehicles per day.

<u>Secondary Roads</u>. Smyth County has a total of just over 447 miles of secondary roads. There are 345.1 miles of hard surface roadways which represents an increase from 341.9 miles in 1990. The unpaved road mileage has remained constant with around 102 miles since 1990. The unpaved road surface in 2007 is broken down into two categories (not shown): 1) All weather surface: 97.69 miles, and 2) Light surface: 4.4 miles.

Table 6.3 indicates the trends in roadway type over the last thirty-seven-year period.

Table 6.3	Secondary	Road Mileage	by Surface Ty	ype, 1970-2007

Surface Type Mileage

	1960	1970	1980	1990	2000
Hard Surface	202.5	243.2	307.5	341.9	343.5
Non-paved surface	231.6	187.1	129.8	102.9	102.1
TOTAL	434.1	430.4	437.3	444.8	445.6

Surface Type	Mileage					
	1970	1980	1990	2000	2007	
Hard Surface	243.2	307.5	341.9	343.5	345.1	
Non-paved surface	187.1	129.8	102.9	102.1	102.1	
TOTAL	430.4	437.3	444.8	445.6	447.2	

Source: Va. Department of Transportation

The trends indicate that the overall mileage of secondary roads has not changed significantly since 1970, with only an additional 16.8 total miles added, however the ratio of hard surface to non-hard surface roads has changed. In 1970, over 43 percent of the total mileage was not hard-surfaced, while by 2000 that proportion had been reduced to 23 percent. However very little change has occurred since 1990.

Table 6.4 provides traffic counts for some of the more heavily traveled secondary routes. Most of these roads have experienced decreases in their traffic volume of 2009.

		unts, 1991, 2001, 20				%
Road Name and No.	Segment (From .	То)	1991	200 1	2009	Change 1981- 2001
		Possum Hollow		1,70		
Valley Rd. (610)	Route 107	Rd. (723)	1,566	0	1,500	-4.2
Poor Valley Rd.	Allison Gap Rd.			1,30		
(613)	(634)	Wash. Co. line	1,610	0	1,300	-19.3
Allison Gap Rd	N. limits of	Intersection with		3,20		
(634)	Saltville	Rt. 613	3,468	0	2,600	-25.0
Thomas Bridge Rd	South Fork Rd.	Adwolfe Rd. (E.	2,645	2,50	2,200	-16.8

Table 6.4: Secondary Road Traffic Counts, 1991, 2001, 2009 Average Daily Vehicles Per Day

(657)	(650)	Rt. 660)		0		
		Thomas Bridge		5,00	4,500	
Adwolfe Rd. (660)	Rt. 11	Road (657)	4,957	0*	*	-9.2
	Thomas Bridge	Backmeadows		2,50		
Riverside Rd (660)	Rd. (E. Rt. 657)	Lane (661)	2,450	0	4,600	87.8
		Flatwood Acres		5,70	6,000	
Whitetop Rd (762)	River Rd (608)	Rd (607)	5,003	0*	*	19.9
Lyons Gap Rd	N. town limits			1,90		
(774)	of Chilhowie	Rt. 637	2,228	0	1,700	-23.7

*Figure derived from average of several road segments – VDOT

The only two segments that showed an increase of traffic for 2009 include: 1) Whitetop Road (Rt. 762) from River Road (Rt. 608) near Interstate 81 to Flatwoods Acres Road (Rt. 607) near Green Hill Market, which carries 6,000 vehicles per day; and Riverside Road (660) from Thomas Bridge Road (E.Rt. 657) to Backmeadows Lane (Rt. 661) which carries 4,600 vehicles per day.

Airports

<u>General Aviation</u> Located approximately eleven (11) miles from Marion is Mountain Empire Airport, designated a Regional Airport in 2004 by the state. The airport is governed by a joint airport commission, composed of appointees from Smyth and Wythe counties and the towns of Marion and Wytheville. The airport commission operates the airport. The airport has a 5,250-foot paved runway as well as radio controlled lights, a localizer/NDB/GPS instrument approaches, AWOS, on-field Weather Information System, remote frequency for air traffic control and flight service, hangar space, and a "fuel farm" with aboveground storage tanks as well as a Jet-A refueling truck.

The airport is base for approximately 30 aircraft. On site is a small business, Hangar 7, which performs airport maintenance, repair, and inspection for aircraft based in Virginia and surrounding states. Many area industries in both Smyth and Wythe Counties utilize the airport for business purposes. The Mountain Empire Airport Master Plan predicts a continuing increase in based aircraft, especially in larger aircraft and jets, and in annual operations. A full-length parallel taxiway was completed in 2003 as well as in 2005, a \$1.3 million paving project on the east ramp to provide additional corporate aircraft parking. Additional hangar space (T-hangars), an upgraded terminal facility, additional navigational aids, improved road access, and increased parking space will be phased in over the next two years.

<u>Commercial Air Service</u> The Tri-Cities Airport near Blountville, Tennessee is 59 miles southwest of Marion via Interstate 81. Four carriers (Delta Connection, U.S. Airways Express, Allegiant Air, and American Eagle) provide direct service to six major U.S. cities daily, including Atlanta, Charlotte, Chicago, Detroit, Orlando, and Tampa. Air charter service is also available for passenger travel. In addition, the Tri-Cities Air Cargo Center is located at the Tri-Cities Regional Airport offering a new, state-of-the-art air cargo facility in addition to a foreign trade zone and a U.S. Customs "port of entry".

The Roanoke Regional Airport is located approximately 100 miles northeast of Marion and offers direct air transportation service to national and international destinations.

Smart Scale Projects

Transportation needs will almost always be greater than the funds available to address them, especially in rural areas. In 2013, the signing of House Bill 2313 (HB 2313) created a more sustainable revenue source supporting transportation funding. While passage of this bill enabled the Commonwealth Transportation Board (CTB) to add significant revenues to Virginia's transportation program, there are still many transportation needs that cannot be addressed with available revenues. To find a way to better balance transportation needs and prioritize investments for both urban and rural communities throughout the Commonwealth, new legislation - House Bill 2 - was signed into law in 2014. In 2016, the process was renamed "SMART SCALE, Funding the Right Transportation Projects in Virginia." SMART SCALE stands for System Management and Allocation of Resources for Transportation: Safety, Congestion, Accessibility, Land Use, Economic Development and Environment. The purpose of SMART SCALE is to fund the right transportation projects through a prioritization process that evaluates each project's merits using key factors, including: improvements to safety, congestion reduction, accessibility, land use, economic development and the environment. The evaluation focuses on the degree to which a project addresses a problem or need relative to the requested funding for the project. With the latest updates to the program's design and project scoring and evaluation, SMART SCALE has moved to a biennial application process, with applications being due in August of years ending in even numbers.

Round Two SMART SCALE Projects

In Round Three of the SMART SCALE process, with projects submitted in 2016, Smyth County had three projects funded.

I-81 Exit 35 (State Route 107) Interchange Modifications

State Route (SR) 107 (Whitetop Road) at Exit 35 experiences significant congestion and delay during peak periods, due to a lack of exclusive turn-lanes to accommodate vehicles trying to turn left to access either northbound or southbound I-81. This results in long queues along SR 107 that impact the through movements as well as I-81 NB/SB Off-ramp traffic operations. This project increases overall pavement width on SR 107 under the interstate to approximately 34' (outside edge of pavement to outside edge of pavement) by modifying/relocating the outside roadside barriers and reducing the travel lane widths to 10' in an effort to provide exclusive leftturn lanes in each direction. The existing metal barriers will be removed and replaced with concrete barriers that use a smaller footprint and can be placed closer to the bridge supports. The resulting 10' center lane would be striped to provide back-to-back left-turn lanes for vehicles on SR 107 to access the I-81 NB/SB On-ramps. With the space available between the ramp termini, these turn lanes would be configured to provide approximately 100' of storage with a 30' taper. Finally, the I-81 NB/SB Off-ramps would be widened to the inside to accommodate exclusive left-turn lanes. These turn lanes will be configured to provide vehicles with approximately 350' of storage and a 150' taper. These new turn lanes at the Exit 35 interchange off-ramps will help reduce the potential of queued turning vehicles from impacting I-81 mainline operations as well as ease overall congestion at the ramp termini. See Figure 7-1 for project sketch.

US 11 at Railroad Drive Intersection Improvements

This project adds dedicated left- and right-turn lanes to the intersection of US 11 at Railroad Dr with the intent of addressing safety and operational concerns associated with this intersection and

the adjacent at-grade railroad crossing. These turn lanes will provide storage areas for vehicles executing turning movements by getting them out of the through travel lane along US 11 and thus helping to improve safety and operations at this intersection. Additionally, this intersection is located on a section of the corridor where vehicles typically travel in excess of 55 mph and through a horizontal curve that limits a driver's sight-distance as they travel northbound on US 11. To help address these issues, ROW will be acquired along/adjacent to US 11 so it can be widened to the east to accommodate a northbound left-turn lane consisting of 200' of storage and a 200' taper. This additional lane will also improve the sight-distance around the horizontal curve and allow drivers more time to react to turning vehicles at this intersection. A southbound right-turn lane with 200' storage and 200' taper will also be added to the west of US 11 and will utilize the space that currently exists with the shoulder. Finally, advance "intersection ahead" warning signs, advisory speed signs, and rumble strips will be installed along the US 11 approaches to this intersection. See Figure 7- 2 for project sketch.

