Giles County

Comprehensive Plan: 2012 Update

PREPARED BY

THE GILES COUNTY PLANNING COMMISSION

with assistance from

THE NEW RIVER VALLEY

PLANNING DISTRICT COMMISSION

REVISION ADOPTED JUNE 6, 2012

by the

GILES COUNTY BOARD OF SUPERVISORS

FOREWORD

The Comprehensive Plan is a method for local government and citizens to plan for their future based on the past and present conditions in their community. The use of background data is essential in determining the future needs of the locality in terms of social and physical infrastructure. The inclusion of citizens in the Comprehensive Plan process ensures that they understand what has happened in their community, such as population shifts, economic trends, housing data, and the provision of public services. Given this knowledge, citizens and government officials can work together to plan for tomorrow, ensuring that future generations can enjoy living and working in their community.

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SECTION I – BACKGROUND DATA

A BRIEF HISTORY OF GILES COUNTY, VIRGINIA

The first recorded expedition in the area of what is now Giles County dates back to the year 1671, when the explorers Batts and Fallan journeyed as far west to what is now known as Narrows. This was the only recorded expedition until 1749, when Doctor Thomas Walker and party, working for the Loyal Company (a land company), entered the area. Besides naming many of the geologic features that he encountered (e.g., Big

and Little Walker Creeks), Dr. Walker's descriptions of the best land obtainable determined the sites for the earliest settlements and stimulated great interest in the region. Another expedition, headed by Christopher Gist, began in 1750. Gist was employed by the Ohio Company, another land development enterprise, to survey the area to prepare maps from which actual grants could be made.

The early settlers were principally of English, Scotch, Irish, and German descent. In the spring of 1749, Adam Harman and his two sons moved to the present site of Eggleston, and established the first permanent settlement in what is now Giles County. Giles County was formally established on January 6, 1806, granted under an act of the Virginia General Assembly entitled, "An Act Forming a New County Out of Certain Parts of Montgomery, Monroe and Tazewell Counties". The new county was named after William B. Giles, a member of Congress and later Governor of Virginia. Giles County originally comprised a territory of about 100 miles in length and 30 miles in width, giving it an area of approximately 3,000 square miles. However, its boundary lines have been changed four times since then. The present land area is 362 square miles.

The earliest roads in the County followed Indian trails. The longest road traversing Giles County was the Fincastle Turnpike. It was chartered in 1834 and built between 1838 and 1843. It passed through the present Towns of Bluefield, Glen Lyn, Narrows, Pearisburg, Pembroke, Newport, and on to Newcastle. Generally, this road followed the present route of Highways 460, 100, and 42. Highway 460 in Giles County was built between 1926 and 1932. Highway 100, between Pearisburg and the Pulaski County line, was hard surfaced between 1933 and 1937. The first railway (now the Norfolk and Western Railway) was started in 1881 at Radford and reached Pocahontas and the coal fields in 1883. Prior to this, the nearest rail service was at Dublin. The Virginia Railway was built between 1906 and 1909. These railroads helped to bring industry to Giles County, and were partly responsible for the early tanneries and later the development of the Celanese Plant.

A five-member board of supervisors, elected from three districts, with two supervisors elected at large, governs the County. The board appoints a county administrator who is given administrative powers and carries out the policies of the board. Pearisburg, Pembroke, Narrows, Rich Creek, and Glen Lyn have mayor-council forms of government with Pearisburg, Pembroke, Glen Lyn and Narrows employing town managers as administrators of the towns' policies, who serve at the pleasure of their respective councils.

NATURAL RESOURCES

GEOGRAPHIC AND TOPOGRAPHIC FEATURES

Nearly all of Giles County lies in the Ridge and Valley Province except for the small area northwest of Glen Lyn and Rich Creek, which is situated in the Appalachian Plateau Province. Bedrock beneath the entire County is gentle to steeply-dipping sedimentary material, which consists of limestone, shale, and sandstone. Limestone sediments are found in the valleys and lowest side slopes, shale in the middle and upper side slopes, and sandstone at the ridge and mountaintops, and in the highest side slopes.

In many areas of the County it is difficult to determine the underlying geologic material because of thick layers of overburden deposited by the New River and other streams in the County. The limestone areas of Giles County have the highest potential for development if central sewage systems are used and construction is avoided in sinkholes. Without central sewage systems, there is a high risk of groundwater contamination because of numerous solution channels in the limestone bedrock.

Limestone is generally found in the central part of the County along and between U.S. 460 and State Route 100. The shale and sandstone areas have the lowest potential for development (with or without central sewage systems) because of steep slopes and shallow or only moderately deep soil depths to bedrock. These areas are generally located in the eastern and western parts of the County. Areas with layers of overburden material offer varying degrees of development potential, depending on the kind and thickness of overburden and steepness of slopes.

The terrain consists of several parallel ridges and small valleys which trend in a northeast- southwest direction. The New River divides the County approximately in half, flowing from southeast to northwest into the Kanawha-Ohio River system. The Ridge and Valley Province has been subjected to folding and faulting during its geologic history. Because of the sharp contrasts in the resistance of the exposed rocks, the province has eroded differently throughout the County, producing the diverse landforms that exist today.

Giles County also contains many prominent mountain ranges. Gap Mountain, Sinking Creek Mountain, and Walker Mountain, whose ridgelines make up the southern boundary of the County; Brushy and Sugar Run Mountains, which prevents public road access to the Dismal Creek Valley from within the County, is located in the southwestern portion of the County; East River Mountain and Peters Mountain whose ridge tops provide the northern boundary for most of the County and form the "Narrows". Wolf Creek Mountain, through which the New River passes just north of the Town of Narrows and runs parallel to East River Mountain to its north and encloses Wolf Creek Valley; Big Mountain, Butt Mountain, Pond Mountain, Salt Pond Mountain and Doe Mountain, all of which make up the large prominent mountain range located in the north-central part of the County.

These formations encircle Mountain Lake; John's Creek Mountain, which parallels Sinking Creek Mountain to the south and envelopes Sinking Creek Valley and Route 42 in the eastern portion of the County; Spruce Run Mountain, which parallels Gap Mountain to the south and envelopes Spruce Run Valley and Route 605; Pearis Mountain and Wolf Creek Mountain form the prominent mountain range with Sentinel Point overlooking the Town of Narrows, and Angels Rest overlooking Pearisburg and the community of Bluff City, which was incorporated into the Town of Pearisburg's corporate limits in January 1998 through a boundary adjustment agreement with the County.

The New River flows across the County for approximately 37 miles, with a total fall of about 170 feet. The principal tributaries of the New River within Giles County are: from the west, Walker and Wolf Creeks; and from the east, Big Stony and Little Stony Creeks. Wolf Creek has a fall of approximately 250 feet in its ten-mile course through the County. Walker Creek drops about 350 feet in approximately 25 miles. Big Stony Creek descends almost 100 feet per mile and Little Stony falls about 86 feet per mile. Many of the banks along the New River are precipitous, or sheer, bluffs. The terrain and the steep gradient of the streams produce fast runoff and high velocities in much of the New River. Rolling hills and high, flat plateaus characterize the watershed. The Valley narrows to gorge-like proportions near the West Virginia line and contains steep reaches and few acres of level land.

MINERALS AND NATURAL GAS

Sedimentary rocks underlie the Ridge and Valley Province (illustrated on page 4). High calcium limestone was produced from large underground mines near Kimballton. Most of the stone was calcined into lime that was marketed for various industrial purposes. Some stone was sold for mine-safety dust, mineral-feed supplement, and other uses. One company processed and marketed magnetite from outside Virginia for use as coal-preparation medium. Another company operated a limestone quarry near Ripplemead to produce crushed stone primarily for construction purposes. Limestone and dolomite have been produced in Newport and other parts of the County for various crushed stone uses and for the manufacture of lime.

Marl has been produced at sites in the vicinity of Narrows for agriculture purposes. Iron ore has been mined near Newport, Ripplemead, and Interior. Evaluation studies were conducted on iron-bearing sandstones of the Clinton Formation, which are found southeast of Pearisburg, between Kimballton and Mountain Lake. Manganese minerals have been mined and prospected at a number of locations in Giles County. Clay materials have also been produced near Curve Station, northwest of Ripplemead. Sand and gravel are produced at sites along the New River. Testing indicates that shale, present at a locality near Kire, is potentially suitable for use in the manufacturing of lightweight aggregate, and shale, found near Glen Lyn, could be used for lightweight aggregate and brick.

Several varieties of colored marble that may have economic potential for ornamental purposes are found in the County. Sandstone in the County offers possibilities for construction materials. During the 1970's, a reinterpretation of the geology of the area spurred interest in drilling for natural gas. At that time, about one-third of the County was under lease by energy companies.

SOILS

A modern soils survey for Giles County was completed in the early 1980's. The compilation of the detailed data resulted in the description of eight soil associations within three general categories: (1) soils on mountaintops and mountain foot slopes, (2) soils on the middle and lower side slopes and high terrace material, and (3) soils of the valleys. Soils of the first category are predominantly well drained, loamy, with very steep slopes. Most of the acreage in this category is wooded because the soils are too rocky or steep for farming or industrial, commercial, or residential development. Soil series in this category include Lehew, DeKalb, Drall, and Jefferson. These soils are derived from sandstone and are moderately deep to bedrock.

The soils of the second category are predominantly well drained and gently sloping to very steep. Subsoil textures range from loam to clay. About 60 percent of the acreage is cleared and is used mainly for pasture and hay crops; the remaining 40 percent is in woodland. Soil series in this association include Berks, Gilpin, Sequoia, and Murrill. The Berks, Gilpin, and Sequoia soils are developed in residual shale material and are moderately deep to bedrock. The Murrill soil is developed in colluvial materials from sandstone, shale, and limestone, and is deep to bedrock.

The soils of the third category are predominantly well drained and are gently sloping to steep. Subsoil textures range from loam to clay. The soils in the association comprise the main urban and agricultural potential in the County. Most gently sloping areas are used for cultivated crops. The moderately steep and steep areas are used for hay and pasture crops. The dominant soil series in this association are Frederick, Murrill, Frankstown, and Carbo. The Frederick, Frankstown, and Carbo soils are developed in residual limestone material. The Murrill soils are deep to bedrock, and the Carbo soils are moderately deep to bedrock. Numerous other series are in this category, but they occupy much smaller acreage in terrace and floodplain positions.

The complete soils survey and analysis will help County officials fit land uses to land capability. The survey did not include those lands owned by the U.S. Forest Service. References made to the County exclude this acreage. A general soils map is intended for broad land use planning because it represents some of the limitations or relationships of soil areas for potential uses. A generalized soils association map should not be used to determine land use decisions for small tracts of land. Each potential site should be surveyed to ascertain its highest use before development is contemplated. The map on page 6 illustrates the soils of Giles County.

Each map unit on the General Soil Map is a unique natural landscape. Typically, a map unit consists of one or more major soils and some minor soils. It is named for the major soils. The soils making up one unit can occur in other units, but in a different pattern.

The General Soil Map can be used to compare the suitability of large areas for various general land uses. Areas of suitable soils can be identified on the map. Likewise, areas where the soils are not suitable can be identified. Because of its small scale, the map is not suitable for site- specific interpretation.

SLOPE

A soil type results from a particular combination of the interaction of six major environmental factors: climate, vegetation, parent material, relief, and time. One of these factors - relief - has the greatest influence on the degree of land capability that a specific site may possess. Length of slope and degree of slope affects the amount and velocity of runoff. Rapid runoff on steep

slopes causes devastating erosion. Soil scientists assert that when the percentage of slope is doubled, soil losses are increased 2.5 times.

Almost 45 percent (101,244 acres) of the land surface of Giles County consists of five-to-twenty percent slopes. There are approximately 13,000 acres of relatively level land, but few large, level sites. The remainder of the County land area has slope gradients in excess of 20 percent. In the New River Valley Planning District, approximately 45 percent of the land surface is

classified as steep slope with a gradient in excess of 20 percent. Terrain of moderate slope (5-20 percent) constitutes nearly 48 percent of the land area of the District, and only 8 percent is rated as level land.

FORESTS

Approximately 76.3 percent of the total land area in Giles County is forestland. Of the 176,775 acres devoted to forest, approximately 63,352 acres are included in the Jefferson National Forest. More than 31 percent of the commercial forest is owned by government agencies, individual ownership accounts for 40 percent, 17 percent is farmer owned, 3.5 percent is operated by the Forestry industry and 8.5 percent is corporately owned.

Hardwoods dominate the County's forests; oak, hickory, and yellow poplar are major species. In 1986, Giles was estimated to have 165,781 acres of timberland of the three major categories with an additional 104,000 acres reserved. The estimated volume was 290 million cubic feet and annual growth at 8.7 million cubic feet. The net annual growth continues to exceed harvest by a wide margin and is expected to continue for a number of interrelated reasons.

Forests are considered to be a renewable resource that can, under proper management, provide continuous yields of timber, wildlife, and provide recreational and aesthetic benefits as well. Forests also assist in controlling runoff

and erosion and provide a habitat for fauna and flora, which are beneficial to man.

Tree farming has long been an important economic venture throughout the timberlands of the United States. For long-range economic planning, silviculturists find it necessary to fit the species to the soil and other site conditions. Site indices in much of Giles County are not such that traditional softwood species should be encouraged in the mountainous areas of the County. Some valley areas may be converted to softwood, but until large markets are developed, this is unlikely. Increasing need for pulpwood may mean that such markets will continue for the next decade.

CLIMATE

Weather is defined as the condition of the atmosphere at any given time and place. Climate is the long-term average of weather in an area. The climate of Giles County is classified as humid continental, a subtype characterized by moderately mild winters and warm summers. Being located in the extreme southeastern section of this climate region, the area is influenced more by the subtropical than the continental effects.

The mean daily maximum temperature in Giles County is 68°F, and the mean daily minimum temperature is 42.9F. Much lower temperatures and a more boreal climate are found on mountaintops in the County. Precipitation averages 35.3 inches a year, usually falling during the growing season. The County receives an annual average of 15.9 inches of snowfall.

The air masses of the area flow predominantly from the southwest during the warm season and from the northeast during the cold season. Although occasional storms may cause severe wind damage to property and crops, violent windstorms are not a serious hazard in the region. Wind velocities have been recorded in excess of 80 mph; however, such devastating storm systems are rare.

Flooding frequently occurs on a small scale along the New River and its tributaries. More serious flooding occurs at longer intervals. The Town of Narrows is especially subject to short term flooding from Wolf and Mill Creeks. Also worth mentioning are Little Stony Creek and Doe Creek in Pembroke, which are subject to flooding and high erosion hazards.

SURFACE WATER

An enormous potential for the development of surface and groundwater resources exists in the New River Valley Planning District region, and Giles County in particular. The New River, one of the largest rivers in the state, flows through the County for approximately thirty-seven miles. Walker, Wolf, Big Stony, and Little Stony Creeks are major tributaries; Doe and Sinking Creeks, Sugar and Spruce Runs comprise smaller drainage basins also feeding into the New River. Giles County’s stream system in is the result of uplift, folding, faulting, and the degradation of a former land surface, consisting mainly of unaltered limestone covered by colluvial and alluvial materials. There are few broad and open valleys in Giles County because the geology favors the development of narrow, steep-sloped valleys. The New River Basin is almost wholly narrow and steep-sloped, and drains into the Ohio River system. Only a small portion of the County's land surface drains into the Atlantic Ocean through the James River tributary system.

According to the United States Geological Survey's Virginia Water Resources Data (Water Year 1997), between 1939-1997, the annual mean discharge at the Glen Lyn gauging station was 5,063 Cubic Feet Per Second (CFS) with the lowest recorded daily mean flow recorded at 787 CFS, which occurred on July 8, 1988. The highest daily mean flow recorded was 126,000 CFS, occurring August 15, 1940. For the Water Years 1939-1997, the annual runoff was 1.34 cubic feet per square mile, or 436,840 gallons. (The volume of one acre-foot of water is approximately 326,000 gallons or 43,560 cubic feet.) The runoff per unit of drainage area in the New River System is reported by the Army Corps of Engineers to be the highest value of any major river in Virginia. The well-developed tree cover along the banks of streams moderates the rate of runoff.

For many years, the majority of the County's population was concentrated in the communities along the New River. The banks of the smaller streams, which feed into the New River, are generally steep and sparsely populated. These conditions allowed the streams to assimilate the small waste loads imposed on them.

Big Stony Creek has no major concentrations of population, but does have mineral processing operations located on it. The Virginia State Water Control Board reports on water quality monitoring indicate that APG Lime Corp. quarries near Stony Creek, and the subsequent runoff from these operations have caused water quality problems in the past. Fortunately, measures have been taken at the facilities to prevent runoff and the water quality has gradually improved.

Wolf Creek flows into the New River at Narrows, draining part of Giles County and a part of Bland County. Much of the creek's headwaters are trout streams, either natural or stocked. The water quality at a station near the North Fork of Wolf Creek has remained good for the last few years based on chemical data and benthic surveys. The twenty miles of this water body partially supports the CWA fishable and swim-able goals. The rest of the water body fully supports both goals.	

Three biological monitoring stations are used to assess the condition of Stony Creek. The first station is located above what was U.S. Gypsum (now part of APG Lime Corp.), which indicates good water quality at all times. The second station below APG Lime Corp. indicates only fair water quality. The third station is located below Virginia Lime Plant. The 2002 Virginia Department of Environmental Quality's (DEQ) Water Quality Assessment 305(b) Report to EPA and Congress reported that twenty miles of the Stony Creek water body partially supports the Clean Water Act's (CWA) fishable goal, while the swim-able Walker Creek is monitored below Pearisburg, and between 1989 and 1991, no water quality violations were detected. The CWA fishable and swim-able goals are fully supported in this particular water body. The Sinking Creek water body reported a single substandard dissolved oxygen

Walker Creek is monitored below Pearisburg, and between 1989 and 1991, no water quality violations were detected. The CWA fishable and swimable goals are fully supported in this particular water body. The Sinking Creek water body reported a single substandard dissolved oxygen concentration over the two-year period at the downstream station. The CWA fishable goal is only partially supported in 20 of the 56.9 miles. The swim-able goal is fully supported.

The final New River testing station is located at Glen Lyn and measures water quality conditions in the river as it leaves the State. Prior to 1990, core monitoring samples of carp tissue contained Zinc values higher than the EPA "Blue Book" values. Poly Chlorinated Biphenyl (PCB) 1254 concentration found in carp was above the FDA action level, and exceeded the 100th percentile of the cumulative frequency distribution for Virginia. This water body partially supports the CWA fishable goal and fully supports the swim-able goal.

NATURAL HERITAGE RESOURCES

Giles County contains considerable wildlife species diversity in numerous different ecological habitats, ranging from boreal forests of Mountain Lake, to shale barrens and sphagnum and shrub bogs. Many plant and animal species of the Southern Appalachian region approach their northern or southern geographical limits in Giles County.

The Virginia Department of Conservation and Recreation (DCR) identifies three types of Natural Heritage Resources in Giles County; Proposed Endangered, Threatened, and Sensitive Species (PETS), Significant Natural Communities, and Significant Caves. According to DCR records, Giles County ranks in the top twenty percent of all Virginia counties in the total number known natural heritage resource occurrences, in the top ten percent in terms

of known occurrences per square mile. Based on geographic data provided by DCR, four areas in Giles County have been identified as having substantial numbers of Natural Heritage Resource occurrences; Mountain Lake area: 26 occurrences; Clover Hollow/Plow Screw area: 21 occurrences; Eggleston area: 10 occurrences; and the Walker Creek Valley area: 7 occurrences.

PROPOSED ENDANGERED, THREATENED AND SENSITIVE SPECIES (PETS)

Based on the data obtained from DCR and other public and private sources, there are documented occurrences of more than 140 species of plants and animals listed by the Commonwealth or federal agencies as rare, threatened, or endangered. The most noted of the listed species occurring in Giles County, Peters Mountain Mallow, occurs nowhere else in the world.

SIGNIFICANT NATURAL COMMUNITIES

Both federal and state agencies recognize the rarity of unique habitat and vegetative communities occurring in the Southern Appalachian region. The Virginia DCR lists thirteen occurrences of unique vegetative communities in Giles County, including rare scrub, woodland, and forest communities. The Forest Service's Southern Appalachian Assessment (SAA), notes that Mountain Lake is the sole example in the Southern Appalachians of a natural high elevation lake. Other unique habitats identified in the SAA that occur in Giles County include beaver ponds, wetland complexes, grassy balds, high elevation rocky summits, shale barrens, sinkholes and karst-lands, and sphagnum and shrub bogs.

SIGNIFICANT CAVES

Giles County has more than 180 caves documented by the Virginia DCR. The Virginia Cave Board has listed twelve of these caves as significant for archeological, biological, historical, recreational or other reasons.

10INVENTORY AND ANALYSIS OF POPULATION

Population

The 2010 U.S. Census of Population data for Giles County indicates that the County's population had a slight increase from 16,657 to 17,286 between 2000 and 2010. This translates into a 1.04 percent increase in population over the ten-year period. The population in Giles County has had significant increases and decreases over the past forty years. For example in Table 1, the County's population in 1980 was at a twenty year high with a population of 17,810. This changed drastically in 1990 with a population decrease of -8.11 percent.

Table 1

Population 1960-2010

Jurisdictions	**1960**	**1970**	**1980**	**1990**	**2000**	**2010**
Glen Lyn	222	191	235	170	151	115
Narrows	2,508	2,421	2,516	2,082	2,111	2,029
Pearisburg	2,268	2,169	2,128	2,064	2,729	2,786
Pembroke	1,038	1,095	1,302	1,064	1,134	1,128
Rich Creek	748	729	746	670	665	774
Subtotals	6,784	6,605	6,927	6,050	6,790	6,832
% of Population Living in Towns	39.40%	39.45%	38.89%	36.97%	40.76%	39.52%
Unincorporated Areas	10,435	10,136	10,883	10,316	9,867	10,454
County Total	17,219	16,741	17,810	16,366	16,657	17,286
NRV Region	97,233	114,833	141,343	152,680	165,146	178,237
Virginia	3,966,949	4,641,448	5,346,818	6,187,358	7,078,515	8,001,024

Source: U.S. Census.

In rural portions of the County, defined as the "Unincorporated Areas" in Table 1, the largest population loss occurred between 1980 and 1990 with a loss of 567 people. This is also the same time period when the County and towns followed a similar population shift and both urban and rural areas experienced a decrease in population.

Of the five towns that are incorporated within Giles County, Pearisburg had the largest increase of 32.2 percent between 1990 and 2000. The majority of this increase can be attributed to boundary adjustments that occurred throughout the decade. This increase remained steady with an estimated increase of 3.37 percent between 2000 and 2002. However, Pembroke had the largest increase during this time period of 7.95 percent.

Overall, Giles County is currently experiencing a steady increase in population with the largest population increases being within the incorporated limits of each town. The County is currently experiencing a higher increase in population (2.56 percent) than the New River Valley (1.36 percent) as a whole and falls within the parameters of Virginia's increase in population (see table 2).

Table 2

Percent Change in Population

Jurisdictions	1960-1970	1970-1980	1980-1990	1990-2000	2000-2010
Glen Lyn	-13.96%	23.04%	-27.66%	-11.18%	-23.84%
Narrows	-3.47%	3.92%	-17.25%	1.39%	-3.88%
Pearisburg	-4.37%	-1.89%	-3.01%	32.22%	2.09%
Pembroke	5.49%	18.90%	-18.28%	6.58%	-0.53%
Rich Creek	-2.54%	2.33%	-10.19%	-0.75%	16.39%
Unincorporated Areas	-2.87%	7.37%	-5.21%	-4.35%	5.95%
County Total	-2.78%	6.39%	-8.11%	1.78%	3.78%
NRV Region	18.10%	23.09%	8.02%	8.16%	7.93%
Virginia	17.00%	15.20%	15.72%	14.40%	13.03%

Source: U.S. Census.