US 11 at SR 107 Intersection Improvements (with Radius)

This project improves the southbound approach to the intersection of US 11 at State Route (SR) 107 by adding back-to-back left turn lanes. Two left-turn lanes will be added, one southbound left-turn lane at the signalized intersection of US 11 at SR 107 (150 ft storage) and a northbound left-turn lane into the site driveway of the Food City (100 ft storage). Both turn lanes will share a 50 ft taper. The southbound approach will be widened to the west to accommodate these turn lane improvements. This will allow left-turn movements or through movements attempting to traverse the intersection, resulting in less overall congestion and travel delay. To be able to accommodate this new lane, ROW will be needed and the existing open drainage system located on the west side of SR 107 will be replaced with an underground closed drainage network, new driveway culverts, and curb/gutter. Finally, the radius of the southwest corner of the intersection will be increased to 70', to better accommodate turning truck traffic accessing existing, recently approved, and planned economic developments along US 11. See Figure 7- 3 for project sketch.

Round Three SMART SCALE Projects

In Round Three of the SMART SCALE process, with projects submitted in 2018, Smyth County had one project funded.

US Route 11 / SR 660 Roundabout North - \$3,572,022

The proposed project involves constructing a single lane roundabout at the intersection of U.S. Route 11 and State Route 660 (north side). The proposed roundabout has an inscribed diameter of 100 feet and one circulating lane. The existing eastbound right-turn lane will be removed from the intersection. No sidewalk or curb and gutter is included as part of this project. The bridge located to the north has been decommissioned and the pavement will be removed so that the previous north leg will no longer be included with the new roundabout intersection. This project will address the Crescent Corridor (CoSS) Segment B1, Needs B and M as identified in the VTrans 2040 document. The proposed project directly addresses reliability and congestion issues along U.S. Route 11. Highway 11 being the primary roadway should have priority in traffic flow and movements. At the current intersection, highway 11 has stop signs in the left turn direction, thus impeding the traffic flow, especially during congested times or when large vehicles are present. The improvements associated with this project will eliminate the stop signs and allow for continuous flow of traffic in all directions. By modifying this intersection, the existing congestion and safety issues will be improved, which will allow U.S. Route 11 to serve as a better parallel facility to I-81. The Interstate 81 Incident Detour Plan routes both Northbound and Southbound Interstate traffic directly through this intersection for incidents occurring between Exits 39 and 44. The current configuration of the intersection does not allow for Tractor Trailer maneuvers without impacting oncoming traffic lanes. A roundabout in this area will allow for larger turning movements as well as separated traffic lanes to allow those movements. Several Commercially Zoned parcels are adjacent to the project, this project will allow for improved access and traffic flows to these highly important development parcels. See Figure 7- 4 for project sketch.

Round Four SMART SCALE Projects

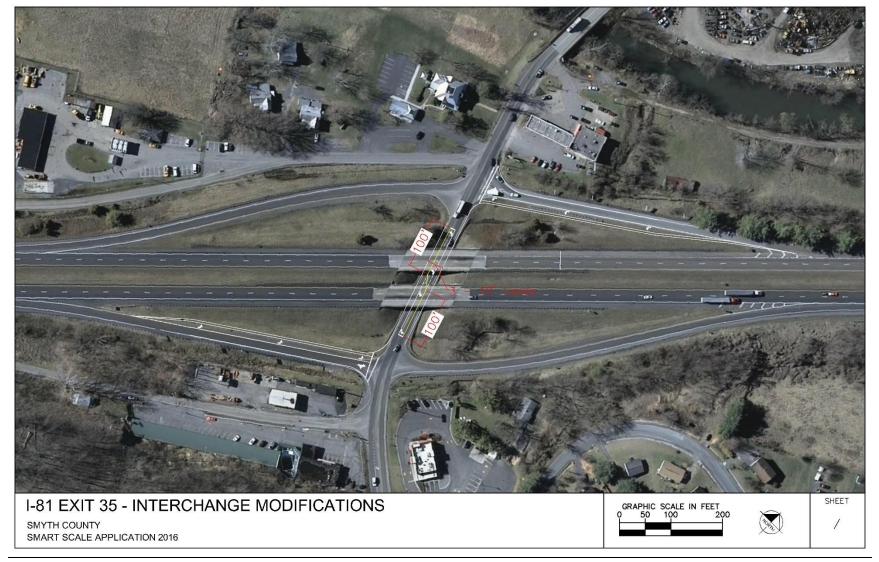
During Round Four of the SMART SCALE process, the continued close working relationship between Smyth County, the Mount Rogers Planning District Commission, and Virginia Department of Transportation (VDOT) has ensured a pair of strong projects for the County. The attentive staff at VDOT has worked one-on-one with all localities in the Mount Rogers Region to create the most necessary, yet fundable, projects in the region. The following projects for Round Four will be submitted by Smyth County in 2020:

US 11 at Rifton Dr (Exit 47) Intersection Safety Improvements

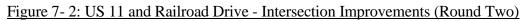
The proposed project involves converting the intersection of Rifton Dr and US11 to an unsignalized Green-T. A raised channelized median will be constructed in the intersection and raised flex-post delineators will be added along US 11 to accommodate the Green-T concept. New signs and pavement markings will be installed to delineate movements at this intersection. This project will mill and overlay the intersection. See Figure 7- 5 for a sketch of the proposed project.

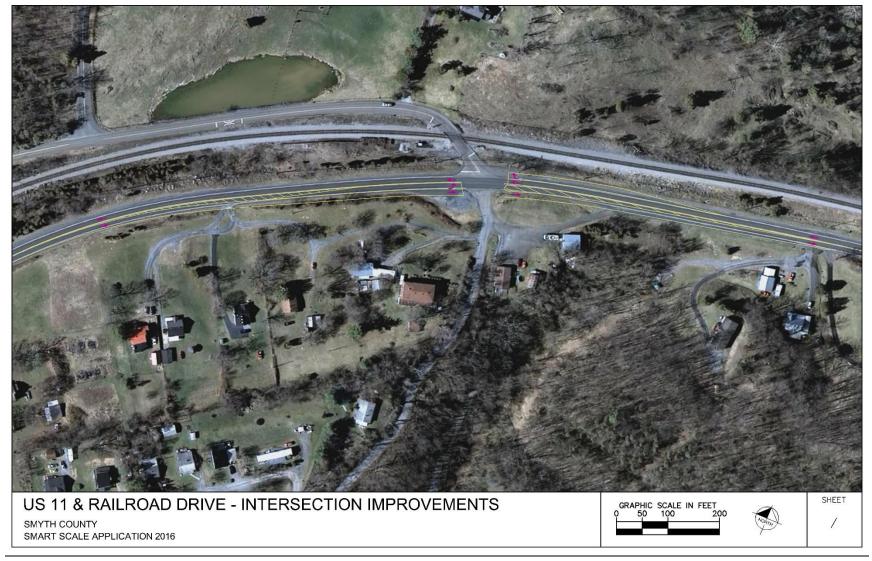
US Route 11 / SR 660 Roundabout (South)

The proposed project involves constructing a single lane roundabout at the intersection of U.S. Route 11 and State Route 660 (south side). The proposed roundabout has an inscribed diameter of 100 feet and one circulating lane. Some ROW acquisitions are anticipated for this project. No sidewalk or curb and gutter is included as part of this project. New guardrail will be installed on the northeast and southeast quadrants of the proposed roundabout. See Figure 7- 6 for a sketch of the proposed project.



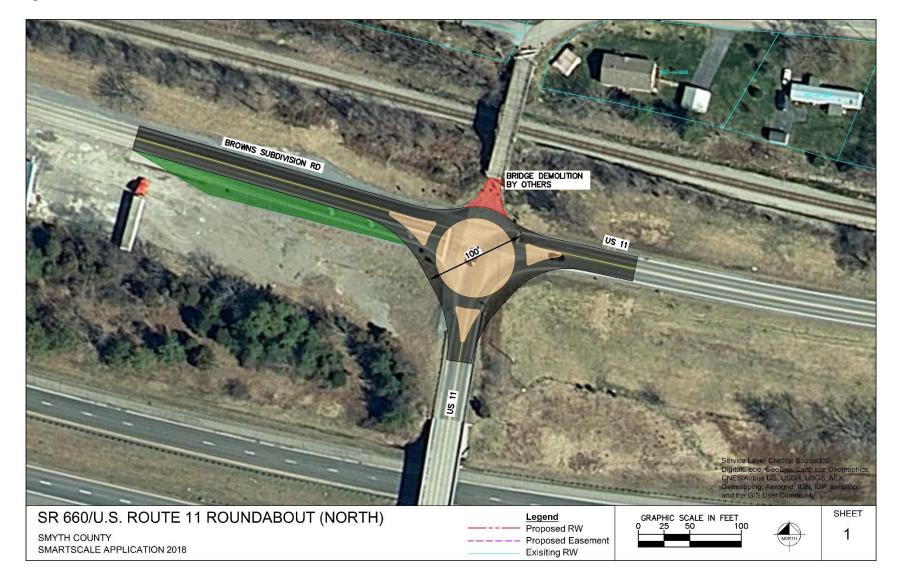








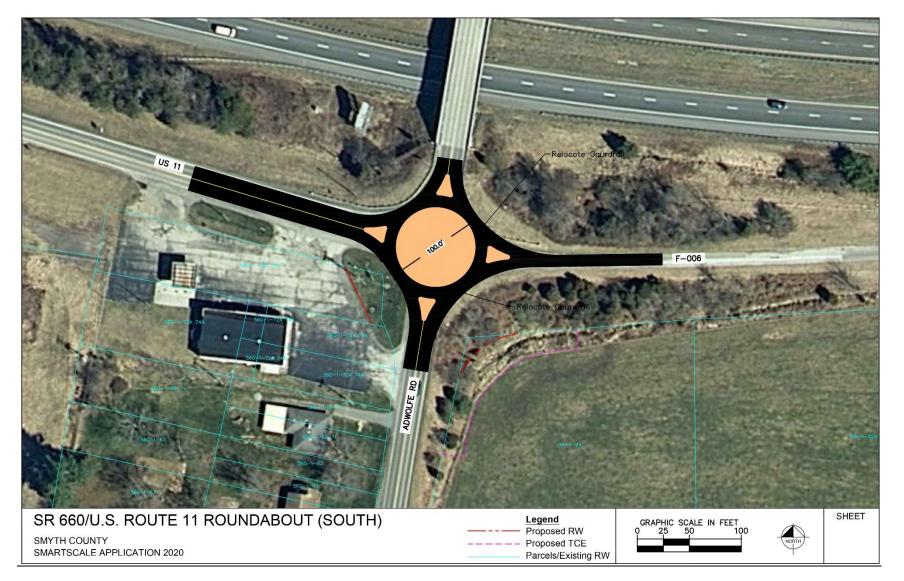














Rail Transportation

A mainline of the Norfolk Southern Railway crosses Smyth County running generally parallel to the Interstate. The railroad provides freight service to Chilhowie, Marion, and the Atkins area. The major rail users in the county are Royal Moldings, General Shale Products, and NALCO (Superior Carriers). An average of six to seven trains per day travel through Marion. Seasonal users are Southern States in Marion and SuperGro near Seven Mile Ford. Freight use of the railroad in Smyth County has not changed in recent years.