Age Distribution

Table 3 illustrates that the largest population group is in the 45 and older age bracket. These numbers have remained relatively unchanged since 1980. The largest increase was 27.76 percent between 1980 and 1990. Between 1980 and 1990, the age groups Under 5 through 25-34 years all decreased enormously. The most prominent loss occurred in the 5-14 age groups (31 percent) and 15-19 (26 percent).

Table 3
Age Distribution

Age	1980	1990	2000	2010	*2020	*2030
Under 5	1,118	946	944	915	1,068	1,064
5-14	2,874	1,972	2,086	2,160	2,151	2,211
15-19	1,597	1,176	977	1,040	951	1,040
20-24	1,269	1,073	790	846	817	928
25-34	2,633	2,308	2,203	1,741	1,953	1,887
35-44	2,077	2,397	2,525	2,381	2,138	2,116
45-64	4,099	3,756	4,350	5,087	5,108	4,859
65 & older	2,143	2,738	2,782	3,116	3,776	4,556
Total Population	17,810	16,366	16,657	17,286	17,962	18,661

Source: U.S. Census, * Virginia Employment Commission Projections.

Table 4
Percent Change in Age Distribution

Age	1980-1990	1990-2000	2000-2010	*2010-2020	*2020-2030
Under 5	-15.38%	-0.21%	-3.07%	16.72%	-0.37%
5-9	-31.38%	5.78%	3.55%	-0.42%	2.79%
15-19	-26.36%	-16.92%	6.45%	-8.56%	9.36%
20-24	-15.45%	-26.37%	7.09%	-3.43%	13.59%
25-34	-12.34%	-4.55%	-20.97%	12.18%	-3.38%
35-44	15.41%	5.34%	-5.70%	-10.21%	-1.03%
45-64	-8.37%	15.81%	16.94%	0.41%	-4.87%
65 & Older	27.76%	1.61%	12.01%	21.18%	20.66%
Total Population	-8.11%	1.78%	3.78%	3.91%	3.89%

Source: U.S. Census, * Virginia Employment Commission Projections.

The number or children under 5 years old has been on the decrease since 1980. The projections for the County for 2000-2030 show an increase of 98 children (10 percent). Children in the 15-19 age- group show a consistent

decrease. Projections for the next 30 years continue this trend (See Figure 2 for a summary of the size of each age group between 1980 and 2000).

The 35-44 age-group shows a decrease in population from 2000-2020. However, projections show that by 2030 the population for this age group will increase by 17.47 percent. This increase and the steady population for the under 5 – 14 age group indicates some children of current families may continue to reside and start families in the Giles County area.

However, the largest gain in population by age is the 65 and older age group. It is estimated that between 2020-203 0 this particular age group will increase by 20.14 percent. With less young people staying in the County upon graduation from high school and joining the work force, there will be less disposable income circulating in the economy and that will undoubtedly affect the local retail and service industries. With less economic activity, that means there will be less sales and food tax revenues for the County and that will have tremendous impacts on the government's ability to provide community-based services for the elderly such as transportation services and other social services. A related issue facing the County is that with less young workers entering the local economy, there will be a decrease demand for housing and that means less revenue for the County in terms of property tax revenue.

Age Distribution by Magisterial District

Between 1980 and 1990, the Western District experienced an overall 12.9 percent decrease in population, the most significant loss occurring in the 10-14 age group (47.7 percent). One of the most surprising statistics is in the 45 + age group population in the Western District which has only increased slightly. This is one of the few age groups forecasted to experience growth in future projections with the exception of the 65 and older. Table 5 presents data for each of the Magisterial Districts in the County.

The Central District followed the same trend as the Western District, experiencing a decrease between 1980 and 1990 of 8.51 percent. However, between 1990 and 2000 the Central District had an increase of 4.08 percent. While the Central District too had decreasing populations in the 15-19 age groups, their decrease was not as severe as the Western District. The Central District also had larger increases in the 5-9 and 10-14 age groups between 1990 and 2000 averaging 12.87 percent. One statistic county officials may find alarming is the substantial decrease in population of the 20-24 age group (28.41 percent). This statistic clearly states that the graduating population is not choosing to remain in Giles County.

The Eastern District, unlike the Central and Western, only had a slight decrease in population overall between 1980

and 1990 (2.56 percent). This District did have a very significant increase of 35.22 percent in the 35-44 age group during this time period. The largest decrease took place in the 5-9 age group (29.47 percent). Like the Central District, the Eastern District also saw a dramatic decrease between 1990-2000 of the 20-24 age group (28.72 percent). Again, this would indicate graduates relocating upon completion of their education.

Table 5

Age Distribution by Region

Eastern District					% Growth Rate		
Age	**1980**	**1990**	**2000**	**2010**	**1980-1990**	**1990-2000**	**2000-2010**
Under 5	409	348	291	300	-14.91%	-16.38%	3.09%
5-9	475	335	340	378	-29.47%	1.49%	11.18%
10-14	452	405	367	338	-10.40%	-9.38%	-7.90%
15-19	516	416	329	340	-19.38%	-20.91%	3.34%
20-24	458	376	268	257	-17.90%	-28.72%	-4.10%
25-34	990	870	811	632	-12.12%	-6.78%	-22.07%
35-44	653	883	922	872	35.22%	4.42%	-5.42%
45+	1,792	1,965	2,344	2,924	9.65%	19.29%	24.74%
Total	5,745	5,598	5,672	6,041	-2.56%	1.32%	6.51%

Central District					% Growth Rate		
Age	**1980**	**1990**	**2000**	**2010**	**1980-1990**	**1990-2000**	**2000-2010**
Under 5	352	307	330	336	-12.78%	7.49%	1.82%
5-9	469	307	346	355	-34.54%	12.70%	2.60%
10-14	491	322	364	411	-34.42%	13.04%	12.91%
15-19	532	377	335	361	-29.14%	-11.14%	7.76%
20-24	368	359	257	305	-2.45%	-28.41%	18.68%
25-34	847	728	708	589	-14.05%	-2.75%	-16.81%
35-44	681	774	822	805	13.66%	6.20%	-2.07%
45+	2,181	2,243	2,476	2,755	2.84%	10.39%	11.27%
Total	5,921	5,417	5,638	5,917	-8.51%	4.08%	4.95%

Western District					% Growth Rate		
Age	**1980**	**1990**	**2000**	**2010**	**1980-1990**	**1990-2000**	**2000-2010**
Under 5	357	291	323	279	-18.49%	11.00%	-13.62%
5-9	384	288	321	354	-25.00%	11.46%	10.28%

10-14	603	315	348	324	-47.76%	10.48%	-6.90%
15-19	550	383	313	339	-30.36%	-18.28%	8.31%
20-24	442	338	265	284	-23.53%	-21.60%	7.17%
25-34	796	710	684	520	-10.80%	-3.66%	-23.98%
35-44	743	740	781	704	-0.40%	5.54%	-9.86%
45+	2,269	2,286	2,312	2,524	0.75%	1.14%	9.17%
Total	6,144	5,351	5,347	5,328	-12.91%	-0.07%	-0.36%
District Population Total	17,810	16,366	16,657	17,286	-8.11%	1.78%	3.78%
Source: U.S. Census.							

Population Trends

In the past, many of the declining population figures pointed to the same trends, and were attributed to several factors. Those statistics clearly showed fewer people in Giles County, however the elderly population was increasing. Currently, the declining figures seem to be leveling off with the slight population increase experienced in Giles.

Another probable factor affecting the recent population loss in the "younger adult" categories would be the lack of jobs. With few moderate-high wage jobs readily available, young adults graduating from high school do not have many employment options in the County. They move to larger communities with a more diverse employment base and a greater opportunity for higher wages.

Population Characteristics

Below, Table 6 documents population gains occurring mainly in the white and "other" minority populations. Between 1990 and 2000, the "other" category experienced a population explosion gaining 108 residents.

Table 6								
Racial Characteristics								
Race	**1980**	**%**	**1990**	**%**	**2000**	**%**	**2010**	**%**
White	17,400	97.70%	16,044	98.03%	16,226	97.41%	16,723	96.74%
Black	354	1.99%	284	1.74%	263	1.58%	261	1.51%
Native American	5	0.03%	8	0.05%	23	0.14%	21	0.12%
Asian	40	0.22%	24	0.15%	31	0.19%	55	0.32%

Other	11	0.06%	6	0.04%	114	0.68%	226	1.31%
Total	17,810	100.00%	16,366	100.00%	16,657	100.00%	17,286	100.00%
Source: U.S. Census.								

Table 7 gives the breakdown of population by gender. Both male and female populations increased between 1990 and 2000. This increase is similar to the New River Valley as a whole, which had an increase of over 4000 persons, with the largest increase being found in the male population (9.4 percent). Comparably, the Commonwealth as a whole experienced a 14.4 percent growth rate for both males and females.

Table 7

Gender Characteristics

	Giles County		NRV Region		Virginia	
Year	**Male**	**Female**	**Male**	**Female**	**Male**	**Female**
1990	7,971	8,395	76,161	76,559	3,033,974	3,153,384
2000	8,141	8,516	83,345	81,101	3,471,895	3,606,620
1990-2000 % Change	2.1%	1.4%	9.4%	5.9%	14.4%	14.4%
2010	8,473	8,813	89,981	88,256	3,925,983	4,075,041
2000-2010 % Change	4.1%	3.5%	8.0%	8.8%	13.1%	13.0%
Source: U.S. Census.						

The median age for most of the New River Valley counties is between 35.7 and 40.5. The median age for Giles County as of the 2000 Census is 40.2. This figure is much higher than Montgomery County and the City of Radford. However, both of these localities are home to state run universities resulting in median ages under 30.

18THE ECONOMY

Employment

Currently, Giles County has more residents employed in the manufacturing industry than any other sector listed in Table 8. This trend is very similar to the counties of Floyd and Pulaski as well. Montgomery County, due to Virginia Tech, currently has the highest employment in the educational, health and social services sector (13,852). This contributes to the top sector in the New River Valley being in this field (22,533) followed by the manufacturing industry (15,783). Giles County, as well, has a large showing in this industry with 1,742 of its residents working in this field.

Table 8

Employment by Industry Sector and Place of Residency

Industry	Floyd	Giles	Montg.	Pulaski	Radford	NRV	VA
Agriculture, forestry, fishing and hunting, and mining	364	154	390	175	13	1,096	42,834

Construction	797	637	2,384	800	318	4,936	288,394
Manufacturing	971	1,518	4,467	3,565	624	11,145	311,717
Wholesale trade	128	121	502	225	59	1,035	83,912
Retail trade	1,065	720	4,380	1,804	941	8,910	413,143
Transportation and warehousing, and utilities	240	228	1,085	785	139	2,477	162,389
Information	53	58	722	169	154	1,156	96,967
Finance and insurance, and real estate and rental and leasing	468	315	1,928	700	276	3,687	256,655
Professional, scientific, and management, and administrative and waste management services	380	457	4,009	1,121	336	6,303	544,503
Educational services, and health care and social assistance	1,622	1,881	16,368	3,705	2,175	25,751	776,545
Arts, entertainment, and recreation, and accommodation and food services	365	462	5,017	943	1,333	8,120	306,317
Other services, except public administration	483	332	1,556	686	215	3,272	197,336
Public administration	236	378	1,475	842	213	3,144	343,419
TOTAL	7,172	7,261	44,283	15,520	6,796	81,032	3,824,131

Source: 2006-2010 Amercian Community Survey 5-Year Estimates.

As shown in Table 9, the largest employer in Giles County is Celanese Acetate (CELCO), which manufactures acetate fibers. Celanese Acetate has been operating in Narrows since Christmas Day, 1939 and currently employs 1,153. It is followed by the Giles County School Board, which employs 460.

Table 9

Major Employers

Major Employers	Products	Employment (Range)
Jennmar Corp.	Mining Supplies	50-99
Patrick Enterprises	Machine and Metal	20-49
Eastern Gun and Supply	Sporting Goods and Equipment	20-49
SEMCO	Electric Motors	20-49

William G. Simmons Company	Commercial Construction	20-49
Universal Forest Products	Trusses	20-49
Southern Tank Transport	Lime Hauler	20-49
American Electric Power	Public Utility	50-99
Lhoist North America	Lime Mining	100-249
Fairchild International	Mining Equipment	100-249
Caterpillar	Mining Equipment	100-249
Mountain Lake Hotel	Motel and Resort	50-99
Wal-Mart	Retail Store	100-249
Carilion Giles Community Hospital	Hospital	100-249
Giles County School Board	Education	500-999
Celanese Acetate	Acetate Fibers	500-999

Source: Virginia Employment Commission and Giles County, 2011.

Table 10 shows the labor force in Giles County has slightly decreased since 1990. The total participation rate dropped from 57.84 to 54.95. Of the population 16 years and older whom are employed, males are more prominent in the labor force with 4,022 of the 7,367 total employed residents.

Table 10

Labor Force Participation

	1980	1990	2000	*2010
Persons 16 years and older	13,506	13,229	13,406	13,905
Employed Persons 16 years and older	7,158	7,652	7,367	7,261
Total Participation Rate	53.00%	57.84%	54.95%	52.22%
Males 16 years and older	6,523	6,348	6,442	6,782
Employed Males 16 years and older	4,193	4,226	4,022	3,790
Total Male Labor Participation Rate	64.28%	66.57%	62.43%	55.88%
Females 16 years and older	6,983	6,881	6,964	7,123
Employed Females 16 years and older	2,965	3,426	3,345	3,471
Total Female Labor Participation Rate	42.46%	49.79%	48.03%	48.73%

Source: U.S. Census, *2006-2010 American Community Survey 5-Year Estimates.

Income

As Table 11 shows, the Per Capita Personal Income in Giles County has steadily increased over the past 20 years. In 1980 the per capita income was 7,702 this increased by 12,598 in 2001. The per capita income was most comparable with the entire New River Valley in 2001 with only a .17 percent difference. However, the state is still higher than Giles County at 37.23 percent.

Table 11
Per Capita Personal Income

Year	Giles County	VA	% Difference
1990	$14,701	$20,312	-27.62%
1991	15,107	20,953	-27.90%
1992	15,673	21,842	-28.24%
1993	16,196	22,596	-28.32%
1994	16,873	23,534	-28.30%
1995	17,626	24,360	-27.64%
1996	18,233	25,354	-28.09%
1997	19,151	26,695	-28.26%
1998	19,758	28,199	-29.93%
1999	20,659	29,617	-30.25%
2000	20,903	31,640	-33.93%
2001	21,852	33,278	-34.33%
2002	21,875	33,753	-35.19%
2003	22,620	35,001	-35.37%
2004	23,460	36,902	-36.43%
2005	24,723	38,966	-36.55%
2006	25,889	41,362	-37.41%
2007	26,991	43,437	-37.86%
2008	27,776	44,676	-37.83%
2009	28,350	44,057	-35.65%

Source: Bureau of Economic Analysis.

The median household income in Giles County is currently $34,927 (see Table 12). This is an increase of $10,802 since 1990. The median family income in Giles County has also increased by over $10,000 since 1990 however the County is still behind the State median, which had an increase of over $15,000. Poverty levels in Giles have decreased over the decade, which is consistent with State levels, however the decrease was more significant in Giles at 2.9 percent.

Table 12
Income Characteristics

	1990		2000		*2010	
	Giles	Virginia	Giles	Virginia	Giles	Virginia
Median Household Income	$24,125	$33,328	$34,927	$46,677	$41,186	$61,406
Median Family Income	$29,416	$38,213	$42,089	$54,169	$48,966	$73,514
Per Capita Income	$11,462	$15,713	$18,396	$23,975	$20,985	$32,145
% Persons below poverty level	12.2	10.2	9.5	9.6	15.0	10.3

% Families below poverty level	9.5	7.7	6.6	7	11.3	7.2

Source: U.S. Census; * 2006-2010 American Community Survey 5-Year Estimates.

Table 13 below lists industry sectors and average weekly wages in Giles County in comparison to the New River Valley; it is evident that wages in the County tend to be lower than those in the State. Average weekly wages in Giles County for the third quarter of 2003 were $556. The highest paying industry was manufacturing, which rose well above the average at $835. The lowest paying industry was the trade industry paying an average of $313/weekly.

Table 13

Giles County Average Weekly Wage By Industry Sector

	Giles County		NRV Region		Virginia	
Industry Sector	**2nd Qtr 2010**	**2nd Qtr 2011**	**2nd Qtr 2010**	**2nd Qtr 2011**	**2nd Qtr 2010**	**2nd Qtr 2011**
Total, All Industries	$654	$661	$658	$667	$929	$949
Agriculture, Forestry, Fishing and Hunting	-	-	$471	$488	$531	$539
Mining, Quarrying, and Oil and Gas Extraction	-	-	$698	$631	$1,314	$1,292
Utilities	$1,304	$1,286	$976	$921	$1,430	$1,417
Construction	$619	$763	$613	$655	$858	$886
Manufacturing	$1,109	$1,029	$1,002	$995	$1,000	$1,019
Wholesale Trade	$674	$670	$769	$802	$1,243	$1,304
Retail Trade	$421	$397	$410	$397	$498	$493
Transportation and Warehousing	$736	$785	$667	$643	$892	$906
Information	$569	$559	$803	$847	$1,401	$1,398
Finance and Insurance	$628	$595	$720	$757	$1,249	$1,295
Real Estate and Rental and Leasing	$431	$547	$501	$502	$790	$823
Professional, Scientific, and Technical Services	$633	$835	$978	$1,036	$1,696	$1,773
Management of Companies and Enterprises	***	***	$980	$962	$1,870	$1,879
Administrative and Support and Waste Mgmt.	$317	$328	$495	$460	$675	$692
Educational Services	***	***	$733	$721	$768	$760
Healthcare and Social Assistance	$605	$593	$701	$725	$829	$843
Arts, Entertainment, and Recreation	$344	$286	$249	$237	$454	$405
Accommodation and Food Services	$236	$244	$250	$257	$315	$318
Other Services (except Public Administration)	$687	$586	$468	$469	$691	$703
Public Administration	$456	$448	$695	$749	$1,324	$1,396

Source: Virginia Workforce Connection: Labor Market Statistics, Covered Employment and Wages Program.

* Indicate non-disclosable data.

Unemployment

The unemployment rate for Giles County has remained relatively the same since 1993 with a slight decrease in 2000 and 2002, as shown in Table 14. The rates for the County since 1993 have been one of the highest in region. This could be in part to the decrease worked force at the Celanese Acetate plant as well as a serious reduction in employment at the American Electric Power Company. Neighboring Montgomery County has had the lowest unemployment rate for the nine- year period.

Table 14											
Regional Unemployment Trends (%)											
Localities	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**
Floyd	3.7	4.3	4.4	4.0	4.0	3.7	3.2	3.5	4.4	7.8	7.5
Giles	4.2	5.7	6.0	5.4	5.0	5.1	3.7	4.5	5.4	9.3	9.2
Montgomery	2.5	3.3	4.0	3.8	3.6	3.5	3.1	3.2	4.1	7.1	7.4
Pulaski	4.5	7.1	6.3	6.1	5.8	4.5	3.9	5.5	6.4	11.1	9.3
Radford	3.2	4.1	5.2	5.2	5.2	4.5	3.8	4.0	5.3	9.1	9.4
NRV	3.3	4.5	4.8	4.6	4.4	4.0	3.4	3.9	4.9	8.4	8.2
Virginia	2.3	3.2	4.2	4.1	3.7	3.5	3.0	3.0	4.0	6.8	6.9
Source: LAUS Unit and Bureau of Labor Statistics.											

AGRICULTURE

Due to steep slopes and soil limitations, Giles County never contained a large agricultural economic base in proportion to the total land area, although agriculture plays a large part of the County's early economy. Between 1987 and 1992, the number of farms in Giles County fell by 4.05 percent. The Commonwealth of Virginia and the United States as a whole experienced similar declines of 5.80 percent and 7.65 percent, respectively, in the number of farms during the same time period. Between 1992 and 1997, the number of farms in the United States decreased by only 1.04 percent. The Commonwealth suffered a decline of 2.61 percent during this time as well. However, Giles County's numbers present a mild return with an increase of 2.71 percent. Table 15 compares agricultural trends in Giles County, the Commonwealth of Virginia, and the United States between 1987 and 1997.

In 1987, the average farm size in the United States was 462 acres. In Giles County, it was 207 acres. One reason for this difference is the adverse topography that prevails in much of Giles County. The land that is available and suitable for agricultural activity is likely to be more profitable-although not necessarily more valuable, in a different use, such as commercial, industrial, or residential activities, if the topography supports it. Between 1987 and 1992, the average farm size in Giles County grew equally to the United States as a whole with an increase of 6 percent. The United States' average decreased slightly by 0.01 percent between 1992 and 1997 from 491 to 487 acres. Giles County's average declined as well, decreasing by 10 percent, from 220 to 197 acres.

Between 1987 and 1992, market values kept ahead of expenses in the United States, Virginia, and Giles County. The same rings true for the United States and Virginia, for the 1992-1997-time period. However, for the same time period, expenses rose a dramatic 32.75 percent in Giles County. This increase can be contributed to the increasing cost new technology has on agriculture, as well as the need for many of the farms in Giles County to replace aging equipment.

24**Table 15**			
Agricultural Trends			
	2002	**2007**	**2002 – 2007 % Change**
United States			
# of U.S. Farms	2,128,982	2,204,792	3.56%
Land in U.S. farms (1,000 acres)	938,279	922,096	-1.72%
Avg. U.S. farm size (acres)	441	418	-5.22%
Market Value of U.S. Products Sold ($1,000)	$200,646,355	$297,220,491	48.13%
U.S. Production Expenses ($1,000)	$173,199,216	$241,113,666	39.21%
Virginia			
# of VA Farms	47,606	47,383	-0.47%
Land in VA farms (acres)	8,624,829	8,103,925	-6.04%
Avg. VA farm size (acres)	181	171	-5.52%
Market Value of VA Products Sold ($1,000)	$2,360,911	$2,906,188	23.10%
VA Production Expenses ($1,000)	$2,045,598	$2,711,537	32.55%
Giles County			
# of Giles County Farms	407	344	-15.48%
Land in Giles County farms (acres)	68,329	65,487	-4.16%
Avg. Giles County farm size (acres)	168	190	13.10%
Market Value of Giles County Products Sold ($1,000)	$5,341	$5,031	-5.80%
Giles County Production Expenses ($1,000)	$4,156	$5,176	24.54%
Source: 2002 and 2007 U.S. Census of Agriculture.			

Wholesale and Retail Trade

Between 1980 and 2003, taxable sales trends in Giles County have moved erratically, from the up and down cycles in the total number of establishments to the steadily increasing volume of taxable sales. Table 16 outlines the erratic movement of the number of establishments.

Table 16
Giles County Taxable Sales

Year	Taxable Sales	No. of Registered Dealers
1990	$65,999,723	353
1991	68,300,234	362
1992	69,264,514	367
1993	70,554,971	364
1994	70,202,254	361
1995	71,228,147	358
1996	80,134,089	348
1997	82,820,437	359
1998	85,777,430	370
1999	99,116,707	366
2000	117,049,629	354
2001	102,605,595	346
2002	106,702,666	329
2003	108,356,227	335
2004	114,852,818	349
2005	107,554,365	*
2006	122,276,776	403
2007	128,106,484	363
2008	126,505,051	369
2009	124,648,378	365
2010	122,100,941	344

2011	126,164,189	345

Source: Virginia Department of Taxation, Annual Taxable Sales Reports.

* Data not available as the Department of Taxation began tracking sales (3rd Qtr of 2005) using National American Industry Classification System (NAICS) business categories rather than Standard Industrial Classification (SIC) categories.