A branch line which serves Saltville through Glade Spring was closed in 1985 when a portion of the line collapsed due to soil subsidence, and although the area has been filled, the railway has subsequently been abandoned by Norfolk Southern. At one time, the Town of Saltville investigated the possibility of reconstructing the railway, but there are no current efforts to reestablish service along that route. The town owns the section of the track within the town limits and is now working on a plan to convert the railroad into a walking and biking pathway.

There is no passenger rail service in Smyth County. However, there continues to be regional efforts to develop a passenger rail service through Virginia (called TransDominion Express) that would go through Smyth County.

Public Transit

<u>Bus Service</u> Passenger bus service is provided to Marion by Greyhound Bus Lines. The company offers two buses to the east and two buses heading west (via Interstate 81) daily. Also available is limited charter service (scheduled from another location), freight, and express package service. The estimated average ridership on the bus service from the Marion station is five passengers per day, which represents no change over the last ten years.

<u>Taxi Service</u> Smyth County is served by two privately owned taxicab businesses located in Marion. (Although these companies will serve the other two towns, there are no longer any taxi companies located in Chilhowie and Saltville).

<u>District Three Government Cooperative</u> District Three Public Transit provides rural public transportation in the third planning district of Virginia except for the City of Bristol. Most services are available to all citizens regardless of age or income. Fares are \$.50 per one way trip in most instances. District Three operates a fleet of 73 vehicles of which 49 are lift-equipped for passengers using wheelchairs. The agency transported over 221,000 riders in 2009. Of that total, over 43,000 rides were provided to residents of Smyth County. Citizens use the bus service for a variety of reasons to include transportation to shopping centers, restaurants, parks, entertainment venues and medical appointments. Other popular destinations include the wellness center, senior centers, schools, libraries and government offices.

District Three provides transportation services through the following:

Smyth County Transit- This system serves citizens living in most areas of the county by providing transportation to the towns of Marion, Chilhowie, or Saltville. Most areas of the county are served weekly. Local match funding is provided by the county

Marion Transit- Over service Mondays through Saturdays, the municipal system operates a flexible fixed loop within the town limits of Marion. Local match funding is provided by the town.

Chilhowie Transit- District Three operates bus service on Thursdays in Chilhowie and the surrounding area. Local match funding is provided by the town.

New Freedom Regional Routes- Through a two-year federal and state grant, the agency provides weekly bus service to Tri-Cities, Winston-Salem, and the Roanoke Valley. Destinations include major medical centers and shopping malls.

Senior Centers- Buses transport older citizens to senior centers in Marion, Chilhowie, and Saltville. Funding provided by District Three Senior Services.

Senior Medical- The agency provides a limited amount of transportation for qualifying seniors from their home to medical appointments. Funding provided by District Three Senior Services.

Pedestrian and Bike Transportation

There are several walking and biking pathways recently constructed or under development in the three towns in the county. The Grassroots Conservancy, an active civic group in Marion, has progressed a long way since 1994, having completed several sections of a walking trail along the Middle Fork of the Holston River, in addition to a park located just off Church Street. The Town of Marion jointly with Smyth County has recently opened a bikeway along Park Boulevard (Route 16) from North Main Street toward Hungry Mother State Park (now ending at Mitchell Valley Road). The Town of Chilhowie plans to develop a walkway along the Middle Fork of the Holston (connecting the Bonham House tourism center with the town park). The Town of Saltville is also in the process of converting a former railway right-of-way into a walking and biking trail.

Hungry Mother State Park and the Mt. Rogers National Recreation Area have trail systems for recreational hiking and horseback riding. In addition, the Appalachian Trail crosses the eastern end of Smyth County, providing only one of the few Interstate crossings along the length of the nationally known trail.

Summary of Problems and Opportunities

<u>Road Conditions, Safety, and Access</u> Although the county has experienced substantial improvements in accessibility, safety, and road conditions since the adoption of the county's Comprehensive Plan in 1976 and some further improvements since 1994, there are still recognized deficiencies that need improvement and future road concerns that need addressing. In terms of safety, many of the county secondary roads have dangerous curves, unsafe bridges, and narrow pavement widths. There are several secondary roads that are extremely heavily traveled and in need of upgrading. Substantial progress has been made to equip unsafe at-grade rail crossings with protection devices, although there are still several unprotected crossings in the county.

The county still has approximately 102 miles of secondary road in unpaved condition. Several roads are in the state's six-year plan to pave with an average of one or two road segments

being completed each year. Also, the county usually spends a portion of its annual construction funds on the upgrading of substandard subdivision roads to bring them into the state secondary system.

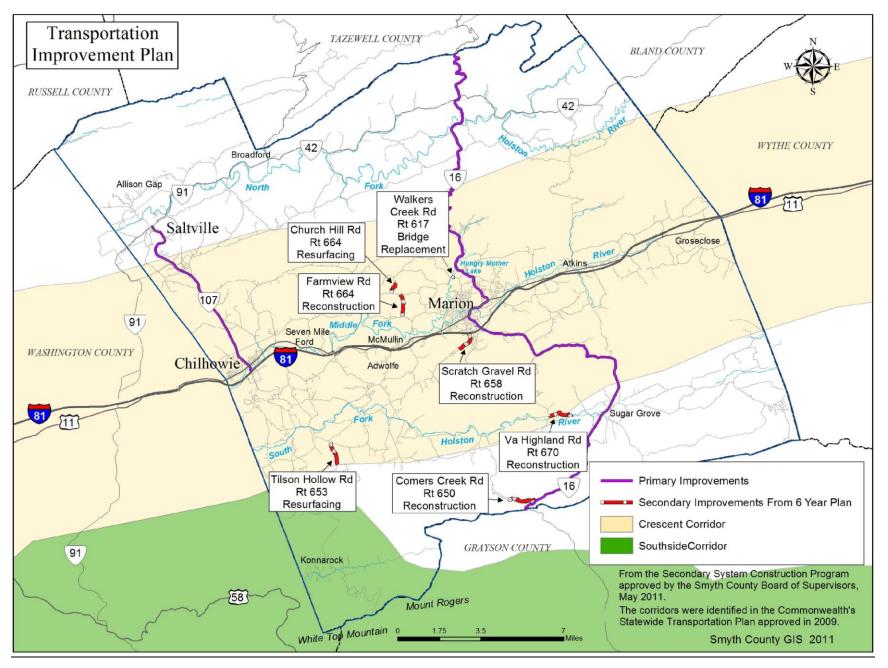
Although Smyth County benefits tremendously from its east/west Interstate access, better accessibility is needed to travel south and north. The primary roadways of Route 16 and Route 107 need to be improved as much as possible with current and future funding. They are critical roadways that need to provide safe and convenient travel for both local traffic within the county and access to Route 58 in Grayson County to the south, and access north toward Tazewell County and U. S. Route 460. There is also a need to plan road improvements to ensure adequate road conditions and access in anticipated future growth areas of the county and to coordinate those road improvements with utility extensions in those areas. Although state funding is extremely limited, the County needs to continue to support safety improvements on secondary roads through the VDOT Six-Year Plan process. Map 6.1 shows transportation improvements planned on secondary roads from the current Six-Year plan, as well as emphasizing the primary state roadways. The map also shows the transportation corridors identified in the Commonwealth Statewide Transportation Plan approved in 2009. (The Interstate 81 corridor in Smyth County is part of the Crescent Corridor).

<u>Rail Transportation</u> Smyth County has freight rail service from the Norfolk Southern line located basically parallel to the Route 11/I-81 corridor. There are three major industrial users and two seasonal users of the railroad in the county. In addition, the industries in the Deer Valley Industrial Park in Chilhowie are immediately adjacent to the railroad. Norfolk-Southern has abandoned a spur line that goes from Glade Spring to Saltville and has donated it to the Town of Saltville. The Town hopes to use the railroad right-of way for conversion to a walking and biking trail. There is no passenger rail service in Smyth County, but recently there has been regional efforts to re-establish passenger service through Virginia, including through Smyth County.

<u>Air Transportation</u> The county is well served by the Mountain Empire Airport, a general aviation facility with a 5,250-foot runway which can accommodate corporate jets. However, the airport is in need of several major improvements related to safety concerns and future anticipated capacity. Commercial air service is not available directly in Smyth County but is available at Tri-Cities Airport (59 miles from Marion) and Roanoke Regional (approximately 100 miles away). The lack of local commercial air service is recognized as a transportation problem.

<u>Public Transportation Services and Ridesharing</u> The county is served by the Greyhound Bus Lines, two private taxi services, and the District Three Governmental Cooperative rural transportation service. District Three uses a fleet of minibuses and vans to serve elderly and handicapped residents in Smyth County on several regular routes. Also, the agency transports students from Marion to Wytheville Community College. Based on 2000 Census data, there are 1,216 households (9.0% of total) in the county that have no vehicle available (this is only slightly down from the 1990 figure of 11.2%). In attempting to serve those households, District Three now operates a bus service in the Town of Marion on both regular routes. Extending this service to other areas in the county outside of Marion should be considered. (District Three is providing this service now in all counties in the Planning District except Smyth County) A local matching fund commitment would be necessary to establish such a service, but it appears that this type of service is needed due to the number of households with no vehicle available. There are also opportunities for exploring both commuter-oriented bus service (for example, Saltville to Chilhowie or Atkins) and ridesharing. A local ridesharing program involving area employers would not only assist those persons in need of transportation to work but would conserve energy and lessen traffic loads.

<u>Pedestrian and Bicycle Transportation</u> There have been several accomplishments in this type of transportation facility since 1994, although there is a need for more facilities for safe pedestrian and bicycle transportation. A local civic group, the Grassroots Conservancy, has constructed several portions of the Riverwalk Trail along the Middle Fork of the Holston River in Marion. In addition, a bikeway has been constructed along Park Boulevard from North Main Street (U.S. Route 11) and Mitchell Valley Road with the hopes that more funding can be provided to extend the bikeway to the state park and connect with the Hungry Mother Park lakeshore trail. Both Chilhowie and Saltville need to be encouraged to continue plans for greenway walking trails and rails-to-trails projects (Saltville). Long-range plans include a trail along the Middle Fork of the Holston River of the Holston River connecting Marion to Chilhowie.



TRANSPORTATION GOAL

• To provide for a safe, efficient, and convenient transportation network for the movement of people and goods into, out of, and within the county

Road Conditions, Safety, and Access

Objectives:

- Upgrade existing unpaved secondary roads
- Improve unsafe conditions on county roads and bridges
- Promote construction and enhancement of major transportation corridors in the county to improve accessibility to Interstate 81
- Provide adequate safety measures at all public rail crossings
- Prevent unsafe entrances onto state roads from residential and commercial developments
- Plan for future road improvements in designated growth areas in accordance with the land use plan and in coordination with proposed utility extensions
- Establish a priority on needed maintenance improvements on existing roadways

Strategies:

- 1) Encourage a pro-active role by elected officials in transportation planning
- 2) Support improvements to Interstate 81 as a non-toll roadway in order to address increasing traffic problems.
- 3) Continue to aggressively seek and utilize available state funds to upgrade unpaved roads. Prioritize the unpaved road projects based on a set of criteria.
- 4) Identify road sections with dangerous curves and inadequate bridges, or with pavement widths insufficient to carry existing traffic volumes and include improvements in the six-year secondary road plan.
- 5) Support the construction of improvements to State Route 16 (both north and south of Marion) as proposed by the Virginia Department of Transportation.
- 6) Support the construction of a new interchange at McMullin to serve the increasing amount of residential traffic and provide for future industrial and commercial growth in that area.
- 7) Promote the upgrading of Route 107 from Chilhowie to Saltville and the continuation of that route along Va. Route 91 to Route 460 in Tazewell County.
- 8) Continue to work for the final completion of the Route 600 project to improve access to the Mount Roger NRA, and the improvement of all of Route 622 through the national forest to provide better access from Sugar Grove to Interstate 81.

- 9) Request funding to provide crossing bars and safety devices for all remaining unprotected public rail grade crossings in the county.
- 10) Continue to upgrade substandard subdivision streets to state standards through the Rural Addition Program and cost sharing from property owners.
- 11) Continue to require all new structures to be setback an adequate distance from any state road right-of-way in order to promote safety and avoid problems in future road widening and utility projects.

Rail Transportation

Objectives:

- Preserve and enhance opportunities for greater industrial use of the railroad in the county
- Promote efforts to restore passenger rail service through southwestern Virginia

Strategies:

- 1) Identify and reserve potential industrial sites along or near the railroad.
- 2) Seek state industrial rail access funds to construct rail siding, when necessary, to serve new or existing industrial sites.
- 3) Take an active role in regional efforts to restore passenger rail service to the county.
- 4) Assist the Town of Saltville in its efforts to convert the rail easement for a walking and biking trail by seeking available grant funds. The portion of the railroad from Saltville to Glade Spring should be a joint project with Washington County and the Town of Glade Spring.
- 5) Study the possibility of establishing a train terminal for freight to be jointly used by area industries

Air Transportation

Objectives:

- Provide airport improvements to meet future needs of industry and the general public
- Promote the Mountain Empire Airport as a potential location for commuter air service and a air freight facility to serve the surrounding region

Strategies:

1) Support the phased development plan recommended in the Mountain Empire Airport Master Plan, including the construction of an upgraded terminal building, t-hangers, navigational aids, other site improvements, and property acquisition. Incorporate airport improvements within county five-year capital improvements program.

- Promote other advantages of the airport to the county, such as its role as a "front door" to Smyth County and its possible use as a meeting facility for industrial prospects or other visitors.
- 3) Investigate the long-range feasibility of commuter air service based on experiences of other small airports.

Public Transportation and Ridesharing

Objectives:

- Increase the availability of public transit services
- Encourage ridesharing opportunities to assist county residents that lack transportation and to reduce traffic loads in the county

Strategies:

- 1) Support increased federal or state funding for the expansion of services by the District Three Governmental Cooperative to include service to transportation-disadvantaged persons in the county.
- 2) Encourage the District Three Governmental Cooperative to expand "demand-responsive" and/or the regular route transit service outside the town of Marion to cover other unincorporated areas of Smyth County.
- 3) Pursue local interest in organizing a ridesharing program among area industries to encourage carpooling and investigate the possibility of commuter transit services to transport workers from home to employment centers.
- 4) Study the need for "park and ride" lots in the county for commuters.

Pedestrian and Bicycle Transportation

Objective: Provide designated facilities for pedestrian and bicycle transportation

Strategies:

- 1) Plan and seek grant funds for the development of countywide systems of walking and biking trails, including continuation of the trail from Marion to Hungry Mother State Park and a trail along the Middle Fork of the Holston through Marion (including the Riverwalk) to Chilhowie.
- 2) Work with the U.S. Forest Service to promote its existing biking and hiking facilities for both local use and tourism.
- Pursue possible designations of additional scenic byways in the county, including Route 610 through Rich Valley

- 4) Support projects to provide safe pedestrian access along roadways within towns and in developed areas of the county
- 5) Encourage the District Three Governmental Cooperative to expand "demand-responsive" and/or the regular route transit service outside the town of Marion to cover other unincorporated areas of Smyth County.
- 6) Pursue local interest in organizing a ridesharing program among area industries to encourage carpooling and investigate the possibility of commuter transit services to transport workers from home to employment centers.
- 7) Study the need for "park and ride" lots in the county for commuters.

Pedestrian and Bicycle Transportation

Objective: Provide designated facilities for pedestrian and bicycle transportation

Strategies:

- 5) Plan and seek grant funds for the development of countywide systems of walking and biking trails, including continuation of the trail from Marion to Hungry Mother State Park and a trail along the Middle Fork of the Holston through Marion (including the Riverwalk) to Chilhowie.
- 6) Work with the U.S. Forest Service to promote its existing biking and hiking facilities for both local use and tourism.
- 7) Pursue possible designations of additional scenic byways in the county, including Route 610 through Rich Valley
- 8) Support projects to provide safe pedestrian access along roadways within towns and in developed areas of the county

VII. QUALITY OF LIFE

Education

The provision of a quality education is of utmost importance to the quality of life in Smyth County. One measure of educational quality is efforts being made to improve educational level of county residents, and the county has made some strides in this area over the last decade. Table 7.1 shows the educational attainment of adults in the county for 1990, 2000 and 2006-2008 as compared with statewide percentages for 2006-2008.

1770, 2000, 2000-2000 Shiyur County and Virgina							
Education Level	1990		2000		20006-2008		
Completed	# Persons	%	# Persons	%	# Persons	%	State %
Less than 9th grade	5,226	24.0	3,488	15.0	2,665	11.5	5.6
9th-12th grade, no diploma	4,915	22.6	4,068	17.5	3,311	14.2	8.7
High School Graduate	6,449	29.7	7,992	34.4	8,513	36.6	26.6
Less than 4 yrs. college	3,424	15.7	5,237	22.5	6,028	26.0	25.9
Bachelor's degree	1,112	5.1	1,717	7.4	2,104	9.0	19.7
5 or more yrs. college	590	2.7	753	3.2	632	2.7	13.6
TOTAL Persons 25 & up (responding)	21,716	100.0	23,255	100.0	23,253	100.0	100.1
Total H.S. Graduates	11,575	53.2	15,699	67.5	17,277	74.3	85.8

Table 7:1. Educational	Attainment for Persons 25 and up
1990, 2000,	2006-2008 Smyth County and Virginia

Source: U. S. Census Bureau

The data show gains in the number of high school graduates (from 37.3 percent in 1980 to 67.3 percent) in Smyth County, however the 2000 figure falls well below the percentage statewide of 81.5 percent and even region wide (68.7% percent for the Mount Rogers Planning District). The percentage of college graduates has increased steadily from 4.6 percent to 7.4 percent, but still is well below that of the state. An increasing number of high school graduates are continuing to complete a bachelor's degree, but often those that go to college away from home do not return, finding employment opportunities elsewhere.