In economic theory, location quotient is a very reliable tool for gauging the local level of a given economic sector compared against an accepted standard, usually the state or national level of the same economic activity. Location quotient is important because it can allow the community to better understand what the local economy is comprised of and how it compares with the state or national economy.

Table 17

Retail Sales Comparison

		Virginia		Giles County	
NAICS	Business Classification	**2006**	**2011**	**2006**	**2011**
000	No NAICS Classification	$7,196,408,770	$1,308,108,219	$5,889,096	$3,018,020
111	Crop Production	86,875,710	113,358,860	-	75,141
339	Miscellaneous Manufacturing	1,078,507,979	473,484,026	596,669	14,687
423	Merchant Wholesalers, Durable Goods	4,881,739,818	3,704,640,128	395,068	1,371,228
441	Motor Vehicle and Parts Dealers	2,277,662,809	2,569,573,624	2,166,034	3,077,054
442	Furniture and Home Furnishings Stores	2,466,868,782	2,011,966,538	1,579,896	1,155,651
444	Building Material and Garden Equipment and Supplies Dealers	7,555,946,352	5,137,319,891	9,934,002	6,735,185
445	Food and Beverage Stores	10,637,948,267	14,202,826,894	20,602,551	25,958,146
447	Gasoline Stations	1,752,928,096	1,753,188,998	6,847,116	4,710,283
448	Clothing and Clothing Accessories Stores	4,903,192,047	4,706,550,735	135,571	104,139
451	Sporting Goods, Hobby, Book, and Music Stores	1,700,204,373	1,648,698,004	1,032,891	1,382,408
452	General Merchandise Stores	13,029,973,372	16,074,943,507	39,086,974	38,092,448

453	Miscellaneous Store Retailers	2,501,428,359	3,380,805,112	1,006,032	1,574,055
454	Non-store Retailers	1,548,127,029	1,125,167,453	2,031,278	287,236
532	Rental and Leasing Services	1,669,157,487	966,667,532	317,910	528,123
541	Professional, Scientific, and Technical Services	798,457,677	1,022,403,713	-	29,225
621	Ambulatory Health Care Services	53,276,999	107,309,402	-	173,833
721	Accommodation	2,999,808,374	2,987,755,500	3,813,552	2,665,367
722	Food Services and Drinking Places	9,071,895,732	11,118,465,142	8,781,406	13,077,420
811	Repair and Maintenance	1,099,841,348	1,359,061,103	2,670,943	2,814,447
812	Personal and Laundry Services	322,736,340	462,887,929	940,842	885,975
	Miscellaneous and Unidentifiable	4,878,387	2,520,013	14,448,945	18,434,118
	Other	11,840,761,176	12,832,639,048	-	-
Total Taxable Sales		$89,478,625,283	$89,070,341,371	$122,276,776	$126,164,189

Source: Virginia Department of Taxation, Annual Taxable Sales Reports.

Commuting Patterns

Out commuters from Giles have increased over the past ten years with the majority going to Montgomery County (1,933). Commuters to Henrico County and Richmond both dropped in 2000 from 14 to zero. However, commuters from the counties of Roanoke, Washington, Tazewell, Alleghany, Craig, Frederick, Henry, Wythe and the District of Columbia all increased from zero to over ten per location. The in-commuter patterns from West Virginia into Giles County have all increased.

Table 18

Commuting Patterns

Out-Commuters To:	1990	2000	In-Commuters From:	1990	2000
Montgomery County	1,926	1,933	Monroe County, WV	881	889
Pulaski County	403	717	Mercer County, WV	324	374
Mercer County, WV	165	126	Montgomery County	294	225
Radford City	75	173	Newport News City	112	46
Monroe County, WV	52	43	Bland County	72	34
Bland County	44	66	Hampton City	72	47
Roanoke City	36	82	Pulaski County	68	69
Salem City	26	19	Raleigh County, WV	54	68
Franklin County	23	14	York County	32	-
Henrico County	14	0	Summers County, NC	28	-
Richmond City	14	0	Person County, NC	25	-
Roanoke County	-	33	Summers County, WV	-	69
Washington County	-	22	Tazewell County	-	46

Tazewell County	-	17	Craig County	-	45
Alleghany County	-	16	Virginia Beach	-	41
Craig County	-	14	Richmond City	-	24
Frederick County	-	14	Gloucester County	-	20
Henry County	-	13	Russell County	-	16
District of Columbia	-	13	Surry County	-	14
Wythe County	-	12	Floyd County	-	8
Work Elsewhere*	123	**	Danville City	-	12
Total Out-Commuters:	2,901	3,381	Portsmouth City	-	12
			Buckingham County	-	12
			Roanoke County	-	10
			Franklin County	-	8
			Wythe County	-	7
			Wise County	-	7
			Worcester County	-	7
			Suffolk City	-	7
			Reside Elsewhere	327	**
			Total In-Commuters:	2,289	2,148

* Worked elsewhere and/or place of work not reported.

** Commuting representing less than 2/10 of 1% are not shown but are in included in the total.

Source: Virginia Employment Commission.

HOUSING

Housing is one of the most important elements in our lives and our communities - socially, physically, and economically. It is both a shelter and a link to the neighborhood and the larger community. Inadequate, unsanitary, and unsafe housing can affect the physical and mental health, privacy and security of citizens. Unchecked housing construction and sighting was one of the factors that led to the adoption of zoning and subdivision ordinances, building and housing codes, sanitation ordinances, and other health and safety regulations are now accepted as ordinary responsibilities of local and state government.

Beyond the physical condition of the house and the neighborhood, the location of' housing affects the quality of life. The quality of housing is often measured by access to community facilities such as schools, water and sewer, transportation networks, fire and police protection services, shopping centers, and perhaps the most important consideration, affordability.

Housing also has an important economic impact, as it represents a major portion of household budgets, frequently 25-3 5 percent or more of gross monthly income. Buying a home is the largest investment that most families make and is a principal form of savings. For local government, housing is a significant consideration for several reasons. First, residential development is a land use type. Next to education, services to housing and the inhabitants, including water and sewer, roads, police and fire protection comprise a major portion of local government expenditures.

Manufactured Housing

Today, housing is becoming more expensive while personal incomes are not keeping pace, making adequate shelter at affordable prices a problem for countless families and individuals. In many urban areas, apartment living is an affordable alternative, which is frequently utilized, although in rural regions such as Giles County, the availability

of apartments is usually less than the demand. Another housing alternative, which has grown dramatically within the last twenty years in rural regions, has been the manufactured home. Manufactured homes have become a major source of new housing for many lower and middle-income families, particularly in many rural counties. With the rising costs of single-family homes, manufactured homes represent an affordable alternative for many families.

However, many cities and counties have not accepted manufactured homes. They have an appreciation/ depreciation rate which is less favorable than a site built unit, and manufactured homes are typically financed by short-term loans at high interest rates, and regulated by different codes. In some jurisdictions in the Commonwealth, manufactured homes are taxed differently than houses on fixed foundations, generally as personal property rather than real estate. Other commonly expressed objections to the placement of manufactured homes in a neighborhood are that they frequently create aesthetic "eyesores" which leads to another objection sited as a loss of neighborhood integrity by way of lowered property values and the often, if not unfairly generalized transient nature of manufactured home occupants. The concept of a manufactured home has been expanding during the past decade to include modular and “doublewide” units which have characteristics similar to site- built structures.

Many of the current negative perceptions regarding manufactured homes are based on stereotyped visions of eight-foot wide metal wide boxes with flat roofs, rusted and decayed, and jammed into trashed filled, eroded "parks". While these types of manufactured homes may still exist, more and more of the newly constructed manufactured homes are "mobile" by virtue of placement on temporary or permanent foundations. Architectural design changes have improved the aesthetic appeal, and more stringent building code regulations at the State and Federal level have made manufactured homes safer.

29**Substandard Housing**

Another method for determining housing needs in a locality is by assessing the number of substandard housing units, or those housing units which lack one or more basic plumbing facilities and lack complete kitchen facilities. The amount of substandard housing has decreased by 65 percent since 1978, from 1,289 substandard units in 1978 to 447 substandard units in 2000, while the vacancy rate has remained relatively constant.

Current and Future Housing Needs

Currently Giles County has 7,732 total housing units. Of these, only 9.5 percent are vacant. Most of the housing units in the County are owner occupied and are considered single-family dwellings. The State’s vacancy rate is slightly lower at 7.1 percent, however the housing units are considered owner occupied, single-family dwellings as well.

Table 19

Housing Characteristics

	Giles County			NRV Region			Virginia		
Characteristic	**1990**	**2000**	***2010**	**1990**	**2000**	***2010**	**1990**	**2000**	***2010**
Total Housing Units	7,098	7,732	8,273	60,609	69,484	76,921	2,496,334	2,904,192	3,315,739
Occupied Housing Units	6,461	6,994	7,100	56,021	64,234	68,368	2,291,830	2,699,173	2,974,481

Owner	5,202	5,529	5,527	35,985	40,722	43,703	1,519,521	1,837,939	2,048,209
Renter	1,259	1,465	1,573	20,036	23,512	24,665	772,309	861,234	926,272
Vacancy Rate	9.0%	9.5%	14.2%	7.6%	7.6%	11.1%	8.2%	7.1%	10.3%
Single Family Housing Units	5,442	5,939	6,319	38,288	44,562	51,708	1,748,056	2,090,142	2,415,725
Multi-Family Housing Units	419	543	511	13,515	15,739	15,623	566,178	625,422	711,005
Mobile Homes	1,144	1,236	1,443	8,189	9,039	9,528	159,352	185,282	188,223
Other	93	14	0	617	144	62	22,748	3,346	786

Since 1999, the Eastern District has averaged 146 building permits per year. In 2001, a decrease of $1,332,988.02 was experienced from the previous year. The Central District had a total of $10,236,035.00 in 1999. The major increase was due to the Giles County High School Renovations. A large increase was also noted in the Western District during this time period due to Narrows High School renovations. A more realistic amount is listed for 2000 for both districts. Since the large increase in 1999 both of these districts have remained virtually the same.

30**Table 20**

District Building Permits

Eastern District

	2006		2007		2008		2009		2010	
Type	**#**	**Valuation**	**#**	**Valuation**	**#**	**Valuation**	**#**	**Valuation**	**#**	**Valuation**
Dwelling	22	$ 4,260,000.00	20	$ 3,717,075.00	16	$ 3,071,375.00	19	$ 5,018,000.00	12	$ 1,422,868.00
Doublewides	7	$ 378,900.00	11	$ 725,800.00	9	$ 597,700.00	4	$ 203,400.00	6	$ 256,039.00
Singlewides	13	$ 140,450.00	11	$ 144,062.00	6	$ 64,467.61	7	$ 160,200.00	6	$ 79,500.00
Commercial	14	$ 167,103.00	16	$ 994,200.00	17	$ 1,392,333.00	25	$ 7,799,038.82	15	$ 2,523,223.00
Additions	10	$ 183,000.00	6	$ 262,600.00	6	$ 262,200.00	11	$ 481,754.00	1	$ 56,000.00
All other	56	$ 472,393.62	50	$ 328,530.00	149	$ 621,199.00	74	$ 813,663.00	53	$ 1,035,000.00
Total	**122**	**$ 5,601,846.62**	**114**	**$ 6,172,267.00**	**203**	**$ 6,009,274.61**	**140**	**$ 14,476,055.82**	**93**	**$ 5,372,630.00**

Note: 2008 Eastern District Total includes 94 residential connections to County sewer.