The increase in persons with high school diplomas has been achieved through several avenues. The county school system reports a high school dropout rate of only 0.99 percent for 2008-2009. Only 23 persons dropped out of high school during the 2008-2009 school year. The county dropout rate is one of the lowest in Virginia.

There was a concentrated effort to tackle adult education in the mid-1980's with the hiring of an adult education coordinator housed at the Smyth Education Center in Atkins. Since 1985, an adult high school program has provided night classes for adults to earn high school credits. There

are currently about 20-30 students graduating from this program yearly. Also addressing the adult literacy is the Smyth County Adult Literacy Enhancement (SCALE) program which provides oneon-one tutoring to bring people from a non-reading level to a fourth-grade level. Adult basic education is provided through the Mount Rogers Regional Adult Literacy Program, including GED training and testing. Recent renewed emphasis on a state and regional level with the "Race to GED" program has increased the goal for the number of GED graduates to 137 for Smyth County for 2005. (The number of people earning GED certifications in 2003 was 75. Data for 2004 is not yet available).

The Smyth County Education Center, a branch of Wytheville Community College (WCC), opened in 1991 in Atkins adjacent to the Mountain Empire Industrial Park. The facility offers business and industrial training programs through formal class offerings, teleconferences, and non-credit workshops. WCC has an average of 100 students served with credit enrollment at the facility each semester (which is down from the student level when it first opened). The facility is used also for community service programs, including evening and weekends. Although the Center had proposed at one time to double its classroom space and add a childcare center on-site, this is no longer currently planned. In 2003, the College moved its Small Business Development Center office from Wytheville to the Atkins facility, which is a benefit to Smyth County residents.

Four-year and/or graduate programs are available at Emory and Henry College in nearby Washington County, and at the Southwest Virginia Higher Education Center in Abingdon. The Southwestern Virginia Advanced Manufacturing Technology Center, a cooperative project of the five community colleges in Southwest Virginia provides training, service, and technical support to the manufacturers in the region and is located at Wytheville Community College. The primary goals of the Center are to improve the global competitiveness and the economic stability of the region.

Child Care

Quality childcare in Smyth County continues to be important to the quality of life. Based on the 1990 Census, 2,078 persons in the workforce have children less than six years of age. A total of 1,330 of these persons (64%) are in situations where both parents in the family are in the workforce. The percentage of women in the workforce with children under six years of age has shifted from 51.7 % in 1980, to 69.6% in 1990, and actually to slightly lower at 67% in 2000. Many working families must find adequate and affordable care for their young children.

Currently, there are nine licensed child day centers in Smyth County providing for a total capacity of 528 children (down from 16 centers with 532 capacities in 2005 Plan). Three of these are Head Start programs (total capacity of 116) that do not provide all-day (8 hour) programs. Of the remaining large centers, three are located in Marion (Marion Baptist Child Development Program (125 capacity) Lifetime Wellness Center (60 capacity), and Pitter Patter Pathways (98 capacity). There are ten licensed family day home centers which can serve up to 12 each: 6 in Marion, two in Saltville, one in Atkins and one in Chilhowie. There are three unlicensed family day home centers which have a capacity of five children for a total capacity of 15. Including the Head Start programs, a total capacity of 663 spaces is available. Obviously, many families rely on other providers for childcare, particularly family members.

Health Care

<u>Hospital and Clinics</u> Smyth County Community Hospital (SCCH), a 170-bed facility located in Marion, is Smyth County's primary provider of medical care services. Of the 170 licensed beds, 12 are for intensive care, 11 are in obstetrics, 16 in pediatrics, and the remainder are medical/surgical or skilled nursing care (swing beds). Construction of a new \$66 million replacement hospital located just off Exit 47 of I-81 began in July 2010, with an anticipated completion date of June 2012. It will be over 150,000 square feet, which is larger than the current hospital by approximately 13,000 square feet. The outpatient areas will be increased significantly, which reflects the increase over the years from an inpatient care delivery model to an outpatient one. The new hospital will have 30 acute care inpatient beds, and 14 inpatient rehabilitation beds for a total of 44. The new hospital has been designed for both horizontal and vertical expansion so that it can meet the future healthcare needs of the community for many years to come.

SCCH operates physician offices in Marion with specialties in Orthopedics, ENT, Urology, OB/GYN and Internal Medicine. SCCH also operates two community clinics--one in Rural Retreat, Wythe County and one in Glade Spring in Washington County. The hospital owns a clinic in Chilhowie that is leased to a group of physicians.

SCCH is part of the Mountain States Health Alliance, which is a not-for-profit healthcare organization that consists of 15 hospitals located in Northeast TN and Southwest VA.

The Saltville Medical Center located in Saltville offers primary care services. It is established as a Community Health Center, which is a not-for-profit community sponsored medical practice serving medically underserved areas. The center receives some federal assistance through a variety of sources. Currently the center has four Doctors and three Nurse Practitioners. A total number of 42 doctors and 10 dentists practice in Smyth County.

Long-term Care There are two long-term care nursing homes in Smyth County. Valley Health Care Center in Chilhowie has a 176-bed capacity (with 26 additional beds in its assisted living facility), while Francis Marion Manor, a division of Smyth County Community Hospital, is a 109-bed facility in Marion with 3 additional beds in its assisted living facility. Both nursing homes have skilled nursing beds in their facility and are operating at 95 percent or more occupancy level. Also located in Smyth County are four assisted living facilities. Ridgefield Retirement Home at Seven Mile Ford has a 120-bed capacity, while there are three small private facilities with less than 20-bed capacities.

<u>Public Health Services</u> The Smyth County Health Department provides comprehensive services from its offices in the 7,400 square foot building in Marion (located near the hospital) and provides programs of the Virginia Department of Health.

<u>Mental Health Services</u> Mount Rogers Community Services Board provides services for adults and children with mental and physical disabilities. The Board operates three major programs in Smyth County including an outpatient program, day support services, and employment services. Training and employment are provided through the Mount Rogers Industrial Development Center at the Mountain Empire Industrial Park which serves persons ages 16-64 with mental or physical disabilities. Employees at the center manufacture products and provide services for local industry.

Southwestern Virginia Mental Health Institute is a 172-bed state psychiatric hospital located in Marion that employs approximately 560 full-time persons. The Institute, operated by the Virginia Department of Mental Health, Mental Retardation and Substance Abuse Services, provides intensive, inpatient psychiatric care on adult, geriatric, and adolescent service units. Accredited by the Joint Commission on Accreditation of Healthcare Organizations, referrals are accepted from Community Services Boards throughout the region.

Recreation

Recreational facilities in Smyth County range from the 115,600-acre Mt. Rogers National Recreation Area (NRA) to local recreation programs for adults and children.

<u>Federal Recreation Facilities</u> A large portion of Smyth County is located within the boundaries of the Mt. Rogers NRA, its name taken from Mount Rogers, which at 5,729 feet is the highest peak in Virginia (see Map 7.1) and is located in adjacent Grayson County. There are over 400 miles of hiking and horseback-riding trails in the NRA, including 78 miles of the Appalachian Trail. (The trail traverses Smyth County on its eastern end and crosses the interstate at Groseclose). The NRA offers numerous trout streams and two man-made lakes. Two campgrounds, one picnic facility, and the visitor center and headquarters building are located in the Smyth County portion of the NRA.

Previous studies in 1992 estimated visitation in the NRA to be 1.1 million annual visits which was almost a 30% increase from 1982. Although no data are collected to update this estimate, it is assumed that annual visitation remains close to the 1 million visit level. NRA officials believe that particularly strong increases have been experienced in equestrian use of the recreation area since 1982.

<u>State Facilities</u> Probably the county's best-known recreational facility is Hungry Mother State Park, a 2,980-acre park located just north of Marion. The state park provides facilities for camping, hiking, picnicking, swimming, boating, and fishing. The park is also the site of the Hungry Mother Arts and Crafts Festival that is sponsored annually by the Marion Arts League and County Chamber of Commerce. The park has a conference center (Hemlock Haven) that is available for meetings and retreats. A recent project of the Town of Marion and Smyth County constructed a bikeway along Park Boulevard to eventually connect Main Street with the park.

Visitation statistics at the park have been on the increase in recent years. Total visitors for 2009 were 204,175, which was down from 254,621 in 2008 and 211,174 in 2007. However, it appears the year 2010 will be a record number year for the park. The campgrounds and cabins are now opened year-round.

A state bond referendum passed in November 1992 brought some needed improvements to the park, including the upgrading of the sewer system in the park, which was connected by Smyth County to the Marion town sewer system. In addition, the park made improvements to the Hemlock Haven Conference Center and to the park restaurant, now upgraded to a fine dining atmosphere, and completed the lake trail that circles the entire lake.

Also, a state facility is the Clinch Mountain Wildlife Area on the northern edge of the county. This area, which includes Tumbling Creek in Smyth and Washington Counties and Laurel Bed Lake in adjacent Russell County, offers fishing, hunting, and camping opportunities.

<u>Local Facilities and Programs</u> There are several local recreation facilities, most of which are located in and operated by the incorporated towns in the county. The county has no recreation facilities of its own nor does it operate any recreation programs.

The Town of Marion Recreation Department sponsors softball, baseball, soccer, and basketball leagues for youngsters and adults using local school facilities and other leased space. In 1990, the Town of Marion opened a new Olympic size outdoor pool and bathhouse, and constructed Recreation Department offices and storage space on a site adjacent to the pool.

The Town of Chilhowie operates an active sports program and maintains a town park located between the railroad and the Middle Fork of the Holston near downtown. The park was the result of a major flood relocation project that moved several families to homes out of the river floodplain.

The Town of Saltville has a nine-hole golf course, an outdoor wave pool, and an exercise trail and pond. In addition, the town has active softball leagues for men and women. The Town is seeking funding to upgrade the golf course with drainage improvements and the clubhouse to provide a larger meeting/banquet/conference room space.

<u>Wellness Center</u> The Lifetime Wellness Center in Marion operated by the Smyth County Community Foundation is a state-of-the-art recreation facility houses a full complement of exercise and weightlifting equipment, a walking track, racquetball courts, basketball court, meeting room space, day care center, and indoor swimming pool. The center also houses the SCCH Outpatient Rehabilitation Services. The center has become not only a health and recreation center, but also a community-gathering place. It is a true "quality of life" improvement to Smyth County.

Cultural Amenities

<u>Performing Arts</u> Smyth County touts its proximity to the Barter Theatre, the State Theatre of Virginia located in nearby Abingdon. The Barter Theatre, founded during the Great Depression, is now opened year-round. It is estimated that half of the theatre patrons are residents from within a 100-mile radius, including Smyth Countians.

Even closer to home is the newly renovated Lincoln Theatre in downtown Marion. Once a busy entertainment spot prior to closing in the 1970's, the Theatre was reopened in May 2004 as a community performing arts center. Considerable funding was raised for the required renovations and refurbishing of the interior. The Lincoln Foundation continues to pursue funding assistance to further enhance the theatre and its operations. The theatre is listed in the National Register of Historic Places.

An active volunteer group in Saltville has reconstructed the historic Palmer Mill and now operates a community theater in the building.

<u>Festivals</u> The Annual Hungry Mother Arts and Crafts Festival features over 130 exhibits, demonstrations, and entertainment. The festival is held on the third weekend in July and sponsored jointly by the Marion Arts League, the County Chamber of Commerce, and the state park. The festival attracts an estimated 25,000 persons.

Several other festivals are held in Smyth County: The Apple Festival, and Fourth of July Festival in Chilhowie, the Labor Day Celebration in Saltville, the Rich Valley Fair held every summer at the old Rich Valley School, the Smyth County Celebration held at the Davis Valley Winery in Groseclose, and others.

<u>Shopping</u> In addition to the downtown business districts of the three towns, there are several other shopping centers located in the towns. The Town of Marion's largest commercial development is the Smyth Valley Crossing Shopping Center located on East Main Street and featuring Wal-Mart as its anchor store. The closest indoor shopping malls are located about 45 minutes away in the Tri-Cities metropolitan area and in Bluefield, West Virginia. A factory outlet mall is located in Fort Chiswell, approximately 30 miles from Marion. Some Smyth Countians even drive as far as Roanoke (90 minutes) for shopping.

Summary of Problems and Opportunities

<u>Education</u> Smyth County has made strides in improving the educational level of adults through a concerted effort of the School Board and the literacy program. However, 32 percent of the adult population did not have a high school diploma in 2000. Efforts must continue to reduce that amount and increase the number of high school graduates. Another educational concern is the need for college and graduate studies in the area. The Southwest Virginia Higher Education Center in Abingdon offers a multitude of both undergraduate and graduate level programs. There is a need to continually assess whether these programs are accessible to Smyth County residents.

<u>Child And Elder Care</u> The availability of childcare facilities has decreased since 2005 (from sixteen centers to nine licensed centers), but day care continues to be a problem as over 2,000 persons in the workforce have children less than six years of age. Most families must rely on relatives or friends for day care. Local industries have interest in this issue as it affects their worker attendance and productivity. In addition to childcare, there has become an increased need for "elder care" programs as our population ages. Many middle-aged adults take care of elderly parents in the home and may be prevented from other employment opportunities.

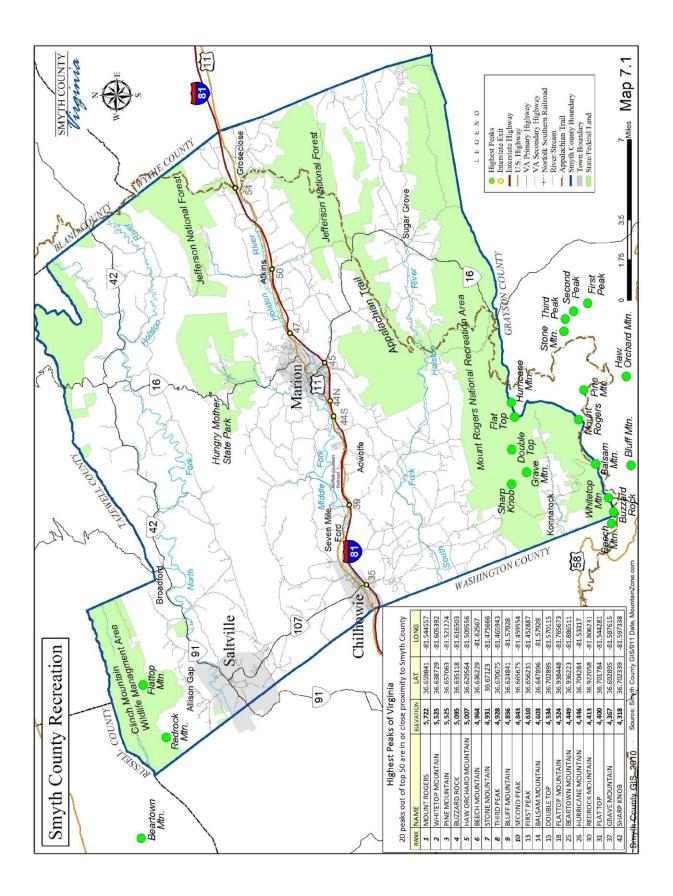
<u>Health Care</u> The Smyth County Community Hospital provides primary and secondary health care for the area and has a strategic plan in place that is regularly updated. Its goals include physician recruitment, particularly with additional specialties, and some community related programs such as the Wellness Center, and a possible "assisted-living" facility. The Saltville Medical Center plays a vital role in serving that part of the county with primary care. That facility, as well as the Smyth County Health Department, improves residents' access to medical services.

<u>Recreation</u> Although the county contains a significant amount of federal and state recreation lands, there are not sufficient local facilities and programs for county residents. The county sponsors no recreation programs, while there are team sport programs offered by all three towns. The Mount Rogers National Recreation Area and Hungry Mother State Park offer outdoor

recreational activities that are enjoyed by local residents but are not significantly promoted for local use.

<u>Cultural Amenities</u> As a rural county, Smyth County has made major strides in improving the level of cultural amenities, particularly with the opening of the Lincoln Theatre, the Palmer Mill, and the Museum of the Middle Appalachians in Saltville. Currently, there is limited promotion of the visual arts in the community. The Marion Art League sponsors the Annual Hungry Mother Arts and Crafts Festival, and the Art Place in Chilhowie offers art instruction and some limited gallery space. A larger arts and crafts cooperative and gallery are needed to continually promote local arts and crafts.

<u>Other Quality of Life Amenities</u> Smyth County enjoys many quality-of-life advantages that should be promoted such as a low cost of living, a low crime rate (including safe schools and relatively limited drug problems), beautiful scenery and pleasant climate, relaxed lifestyle, and a sense of community. The county should make every effort to preserve those amenities.



QUALITY OF LIFE GOAL

• To promote the advancement of the quality of life through health care, childcare, educational, recreational, and cultural improvements

Education

Objectives:

- Increase the percentage of adults in the county who are high school graduates (or equivalent).
- Improve the educational opportunities for college and post-graduate studies.
- Provide employment training opportunities to encourage younger citizens to remain in Smyth County

Strategies:

- 1) Provide additional space for learning opportunities in adult education, post-secondary, graduate studies, business/industry training, and generally, life-long learning.
- 2) Increase life-long learning opportunities for literacy programs in the county by promoting programs such as "Race to GED", SCALE, Adult Basic Education, continuing education, and higher education.
- 3) Encourage businesses and industries to provide employees, especially those without high school diplomas or equivalent, the opportunity for basic skills training, Adult Basic Education, and /or GED or high school diploma attainment.
- 4) Promote the value of a good education through local media stories that feature local citizens such as "Student of the Week" or "Education Person of the Month".
- 5) Assist the Smyth County School Board and the two area community colleges in marketing opportunities for adult education in the county.
- 6) Promote existing continuing education opportunities that are currently available through the Smyth Education Center of the Wytheville Community College and the Southwest Virginia Higher Education Center.
- 7) Support the continued programs of the Manufacturing Technology Center housed at Wytheville Community College.

Child and Elder Care

Objectives:

- Encourage the growth of quality and affordable childcare programs to serve working parents with particular emphasis on the need for infant and toddler care and before-and after-school programs
- Encourage the growth of adequate care programs for the elderly citizens of the county

• Encourage the participation of industries and business in cooperative arrangements to establish quality day care opportunities

Strategies:

- 1) Consider the use of existing public facilities to provide space for day care centers.
- 2) Encourage the formation of nonprofit corporations of businesses and industries, such as the Middle Fork Child Care Corporation, as the vehicle to serve other parts of the county, particularly Atkins and Saltville.
- 3) Encourage Smyth County businesses to be "family-friendly" as a means to increase worker productivity and minimize absenteeism and tardiness. Encourage such innovative employment practices as flextime or job sharing.
- 4) Consider the location of childcare facilities in or near existing or proposed industrial sites.
- 5) Encourage the development of elder care programs such as day "respite" programs and adult day care facilities.