Central District

	2006		2007		2008		2009		2010	
Type	**#**	**Valuation**	**#**	**Valuation**	**#**	**Valuation**	**#**	**Valuation**	**#**	**Valuation**

Dwelling	19	$ 2,545,375.00	16	$ 1,835,500.00	18	$ 3,587,414.00	9	$ 1,448,000.00	7	$ 459,000.00
Doublewides	4	$ 251,000.00	4	$ 280,000.00	9	$ 741,000.00	5	$ 262,000.00	1	$ 62,000.00
Singlewides	5	$ 30,350.00	4	$ 15,100.00	3	$ 16,250.00	2	$ 6,700.00	1	$ 15,720.00
Commercial	9	$ 829,300.00	11	$ 463,700.00	12	$ 1,410,000.00	8	$ 7,081,712.00	5	$ 667,000.00
Additions	8	$ 271,000.00	14	$ 544,500.00	7	$ 159,500.00	9	$ 439,000.00	2	$ 67,500.00
All other	39	$ 339,040.00	44	$ 312,390.00	45	$ 245,375.00	38	$ 122,530.00	20	$ 240,275.33
Total	**84**	**$ 4,266,065.00**	**93**	**$ 3,451,190.00**	**94**	**$ 6,159,539.00**	**71**	**$ 9,359,942.00**	**36**	**$ 1,511,495.33**
Western District										
	2006		**2007**		**2008**		**2009**		**2010**	
Type	**#**	**Valuation**	**#**	**Valuation**	**#**	**Valuation**	**#**	**Valuation**	**#**	**Valuation**
Dwelling	8	$ 1,345,580.00	2	$ 1,082,000.00	5	$ 462,800.00	3	$ 269,415.00	2	$ 115,000.00
Doublewides	1	$ 197,500.00	1	$ 58,000.00	2	$ 159,211.00	1	$ 55,000.00	3	$ 202,276.00
Singlewides	7	$ 98,191.00	6	$ 133,365.00	5	$ 55,200.00	2	$ 2,250.00	3	$ 107,500.00
Commercial	17	$ 616,724.00	15	$ 472,507.00	16	$ 655,267.00	14	$ 1,167,365.00	11	$ 260,206.00
Additions	10	$ 250,049.00	5	$ 86,800.00	9	$ 150,000.00	5	$ 164,000.00	3	$ 374,200.00
All other	51	$ 226,140.00	53	$ 490,860.00	71	$ 414,578.00	55	$ 292,265.00	58	$ 276,687.00
Total	**94**	**$ 2,734,184.00**	**82**	**$ 2,323,532.00**	**108**	**$ 1,897,056.00**	**80**	**$ 1,950,295.00**	**80**	**$ 1,335,869.00**
County Wide Total										
	2006		**2007**		**2008**		**2009**		**2010**	
Type	**#**	**Valuation**	**#**	**Valuation**	**#**	**Valuation**	**#**	**Valuation**	**#**	**Valuation**
Dwelling	49	$ 8,150,955.00	38	$ 6,634,575.00	39	$ 7,121,589.00	31	$ 6,735,415.00	21	$ 1,996,868.00
Doublewides	12	$ 827,400.00	16	$ 1,063,800.00	20	$ 1,497,911.00	10	$ 520,400.00	10	$ 520,315.00
Singlewides	25	$ 268,991.00	21	$ 292,527.00	14	$ 135,917.61	11	$ 169,150.00	10	$ 202,720.00
Commercial	42	$ 1,613,127.00	42	$ 1,930,407.00	45	$ 3,457,600.00	47	$ 16,048,115.82	31	$ 3,450,429.00
Additions	27	$ 704,049.00	25	$ 893,900.00	22	$ 571,700.00	25	$ 1,084,754.00	6	$ 497,700.00
All other	145	$ 1,037,573.62	147	$ 1,131,780.00	265	$ 1,281,152.00	167	$ 1,228,458.00	131	$ 1,551,962.33
Total	**300**	**$ 12,602,095.62**	**289**	**$ 11,946,989.00**	**405**	**$ 14,065,869.61**	**291**	**$ 25,786,292.82**	**209**	**$ 8,219,994.33**

The number of building permits obtained in the Towns has remained relatively the same since 1999, with the exception of the Town of Rich Creek in 2001. That year, Rich Creek had building permits totaling $2,001,000 due to renovations to the Riverview Nursing Home. Statistics are not available for Narrows prior to 2002 when Giles County started serving as building official for the Town.

Table 21

District Building Permits for Towns

Town of Glen Lyn										
	2006		2007		2008		2009		2010	
Type	#	Valuation	#	Valuation	#	Valuation	#	Valuation	#	Valuation
Dwelling	0	$ -	0	$ -	0	$ -	0	$ -	1	$ 50,000.00
Doublewides	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
Singlewides	1	$ 24,000.00	0	$ -	0	$ -	0	$ -	0	$ -
Commercial	1	$ 32,000.00	0	$ -	0	$ -	1	$ 40,000.00	2	$ 19,500.00
Additions	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
All other	0	$ -	1	$ 7,475.00	0	$ -	2	$ 2,400.00	7	$ 10,150.00
Total	**2**	**$ 56,000.00**	**1**	**$ 7,475.00**	**0**	**$ -**	**3**	**$ 42,400.00**	**10**	**$ 79,650.00**

Town of Pembroke										
	2006		2007		2008		2009		2010	
Type	#	Valuation	#	Valuation	#	Valuation	#	Valuation	#	Valuation
Dwelling	1	$ 58,000.00	2	$ 200,000.00	0	$ -	1	$ 127,000.00	0	$ -
Doublewides	1	$ 56,000.00	4	$ 293,900.00	1	$ 71,000.00	1	$ 6,000.00	2	$ 68,500.00
Singlewides	3	$ 3,550.00	2	$ 48,000.00	1	$ 36,547.61	0	$ -	0	$ -
Commercial	3	$ 57,786.00	2	$ 71,600.00	1	$ 12,000.00	1	$ 800.00	3	$ 26,000.00
Additions	2	$ 8,000.00	0	$ -	1	$ 27,000.00	1	$ 4,000.00	0	$ -
All other	10	$ 80,480.62	4	$ 10,200.00	9	$ 54,422.00	10	$ 53,150.00	11	$ 39,966.00
Total	**20**	**$ 263,816.62**	**14**	**$ 623,700.00**	**13**	**$ 200,969.61**	**14**	**$ 190,950.00**	**16**	**$ 134,466.00**

Town of Narrows										
	2006		2007		2008		2009		2010	
Type	#	Valuation	#	Valuation	#	Valuation	#	Valuation	#	Valuation
Dwelling	2	$ 205,730.00	0	$ -	0	$ -	2	$ 179,415.00	0	$ -
Doublewides	0	$ -	1	$ 58,000.00	0	$ -	0	$ -	0	$ -
Singlewides	1	$ 26,091.00	0	$ -	0	$ -	0	$ -	0	$ -
Commercial	6	$ 412,724.00	6	$ 210,257.00	4	$ 94,600.00	9	$ 1,107,165.00	5	$ 30,973.00
Additions	6	$ 140,049.00	5	$ 86,800.00	3	$ 85,000.00	3	$ 69,000.00	1	$ 340,000.00
All other	28	$ 148,300.00	21	$ 174,435.00	31	$ 207,953.00	33	$ 142,201.00	28	$ 102,800.00
Total	**43**	**$ 932,894.00**	**33**	**$ 529,492.00**	**38**	**$ 387,553.00**	**47**	**$ 1,497,781.00**	**34**	**$ 473,773.00**

Town of Rich Creek										
	2006		2007		2008		2009		2010	
Type	#	Valuation	#	Valuation	#	Valuation	#	Valuation	#	Valuation
Dwelling	0	$ -	1	$ 90,000.00	0	$ -	0	$ -	1	$ 65,000.00
Doublewides	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
Singlewides	0	$ -	1	$ 1,000.00	0	$ -	0	$ -	0	$ -

Commercial	0	$ -	4	$ 45,000.00	5	$ 331,459.00	2	$ 7,000.00	3	$ 209,233.00
Additions	2	$ 84,000.00	0	$ -	0	$ -	1	$ 25,000.00	0	$ -
All other	7	$ 12,850.00	4	$ 34,800.00	8	$ 33,125.00	6	$ 20,049.00	0	$ -
Total	**9**	**$ 96,850.00**	**10**	**$ 170,800.00**	**13**	**$ 364,584.00**	**9**	**$ 52,049.00**	**4**	**$ 274,233.00**

TRANSPORTATION

Accessibility is a necessary ingredient of a locality's ability to expand its economic base. Efficient means of transportation enlarge the potential trade areas a community can access. Two principal factors must be considered - the accessibility to natural resources and the accessibility to markets. Determining accessibility will also determine the timing and location of new growth.

Transportation planning needs to be coordinated in the comprehensive planning process. The location of a road or highway can be viewed as a policy statement by the locality because of its effect upon development. Cooperation between local government and transportation planners is necessary to avoid such problems as misguided land development alongside poorly designed or obsolete highways.

Many inadequate roads exist in Giles County because of the excessive costs involved in their construction and maintenance through the rugged terrain. Because of the generally steep topography in Giles County, industrial and commercial development is typically located on or near major roads capable of supporting the businesses' transportation needs.

HIGHWAYS

Each of the roads in Giles County and the rest of the Planning District are classified by the Virginia Department of Transportation as arterial, collector, or local. Arterial highways are two, three, and four-lane roads linking principal cities and towns with each other and with the interstate system.

Collectors are two-lane roads linking outlying areas and smaller towns with the larger towns and cities and the arterial routes in the district. In addition to providing for traffic movement between local streets, arterial routes, and urban areas, they provide direct access to abutting property. Local streets are usually two-lane roads that provide for local traffic movements and direct access to abutting land.

The primary arterial highway in Giles County is U.S. Route 460, which enters from Montgomery County in the southeast portion of Giles County and exits into West Virginia at Glen Lyn. Minor arterial routes in Giles County include Virginia Route 100 from Narrows to the Pulaski County line, and Virginia Route 219 from Rich Creek to the West Virginia line.

In Giles County, two state routes are classified as rural major collector roads: State Route 42 extending from Poplar Hill at State Route 100 west to the Bland County line, and State Route 61, west from Narrows to Bland County. Both of these state routes connect in Bland County with Interstate 77.

Ideally, the highway network should provide an integrated transportation system, which will effectively serve the existing land use pattern and promote the implementation of the land use plans. It should reduce traffic congestion and travel time, minimizing the disruption of existing and proposed land uses as well as prevent the deterioration or destruction of natural resources.

EXISTING HIGHWAY FACILITIES

As documented in VDOT's 2002 Daily Traffic Volume Estimates, Giles County ranks 115th in the State in the amount of vehicle miles traveled on arterial and major collector (primary) routes. The County has a total of 75.31 miles of arterial and major collector highways and an average density during a 24-hour period of 6,092 vehicles per mile of route. The average daily vehicle miles traveled on primary routes (75.31 mileage) was 458,789 miles, representing 6.97 percent of the total Salem District mileage (total primary and interstate mileage is 11,398,546). Included in the first category (primary) are State Routes 42, 61, and 100 as well as U.S. Routes 219 and 460; all other roads in the County are classified "Secondary" by the Virginia Department of Transportation.

33Daily traffic on secondary roads varies from near zero on a few routes to over 1,400 vehicles on certain sections of six secondary routes, Routes 635, 637, 640, 712, 806, and 1021. Portions of Routes 613, 623, 626, 636, 643, 649, 665, 700, 704, 730, 906, 1006, 1105, 1210, and 9849 exceed 500 VPD (vehicles per day). Portions of 612, 623, 626, 636, 640, and 1404 exceed 1,000 VPD. Most of the mileage of secondary county roads has a much lower traffic volume. Because of the barrier ridges between valleys, the highway system in Giles County has developed in an east-west pattern. Table 22 gives the most recent traffic counts for the arterial and primary routes.

Route 460 currently has the highest traffic volume of the major roads in Giles County. The section of Business 460 West of Pearisburg to Narrows has the highest count with an average of 13,000. Out of the remaining arterial and primary roads, Route 219 also has a large traffic count between the West Virginia State Line and the Town of Rich Creek. This count is attributed to by the large number of in-commuters (See Table 18 above) Giles County has from West Virginia (1400 total).