Recreation

Objectives:

- Improve recreational facilities and programs available to Smyth County citizens
- Promote the existing state and federal recreation facilities for greater use by local citizens and support their improvements

Strategies:

- 1) Work with the towns and civic organizations to improve existing local parks and encourage the development of appropriate and safe playground facilities for young children.
- 2) Plan a countywide system of walking and biking trails, including a trail along the Middle Fork of the Holston from Marion through Chilhowie.
- 3) Work with the U. S. Forest Service and the Va. State Parks office to develop mountain biking opportunities and other recreational programs to serve county citizens.
- 4) Study the development of a countywide recreation program jointly with the three towns and other community organizations.
- 5) Seek opportunities to use existing facilities to meet county recreation needs, including local schools.
- 6) Consider using un-needed or undevelopable space in future industrial parks for recreation needs, such as ball fields.

Health Care

<u>Objective</u>: Support the improvement of local health facilities and services, and the access county citizens have to those services, both geographically and financially

Strategies:

- 1) Assist the medical community in attracting qualified physicians to the area by promoting the area's strengths and making improvements related to housing and cultural needs.
- 2) Promote the expansion of programs to improve access to medical care, such as the Saltville Medical Center and the Smyth County Free Clinic in Marion.

Cultural Amenities

Objective: Promote the development of cultural amenities that would benefit all county residents

Strategies:

- 1) Support the continued success of the historic Lincoln Theatre as a cultural and community center "anchor" for downtown Marion as well as a facility to serve the arts and educational needs of all county residents.
- 2) Support the efforts of the Saltville Foundation and its goals for growth of the Museum of the Middle Appalachians showcasing the natural and cultural history of the area.
- 3) Encourage the further development of the former Chilhowie High School as a community center.
- 4) Support the formation of an area arts and crafts cooperative in the county.

Amended on March 5, 2019, to incorporate 544 roads within the County as part of the Revenue Share Project with VDOT to ensure identification of potential upgrades to the following roads:

Name	Town
Acorn Lane	Damascus
Addison Wolfe Drive	Marion
Aeriel Lane	Chilhowie
Almond Lane	Saltville
Alpha Street	Marion
Alston Drive	Saltville
Althea Street	Marion
Ambrose Drive	Chilhowie
Angier Lane	Saltville
Apache Lane	Marion
Apex Lane	Saltville
Arbor Lane	Chilhowie
Armstrong Hollow Lane	Saltville
Arnold Hill Lane	Saltville
Arrow Point Lane	Marion
Arrowhead Lane	Marion
Asbury Church Road	Rural Retreat
Ascot Lane	Marion
Ashe Lane	Chilhowie
Ashton Lane	Marion
Aspen Lane	Marion
Atkins Tank Road	Atkins
Auburn Lane	Chilhowie
Aurora Lane	Chilhowie
Austin Lane	Chilhowie
Autumn Lane	Marion
Avery Lane	Marion
Axum Lane	Atkins
Azalea Lane	Atkins
B Lane	Marion
Back Hollow Road	Saltville
Backstretch Lane	Marion
Balsam Lane	Chilhowie
Banjo Alley	Saltville
Barrister Lane	Marion
Barton Lane	Sugar Grove
Bay Pines Lane	Chilhowie
Beadwood Lane	Damascus
Bear Lick Lane	Sugar Grove

Poor Didgo Long	Sugar Grova
Bear Ridge Lane Beaver Trail	Sugar Grove Marion
Bebee Lane	Chilhowie
Beck Hollow Lane	Marion
Beechdale Lane	Chilhowie
Bengal Lane	Chilhowie
Bent Lane	Saltville
	Marion
Berryhill Lane	Saltville
Beryl Lane Better Homes Drive	
	Sugar Grove Marion
Beulah Lane	
Big Tree Drive	Chilhowie
Big Tumbling Creek Road	Saltville
Big Valley Road	Marion
Biggins Drive	Chilhowie
Birch Lane	Damascus
Birdmont Lane	Marion
Bishop Street	Chilhowie
Blackberry Lane	Marion
Blackwell Lane	Tannersville
Bloom Lane	Atkins
Bluebird Lane	Marion
Bobcat Run Road	Sugar Grove
Bolton Lane	Saltville
Bonhill Lane	Chilhowie
Bowman Place	Marion
Boyer Place	Marion
Branchwood Lane	Chilhowie
Breezewood Lane	Chilhowie
Briarwood Lane	Chilhowie
Brinkley Lane	Chilhowie
British Rowe	Saltville
Broadford Lane	Broadford
Broce Lane	Marion
Brockwell Lane	Marion
Bromley Lane	Chilhowie
Brooks Lane	Sugar Grove
Brookside Lane	Marion
Brushy Mountain Road	Marion
Buck Hollow Trail	Sugar Grove
Buck Park Lane	Rural Retreat
	Marion
Bugle Lane	
Burgess Hollow Road	Saltville

Burley Drive	Saltville
Burnwood Lane	Atkins
Butternut Lane	Atkins
Cabin Fever Drive	Marion
Camel Lane	Marion
Candice Lane	Atkins
Candy Lane	Marion
Canton Lane	Atkins
Cardinal Lane	Marion
Carrol Lane	Sugar Grove
Carver Lane	Marion
Caspian Lane	Chilhowie
Cave Hill Lane	Marion
CCC Cabin Road	Marion
Chadwick Lane	Marion
Chalet Drive	Chilhowie
Chance Lane	Chilhowie
Chaparral Lane	Chilhowie
Charlie Taylor Road	Sugar Grove
Chey Drive	Saltville
Cheyenne Lane	Marion
Chipmonk Hollow Road	Sugar Grove
CJ Lane	Sugar Grove
Clara Lane	Saltville
Clark Farm Road	Saltville
Clover Street	Marion
Cobble Lane	Marion
Colecrest Drive	Chilhowie
Collins Drive	Saltville
Colonial Heights Drive	Marion
Concord Lane	Marion
Conifer Lane	Marion
Cool Brook Lane	Chilhowie
Copper Drive	Rural Retreat
Corbin Drive	Chilhowie
Cotton Lane	Chilhowie
Cougar Lane	Marion
Countryside Drive	Marion
Cove Mine Road	Saltville
Crab Orchard Lane	Marion
Crabapple Lane	Troutdale
Crawfish Road	Atkins
Creekside Lane	Chilhowie

Crestview Lane Chilhowie Crigger Lane **Rural Retreat** Cross Link Road Saltville Crown Circle Chilhowie Cullop Lane Ceres Marion Currin Valley Road Daisy Lane Marion Dakota Lane Chilhowie Dana Drive Sugar Grove Darby Lane Atkins Dartmouth Lane Chilhowie **Davis Path Road** Atkins Saltville Daydream Ridge Lane Days Bottom Lane Troutdale Daywood Lane Marion Chilhowie Deer Valley Road **Dell Drive** Marion Marion Denton Lane Denzler Lane Marion Chilhowie **Doane Drive** Dora Knob Lane Marion Dorset Drive Marion Dove Lane Marion Drexel Lane Marion Saltville Dry Cove Lane Dry Creek Road Sugar Grove Dryden Lane Marion Dusty Lane Chilhowie Eagles Knob Sugar Grove East Lakeview Lane Marion Elk Drive Marion **Emerald Lane** Marion **Endless View Drive** Chilhowie Ernest Mitchell Memorial Lane Saltville Marion Everett Lane **Evergreen** Court Chilhowie Evergreen Lane Marion Faith Lane Marion Falcon Lane Saltville Falling Rock Road Saltville Marion Family Lane Fan Lane Marion Farmers Lane Marion

Finch Lane Marion Marion **Firestone Lane** Flint Lane Marion Foot Hill Lane Chilhowie Forge Road Damascus Atkins Foust Lane Foxrun Lane Marion Foxtail Lane Sugar Grove Freedom Tabernacle Lane Atkins Freewill Lane Saltville From Above Lane Marion Frye Town Lane Saltville Chilhowie Fullen Lane Fuller Lane Marion Gait Lane Atkins Marion Gaston Lane Glade Mountain Road **Rural Retreat** Glade Mountain Road Atkins Glade View Lane **Rural Retreat** Goodpasture Hollow Road Marion Grandview Lane Chilhowie Granite Lane Chilhowie Grant Street Marion Green Acres Drive Chilhowie Green Valley Court Chilhowie Greenbay Lane Marion Greyfox Lane Marion Gum Lane Marion Gunston Lane Marion Hafley Hollow Lane **Rural Retreat** Harley Road Marion Harleyville Lane Saltville Harper Lane Saltville Hatchery Drive Marion Havenwood Lane Marion Hawks Peak Road Sugar Grove Haywood Lane Sugar Grove Health Way Marion Helena Drive Marion Hemlock Haven Lane Marion **Rural Retreat** Highland Park Lane Highwood Lane Marion Hillbilly Lane Chilhowie

Hilltop Drive	Saltville
Hiss Street	Saltville
Hockett Street	Marion
Holden Drive	Marion
Holly Hills Park	Marion
Homestead Drive	Marion
Honeysuckle Lane	Saltville
Hoosier Lane	Troutdale
Horne Family Circle	Sugar Grove
Hunter Lane	Saltville
Hurricane Campground Road	Sugar Grove
Husky Lane	Chilhowie
Indianhead Lane	Chilhowie
Indigo Drive	Marion
Ingle Lane	Marion
Intrepid Lane	Marion
Ivy Road	Marion
Jacob Lane	Chilhowie
Jade Lane	Chilhowie
Jaguar Lane	Marion
Jake Lane	Marion
Jasper Lane	Rural Retreat
Jenna Lane	Marion
Jerrys Estates Drive	Marion
Jessie Lane	Marion
Jimmy Lane	Rural Retreat
John Broady Memorial Drive	Saltville
Johnstone Lane	Marion
Joines Lane	Chilhowie
Jordan Lane	Marion
Jori Lane	Atkins
Joyful Noise Road	Marion
June Hollow Road	Marion
Keesee Lane	Chilhowie
Keller Lane	Marion
Kenbridge Lane	Marion
Kennedy Lane	Marion
Keystone Lane	Marion
King Lane	Marion
Knecht Street	Marion
Knoll Drive	Troutdale
Kokomo Lane	Marion
Lake Drive	Marion

Marion Lake Drive Sugar Grove Lakewood Lane Marion Lamont Lane Lancaster Lane Marion Lancing Lane Marion Atkins Landis Lane Landsdown Court Marion Lanier Lane Marion Atkins Lark Drive Lasalle Lane Sugar Grove Lassiter Lane Chilhowie Saltville Laurel Bed Lake Road Broadford Laurel Creek Lane Sugar Grove Lazy Lane Lemon Street Marion Atkins Leonard Lane Marion Liberty Drive Light House Road Sugar Grove Lilly Lane Marion Marion Limestone Lane Little Grannys Lane Chilhowie Little Laurel Road Troutdale Little Mountain Road Saltville Little Thompson Road Ceres Locust Grove Road Marion Loft Drive Saltville Logan Lane Marion Lois Lane Sugar Grove Lombard Avenue Marion Lone Oak Lane Sugar Grove Chilhowie Lonesome Pine Lane Longhorn Lane Marion Longleaf Lane Marion Longview Lane Sugar Grove Look Out Lane **Rural Retreat** Loop Drive Marion Lovelace Drive Marion Lucky Lane Marion Lynx Drive Marion Lynx Drive Marion Mackie B Drive Marion Macon Lane Sugar Grove Marion Magnum Loop

Mallard Lane	Marion
Maloyed Place	Saltville
Malvern Lane	Marion
Maple Leaf Lane	Sugar Grove
Marion Manor Drive	Marion
Marlin Lane	Marion
Marthas Lane	Troutdale
Mason Dixon Drive	Marion
Mason Lane	Atkins
Matson Drive	Marion
Maxwell Lane	Atkins
Mccoy Lane	Atkins
Mcintyre Lane	Atkins
Mcintyre Place	Marion
Mcvey Farm Road	Saltville
Medical Park Drive	Marion
Megan Lane	Sugar Grove
Metcalf Lane	Atkins
Midway Street	Saltville
Mining Ridge Road	Chilhowie
Mobile Street	Chilhowie
Monte Vista Drive	Marion
Moore Street	Chilhowie
Morning Glory Lane	Chilhowie
Mosley Lane	Atkins
Mosswood Lane	Marion
Mount Pleasant Drive	Saltville
Mullin Drive	Marion
Myers Street	Marion
Mystic Lane	Marion
Napoleon Street	Marion
Needle Drive	Marion
Nelson Lane	Atkins
Newsome Lane	Atkins
Nivens Lane	Marion
No Pine Drive	Chilhowie
North Meadowlark Lane	Marion
North Overlook Drive	Marion
Norton Lane	Rural Retreat
Nutmeg Lane	Rural Retreat
Nuttywood Lane	Saltville
Oak Point Drive	Marion
Oakland Lane	Rural Retreat

Oakwood Lane Sugar Grove Old County Road Troutdale Old Oak Tree Lane Ceres Old Shannon Road Saltville Old Stone House Road Saltville Old Tram Road Saltville Orchid Lane Marion Osborne Lane Marion **Owen Drive** Sugar Grove **Owl** Lane Marion Panama Lane **Rural Retreat** Chilhowie Paradise Drive Parker Branch Lane Chilhowie Parsons Place Marion Atkins Patriotic Lane Peach Street Marion Marion Peggy Lane Pelham Lane Marion Pembroke Lane **Rural Retreat** Pen Road Chilhowie Atkins Pender Lane Pennington Branch Road Troutdale **Piedmont Circle** Chilhowie Saltville Pill Hill Road Pine Bluff Road Sugar Grove Pine Drive Saltville Marion **Pine Forest Street** Marion **Pinebrook** Lane **Pinecrest Lane** Ceres Pleasant Valley Road Sugar Grove Saltville Polk Lane Pond Hollow Road Marion Ponderosa Road Saltville Pony Lane Saltville Poppy Lane Saltville Portor Lane Saltville Possum Trot Ter Sugar Grove Powell Hollow Road Atkins **Price Street** Marion Prospect Lane Marion Quail Run Road Sugar Grove R L Drive Chilhowie Rabbit Hill Lane Sugar Grove

Rabbit Run Road	Sugar Grove
Raccoon Ridge Road	Sugar Grove
Rainbow Avenue	Saltville
Raven Lane	Chilhowie
Rector Road	Marion
Red Apple Orchard Road	Rural Retreat
Red Fox Lane	Chilhowie
Redwood Lane	Saltville
Reed Hollow Road	Marion
Remington Lane	Marion
Ridgewood Place	Marion
Rigby Street	Marion
Riley Drive	Chilhowie
Riverdale Lane	Saltville
Roberts Avenue	Sugar Grove
Robinson Cove Road	Saltville
Rocky Drive	Troutdale
Rocky Ridge Drive	Chilhowie
Rogers Street	Chilhowie
Rolling Tide Lane	Marion
Romans Street	Marion
Rosewood Lane	Chilhowie
Ross Lane	Sugar Grove
Roundtop Circle	Saltville
Royal Lane	Saltville
Rupard Lane	Chilhowie
Rustle Lane	Sugar Grove
Rustle Lane East	Sugar Grove
Rusty Drive	Chilhowie
Rusty Hollow Lane	Saltville
Rye Valley Lane	Sugar Grove
Saddleback Road	Saltville
Sage Drive	Marion
Sagewood Lane	Saltville
Sara Lane	Marion
School House Lane	Marion
Serenity Cove Road	Troutdale
Shadetree Lane	Tannersville
Shadow Lane	Troutdale
Shady Lane	Saltville
Shallow Valley Road	Sugar Grove
Shamrock Lane	Marion
Shannon Gap Road	Marion

Shaw Road **Rural Retreat** Sheep Hill Road Saltville Marion Sherwood Drive Shileigh Lane Marion Short Mountain Road Marion Marion Short Street Shuler Lane Sugar Grove Side Trail Chilhowie Sierra Lane Marion Saltville Skippy Lane Saltville Skylark Lane Songbird Lane Chilhowie South Meadowlark Lane Marion South Wood Lane Saltville Sparks Lane Chilhowie Sparrow Lane Saltville Spottswood Place Marion Spring House Drive Saltville Squaw Lane Squire Lane Marion Squirrel Lane St Johns Way Saltville Stagecoach Lane Star View Lane Starlite Lane Steer Lane Saltville Saltville Stevenson Farm Road Marion Stone Haven Lane Stone Hill Lane Stone Way Atkins Straight Way Sturgill Street Marion Sugar Town Trailer Court Sundancer Drive Sunflower Lane Marion Sunlight Drive Sunny Lane Marion Sunrise Lane Sunset Hill Drive Marion Sutton Lane Troutdale Swamp Road Tanglewood Lane Marion Saltville Tara Lane

Chilhowie Sugar Grove Chilhowie Chilhowie Sugar Grove **Rural Retreat** Chilhowie Sugar Grove Chilhowie Sugar Grove Chilhowie Chilhowie 146

Teaberry Lane	Marion
Teapot Lane	Marion
Teaster Hollow Road	Marion
Teaters Lane	Chilhowie
Tenderfoot Lane	Marion
Testerman Lane	Marion
Thompson Road	Marion
Three Sticks Lane	Damascus
Thunder Road	Marion
Timber Brook Drive	Saltville
Timberland Lane	Chilhowie
Tipton Lane	Marion
Tobacco Road	Saltville
Tomahawk Lane	Marion
Tower Hill Lane	Chilhowie
Tree Top Lane	Saltville
Trillium Lane	Marion
Trimble Drive	Marion
Trimble Lane	Chilhowie
Tripple Teal Road	Saltville
Trivitt Lane	Marion
Trump Drive	Marion
Tuggle Hollow Road	Saltville
Tumblewood Lane	Marion
Turkey Pen Road	Chilhowie
Turkey Trail Road	Sugar Grove
Turkey Trail Road	Sugar Grove
Twin Oaks Lane	Marion
Two Turtle Dove Lane	Atkins
Umbarger Lane	Marion
Union Church Road	Saltville
Vale Circle	Marion
Vance Drive	Chilhowie
Vardon Drive	Marion
Victor Place	Marion
View Drive	Marion
Violet Lane	Marion
W.A. Stuart Lane	Saltville
Wadill Lane	Marion
Walker Mountian Lane	Marion
Wallace Lane	Marion
Warhawk Lane	Chilhowie
	Marion
Washington Avenue	111011

Water Mill Road	Marion
Water Street	Sugar Grove
Watson Gap Lane	Saltville
Waverly Lane	Marion
Welch Lane	Atkins
West Hungry Mother Drive	Marion
West Lakeview Lane	Marion
West Virginia Boulevard	Marion
Wheaton Lane	Atkins
Whippoorwill Lane	Marion
Whisper Creek Lane	Chilhowie
Whispering Wind Lane	Marion
White Drive	Marion
White Rock Road	Saltville
Widener Park Lane	Atkins
Wilbur Lane	Marion
Wild Cat Lane	Saltville
Wilderness Trail	Troutdale
Williamsburg Drive	Marion
Willow Lane	Marion
Winchester Drive	Chilhowie
Windmere Lane	Marion
Windy Ridge Road	Chilhowie
Winton Lane	Atkins
Wizard Drive	Sugar Grove
Wood Lane	Sugar Grove
Woodbury Drive	Saltville
Woodleaf Lane	Marion
Woodpecker Lane	Chilhowie
Worley Street	Chilhowie
Wren Lane	Marion
Zion Hill Road	Marion