Table 22

Arterial and Primary Average Daily Traffic Volume

Route	From	To	1990	1995	2005	2010
42	Rt. 601 North of Newport	Rt. 460 Newport	2,215	2,300	1,900	1,700
61	Rt. 724 Chapel	Rt. 724 Shumate	815	800	620	540
61	Rt. 724 Shumate	Narrows	1,365	1,100	1,400	1,200
100	Rt. 42 Poplar Hill	Rt. 730 Staffordsville	3,190	3,800	4,400	3,800
100	Rt. 730 Staffordsville	Pearisburg	4,490	5,800	6,000	6,000
100	Pearisburg	Narrows	1,985	2,700	2,100	2,000
219	West Virginia State Line	Rich Creek	4,380	3,000	9,400	9,100
460	Business 460 North of Blacksburg	Rt. 42 Newport	9,880	12,000	12,000	11,000
460	Rt. 42 Newport	Rt. 700 near Mountain Lake	8,770	11,000	11,000	10,000
460	Rt. 700 near Mountain Lake	Rt. 730 near Maybrook	7,940	11,000	11,000	10,000
460	Rt. 730 near Maybroook	Business 460 East of Pearisburg	9,170	-	13,000	12,000
460	Business 460 East of Pearisburg	Business 460 West of Pearisburg	13,270	14,000	8,900	8,300
460	Business 460 West of Pearisburg	Narrows	10,465	14,000	16,000	13,000
460	Narrows	Rt. 712 East of Rich Creek	9,820	10,000	9,400	11,000

460	Rt. 712 East of Rich Creek	Rt. 219 Rich Creek	6,245	10,000	7,200	6,900
460	Rt. 219 Rich Creek	Rt. 806 East of Glen Lyn	8,555	11,000	9,800	9,200
460	Rt. 806 East of Glen Lyn	West Virginia State line	8,700	11,000	9,800	9,200

Source: Virginia Department of Transportation Average Daily Traffic Volumes with Vehicle Classification Data on Interstate, Arterial, and Primary Routes.

The secondary traffic volume counts average over 1200. The exception to this is Route 623 from SCL Pembroke to Route 1404 East with a traffic count of 860 and Route 1021 from Route 1002 to US 219 with a traffic count of 6,400.

Table 23

Secondary Traffic Volume Counts

Route	From	To	Length	1995	2005	2010
623	SCL Pembroke	Route 1404 East	0.42	688	960	740
623	Route 1404 West	US 460	0.08	1,368	1,100	1,000
623	US 460	Route 688 NCL Pembroke	1.07	1,578	1,200	1,200
634	NCL Pearisburg	Route 1238	0.35	1,076	890	980
635	US 460	Route 809	0.84	1,844	1,200	1,200
635	Route 809	Route 684	2.81	1,581	1,100	1,100
635	Route 684	Route 628	1.82	1,001	960	940
806	Route 1020	US 219	0.06	1,272	1,400	1,200
1021	Route 1002	US 219	0.06	4,809	6,400	6,200

Source: Virginia Department of Transportation Daily Traffic Volume Estimates Including Vehicle Classification Estimates.

Table 24 lists the secondary road miles by class and mileage.

Table 24

Secondary Road Miles by Class and Mileage

Class	12/31/1980	12/31/1990	12/31/2000
Hard Surface	178.09	198.07	207.45
All Weather Surface	120.73	105.35	101.74
Light Surface	24.10	23.30	22.48
Unsurfaced	0.96	0.00	0.00

Total Mileage	323.88	326.72	331.67

Source: Virginia Department of Transportation, 2004.

RECOMMENDED HIGHWAY IMPROVEMENTS

According to the Commonwealth Transportation Board Fiscal Year 2005-2010 Six-Year Improvement Program, the following projects are scheduled to begin within the six-year scope of work:

Route/Street/Length	Locality/Description		Cost
Route 460 / 8.2 miles	G Giles County; Safety Improvements from Maybrook to Mont. Co. Line (Engineering & RW only)		$1,850,000
Route 219 / Bridge	Bridge Replacement in Cooperation with WV (Engineering only)	$145,000	

There are many recommendations that were made which have been removed from the Six Year Improvement Program due to a considerable decrease in transportation funding in Virginia. One of the dropped projects included the replacement of the Route 61 Bridge over the New River in Narrows. Plans to four-lane the remaining the two-lane section of Route 100 in Giles County were also originally included in the Six Year Improvement Program, but later removed. This project is extremely important in providing Giles County greater access to Interstate 81. Another recommendation currently not included in the Six Year Improvement Program is the improvement of westbound U.S. 460 between Narrows and Rich Creek to address safety concerns and providing improved access to West Virginia and Interstate 77.

SCENIC BYWAYS

To date, only one road in Giles County has been designated a State Scenic Byway, that is Route 42 from the Craig County line to U.S. Route 460.

RAIL

Norfolk Southern Railway provides the only rail transport service in Giles County. The main line between Norfolk and Columbus-Cincinnati, Ohio passes through the County with terminals at Pearisburg and Narrows. In general,

most rail transportation traffic is based on point of origin to point of destination, usually passing through Giles County rather than originating here. While there is substantial originating and terminating traffic from local freight trains in the region, the principal contribution of the Norfolk Southern Railway in Giles is to provide a "through" route from the Virginia-West Virginia-Kentucky coal fields to Midwestern and Eastern markets. The major rail users in Giles County are the Celanese Fiber Company near Narrows; American Electric Power (AEP) at its Glen Lyn steam generation station; and APG Lime. Large national and international demands for coal require frequent shipments by rail through Giles County.

AIRPORTS

The New River Valley Airport Commission (NRVAC) consists of seven member localities, including the Towns of Christiansburg, Dublin, and Pulaski, the City of Radford and the Counties of Giles, Montgomery, and Pulaski. The NRVAC operates the New River Valley Airport and is one of the oldest examples of multi-jurisdictional cooperation in the New River Valley, as well as the State of Virginia.

The concept of an airport to serve the New River Valley area began in 1955 with cooperative efforts by the municipalities of Pulaski, Dublin, and Radford. A location was eventually selected, which is its present location, less than three miles northwest of Dublin on Route 100. Plans for the airport were developed in 1957, and construction began in 1958 and was completed in 1960. In 1997, construction was completed on a new 4,000 square foot terminal building. The new terminal provides an attractive gateway to the region for business and recreational travelers. The NRVAC received state and federal funds for the project. Other airport features include a 6,200 foot long, 150 foot wide runway, the third longest in the State; an instrument landing system, automated weather observation system; piston and jet engine fuel facilities; and hangars.

In partnership with the New River Valley Economic Development Alliance (NRVEDA), the airport was designated as Foreign Trade Zone #238 (FTZ) and U.S. Customs Port of Entry #1481 (POE) in 1999. Manufacturers in the Giles County and the surrounding regions may participate in the FTZ by having their sites designated as special purpose subzones of the New River Valley FTZ. Subzone benefits for private businesses can include: cash flow savings; elimination of duties for merchandise exported from a subzone; and reduction of duties in some cases for merchandise sold for use in the United States.

Businesses do not have to be FTZ participants to use the Customs POE located adjacent to the FTZ at the New River Valley Airport. Manufacturers and businesses are able to benefit from the convenience of a local Customs POE. Customs clearances/entries can be completed here in the New River Valley rather than waiting for such transactions at congested, high-volume ports. A full-time Senior Customs Officer staffs the U.S. Customs Service Port office at the New River Valley Airport.

OTHER TRANSPORTATION FACILITIES

At one time, Giles County was served by Continental Trailways bus line, but due to its acquisition by Greyhound, coupled with the substantial reduction in the amount of rural service throughout the United States, Giles County is no longer served by a private bus transportation service. Several years ago, the New River Valley Planning District Commission completed a district-wide mass transportation study, which did not find

mass transportation efforts feasible in Giles County. Ride sharing and vanpooling were encouraged as alternatives.

PUBLIC SERVICES AND FACILITIES

Ideally, community facilities should be convenient for the greatest number of people, and located where the highest density of population occurs. A local planning commission should be prepared to assist in recommending and securing suitable sites for public services based on the recommendations of engineers, soil scientists, geologists, citizens, and other knowledgeable sources.

The location of a community facility should be where the building or activity can perform its functions effectively and, at the same time, fit harmoniously into the community's comprehensive plan vision. The planning commissioners have a responsibility to recommend the pattern of any future development and have the power to direct development by planning for the placement of community facilities such as water and sewage systems, refuse disposal, and all of the principal utility and service facilities.

This summary of Giles County facilities is intended as a general foundation to determine how future community facilities and service needs can best serve the public interest.

EDUCATION

Giles County school facilities were built to accommodate a population much larger than the current enrollment figures. Based on the 2000 Census of Population, approximately 25 percent of Giles County's population is school age (school age = children 19 years old and under). This figure is roughly equal to the 1990 Census information and 6 percent less than the 1980 Census figure of 31 percent of the total population. However, as shown in Table 25, enrollment figures between 1997 and 2000 have dropped in every school, with the exception of Narrows High (equal enrollment) and Macy McClaugherty (increase of 0.37 percent). Between 2000 and 2003, this trend continued in the elementary schools. Macy McClaugherty Elementary experienced a slight decrease of 1.47 percent, whereas the Narrows Elementary and Eastern Elementary both suffered larger losses of 5.58 percent and 8.81 percent, respectively.

According to the 1995-96 Superintendent's Annual Report for Virginia, the Giles County Elementary Pupil-Teacher ratio, 15:1, is slightly higher than Virginia's ratio of 14.3:1. Giles County Secondary Pupil-Teacher to Teacher ratio is 10.9:1, less than Virginia's Secondary Pupil-Teacher ratio of 12.3:1. Table 26 shows a comparison between Giles County and the Commonwealth with respect to salaries, cost, number of positions, and student-teacher ratios.

A vocational school in Pearisburg at Giles County High School offers a wide range of courses for grades eleven and twelve. Courses are offered in auto body repair, auto mechanics, building trades, cosmetology, drafting, electricity, health aids, machine shop, practical nursing, welding and plumbing. The New River Community College at Dublin in Pulaski County provides curricula leading to an associate (two-year) degree. Some credits obtained at the Community College may be transferred to four-year colleges in and outside of the region.

Table 25
School Enrollment

School	2003-2004	2007-2008	% Change	2011-2012	% Change
Giles High School	681	666	-2.20%	682	2.40%
Eastern Elem/Middle	466	461	-1.07%	472	2.39%
Macy McClaugherty	535	559	4.49%	513	-8.23%
Narrows High School	352	330	-6.25%	293	-11.21%
Narrows Elem/Middle	508	531	4.53%	485	-8.66%
Total	2,542	2,547	0.20%	2,445	-4.00%

Source: Virginia Department of Education Fall Membership Reports.

Table 26
Cost and Staffing Profile
Academic Year 2009-2010

	Giles County	Virginia
Teaching Positions	220.04	102,961.89
Average Annual Teacher Salary	$41,064	$51,887
Per-Pupil Expenditure	$9,292	$11,020
Elementary Pupil: Teacher Ratio	13 to 1	12 to 1
Secondary Pupil: Teacher Ratio	11 to 1	11 to 1

Source: 2009-2010 Superintendent's Annual Report for Virginia (Virginia Department of Education).

Virginia Tech at Blacksburg (fall 2003 enrollment = 26,026) and Radford University at Radford (fall 2003 enrollment = 9,242) offer undergraduate, graduate and post-graduate education. New River Community College, located in Dublin, offers a variety of associate degrees, general studies degrees, and through the recent advent of telecommunications, residents of Giles and the rest of the New River Valley can earn Bachelors and Masters Degrees in several disciplines through Old Dominion University. New River Community College's fall 2003 enrollment was 4,009 full and part time students.

Bluefield College at Bluefield, Virginia offers a two-year educational program in arts, sciences, engineering, education, and business administration. Educational opportunities are also available in metropolitan Roanoke at Roanoke College, Hollins College, and Virginia Western Community College. Virginia Tech maintains a scientific research center on Salt Pond Mountain (Miles Horton Center) that collects and studies planetary and biological data. The University of Virginia maintains the UVA Biological Station near Mountain Lake.

39**LIBRARIES**

Giles County currently has two libraries located in Pearisburg and Narrows which provide data to the National Center for Education Statistics. Pearisburg has the larger library with 36,704 books and serial volumes. Both libraries offer Internet access with 5 public Internet terminals each. Total income for Pearisburg is currently $236,080 and Narrows is $74,099. While both libraries maintain a sizeable number of volumes, residents frequent Pearisburg more. Smaller libraries are also located in Pembroke and Rich Creek; however, data is not readily available.

Table 27
Giles County Library Resources

	Pearisburg	Narrows
Total Income	$249,832	$54,214
Local Income	$200,722	$44,812
Per Capita	$71.79	$20.56
Total Expenditures	$252,223	$56,445
Per Capita	$90.21	$25.89
Books and Serial Volumes	51,763	27,696
Per Capita	18.51	12.70
Subscriptions	82	0
Video Materials	1,865	0
Audio Materials	2,572	115
Library Visits	37,497	3,320
Per Capita	13.41	1.52
Total Circulation	66,143	4,128
Per Capita	23.66	1.89
Public Internet Terminals	8	5

Source: Public Libraries Survey, FY 2009.

40HEALTH CARE

The Carilion Giles Memorial Hospital in Pearisburg is an acute care facility operated by Carilion Health System. The building contains 65 beds, including 29 medical/surgical beds, and 3 intensive- care. There is a 24 hour emergency room, an Intensive Care Unit, general and vascular surgery, cardiac testing/rehabilitation, home care, inpatient care, nutritional counseling, occupational medicine, physical therapy, respiratory care services, and sleep disorder studies. Carilion Giles Memorial Hospital also provides community outreach efforts such as a congregational nursing program, Giles County Adult/Youth Partnership, Giles County Volunteer Coalition, Med-Ride Transportation, Mental Health Counseling Grade School Program, and Western Virginia Mobile Mammography Services

Carilion Giles Memorial Hospital employs physicians trained in the field of primary health care residing and working in the County. These include 6 family practitioners, 2 internal medicinespecialists, 2 surgeons, 4 radiologists, 1 pathologist, 1 otolaryngologist, 1 neurologist, 3 emergency medicine specialists, 2 ophthalmologists, and 2 orthopedic specialists.

Carilion Health System also operates an ambulance service to serve the emergency needs of Giles County residents. The Giles County Lifesaving Crew also performs emergency rescue services voluntarily. Giles County contributes County funds to the Rescue Squad operations. All County ambulance attendants and rescue squad members have completed, at minimum, an Emergency Management Technician certification (EMT).

Other health care-related services available to citizens of Giles County include the Riverview Nursing Home, located in Rich Creek, which contains 120 beds, with 30 of those reserved for patients with Alzheimer's disease.

LOCAL HEALTH DEPARTMENT

The Virginia Department of Health must administer and provide a comprehensive program of services as mandated by the Code of Virginia. These services must include Disease Prevention and Control, Medical Care Services, Health Care Planning, Regulation of Medical Care Facilities and Services, Environmental Services, Vital Records and Health Statistics, Postmortem Examinations and Services. Locally, the Giles County Health Department provides specific services to children and women such as Maternity Care, Well Child Care, Baby-Care, WIC (Women, Infants and Children), Resource Mothers, Family Planning, and CHIP.

The Environmental Health Program's Sewage and Water Services evaluates, designs, and inspects all individual well water supplies and sewage disposal systems; reviews soil consultants' and engineers' proposals for subdivision development; evaluates, monitors, and permits all point source discharges and alternative type sewage disposal systems; conducts training sessions and meetings with all septic contractors and well drillers; reviews and approves engineered plans and specifications for all alternative sewage disposal systems; collects water samples for bacterial analyses; evaluates and approves construction methods and water quality for individual drinking water supplies; conducts health hazard surveys of individual water well and sewage disposal systems in localities whose neighborhoods, subdivisions, and communities, through block grant proposals, are applying for grants to improve water and sewer conditions; and investigates all complaints received as related to individual malfunctioning sewage disposal systems and improperly functioning wells.

Food Protection Services inspects and permits all food service establishments which prepare food for sale to the public; reviews engineered plans for all new and extensively remodeled food establishments; investigates all food-borne outbreaks and food-related complaints; trains foodservice workers by holding Manager Certification Training courses, Applied Foodservice Sanitation courses, Occasional Quantity Cooks courses, and Food

Schools for all food handlers; collects food and milk when needed for laboratory analyses; inspects, samples, and maintains surveillance of all soft serve machines and other frozen desserts. The Rabies Prevention program maintains and monitors a 24-hour rabies hotline for reporting all animal bites; quarantines all domestic animals which bite the general public; prepares and processes all laboratory specimens for rabies analysis; identifies and tracks the spread of rabies cases throughout the New River Valley; annually conducts in-service training for all animal control officers and state game wardens in the district; and assists all local veterinarians in promoting annual rabies vaccination clinics.

LOCAL SOCIAL SERVICES

The Giles County Department of Social Services provides financial aid and services to indigent families in the County. The Social Services office is located in Narrows and is governed by the Social Services Board, which consists of five members appointed by the Board of Supervisors.

The Giles County Department of Social Services administers the following programs:

Temporary Assistance to Needy Families (TANF) (Previously AFDC): Provides money payment to a parent or caretaker relative of specified degree on behalf of children under age 18 (and including age 18, if still in school), who reside with them, are deprived of parental support due to death, incapacity, or prolonged absence, and who need public assistance.

Temporary Assistance to Needy Families (TANF): Unemployed Parents (Previously AFDC-UP): Provides money payments to the parents on behalf of children under age 18 (and including age 18, if still in school), who are deprived due to the unemployment of at least one parent who is living in the home.

Aid to Families with Dependent Children-Foster Care (AFDC-FC) Program: Specifically for those children who have been removed from their homes by court order or voluntarily relinquished by the parent, and placed into the custody of the local social services board and who are eligible for AFDC. (Mandatory)

Temporary Assistance to Needy Families-Emergency Assistance Program: Cash payments to families

with children (or to service providers on their behalf) who need temporary assistance due to an emergency situation such as fire or natural disaster. (Mandatory)

Auxiliary Grant Program: The former federal/state programs of Old Age Assistance, Aid to the Permanently and Totally Disabled, and Aid to the Blind were combined into the Federal Supplemental Security Income (SSI) program as of January 1, 1974. In some cases, for those already on the state rolls, SSI payments were less than payments received as of December, 1973. Auxiliary Grants make up the difference to equal the payments previously received. Elderly, blind, or disabled residents of domiciliary institutions whose income is inadequate to meet the cost of care are also eligible. (Mandatory)

Food Stamp Program: Distributes coupons (redeemable for food only) in an effort to encourage greater nutritional adequacy among low-income families. (Mandatory)

Energy Assistance Program: Supplements home energy budgets for low-income families in accordance with the Low-Income Energy Assistance Act of 1981. (Mandatory)

General Relief (GR): Provides temporary aid for people in need due to job loss or illness; may cover some medical expenses and burial expenses for indigent individuals. These funds ay also be offered as a small ongoing monthly payment to disabled individuals who are not eligible for federal assistance program (Optional). The only General Relief Program Giles County currently provides is GR-County Burial.

Medical Assistance (Medicaid): Pays medical care costs for needy and low-income individuals who are aged, blind, disabled, members of families with dependent children under Title IV of the Social Security Act; deprived children under 19 if living with a parent; pregnant women whose income is equal to or less than 133% of the

poverty rate; children under 6 whose income is equal to or less than 100% of poverty; and on July 1993, children 6-19 whose income is equal to or less than 100%; Medicaid will pay the Medicare coinsurance and deductibles for Qualified Medicare Beneficiaries. There is also a SLMB Medicaid program which only pays the Medicare premiums. The departments of welfare/social services are involved only in determining eligibility. (Mandatory)

Service Programs: In addition to the financial needs programs discussed above, Department of Social Services staff seek to serve some of the other essential needs of their clients through direct services. Besides the initial procedures, the following programs are offered in every locality, according to the State Board of Social Services:

- **Adoption Services:** Registries and services involved in bringing together children and families for permanent placements.
- **Adult Services:** Targets those over 60, disabled individuals over age 18 and their families, when necessary. The goals include the maximization of self-sufficiency, the prevention of abuse and neglect, a reduction and delay in premature or unnecessary institutionalization, and aid when such a placement is appropriate. Some home-based services are mandated by state law (63.1-55.01); other services which may be offered include: counseling on an individual or group basis, transportation, day care, sheltered employment, legal proceedings, and meal provision.
- **Adult Protective Services:** Receives and investigates reports and complaints concerning the abuse, neglect, or exploitation of the above target population. Intervention may involve any of the services listed above, including placement when necessary.

- **Child Protective Services:** Receives and investigates reports and complaints concerning the abuse, neglect, or exploitation of children, and provides preventative action when there is a threat of harm. Services are available 24 hours a day to handle emergency situations.
- **Day Care Services for Children:** Involves the purchase of day care in approved facilities to enable parents to be employed or when they must be away due to an emergency. Services can also be provided for child protection.
- **Early and Periodic Screening, Diagnosis, and Treatment (EPSDT):** Supportive services involved in encouraging children on Medicaid to utilize preventative services.
- **Employment Services Program (ESP):** Able-bodied applicants and recipients are required to participate in this program to help them find, retain, or regain full or part- time employment.
- **Family Planning:** Provides information, counseling, education, and referral to medical services to individuals who want to limit their family size or space their children.

FIRE AND RESCUE

Volunteer fire departments are maintained at seven locations throughout the County: Eggleston, Glen Lyn, Narrows, Newport, Pearisburg, Poplar Hill, and Rich Creek. Members of these companies receive training in first aid, rescue work, fire control, and safety techniques. A fire department association has been established for better coordination and efficiency in fighting fires throughout the County. Giles County has four volunteer rescue squads located throughout the County; Station 1 is in Pearisburg, Station 3 is in Pembroke, and Station 4 is in Narrows. Newport's rescue squad, at one time Station 2, is a separate unit from the other three squads.

E-911

Giles County has implemented an enhanced 911-emergency service for residents. The two local phone service providers, Verizon and Pembroke Telephone Cooperative, handle the 911 databases. The enhanced service allows

the 911 dispatcher instant access to the caller's phone number and the location the call is being made from. This provides the dispatcher the ability to notify police, fire and rescue of an emergency much quicker than the older method of routing all emergency calls through the Sheriff's office.

LAW ENFORCEMENT

The primary responsibility for general law enforcement in Virginia counties is a shared function of the Sheriff, the Commonwealth's Attorney, and the Courts. The Sheriff and the Commonwealth's Attorney are each elected for a term of four years, as provided for in the Virginia Constitution. As constitutional offices, the State Compensation Board sets the rates of compensation and expenses. Expenses from the Sheriff's office are borne primarily by the State.

The Sheriff exercises broad authority to make investigations and arrests in connection with violations of the criminal laws of the state. He is also responsible for enforcing County ordinances, maintaining the jail, and serving as an executive officer of the courts for which he carries out court orders, warrants, and other legal documents.

Commonwealth's Attorneys are state officers, prosecuting crimes committed in violation of State Statutes and county ordinances. The Commonwealth's Attorney is authorized to request opinions from the Attorney General of Virginia. The Board of Supervisors has a County Attorney for general legal work.

In Virginia, every county is permitted to have three types of courts; the courts of record or Circuit Court, and

courts not of record, or General District Court, and the Juvenile and Domestic Relations Court. The Judge of the Circuit Court is responsible for making appointments to certain county offices and for filling vacancies in elective offices. He also issues orders to create sanitary districts and directs the holding of special elections and bond referenda. The Circuit Court has original and appellate jurisdiction in criminal offenses. The General District Court has jurisdiction over all kinds of criminal and civil controversies, but as a matter of practice usually hears only cases involving minor crimes.

Crime in Giles County has decreased from 183 incidents in 2000 to 95 incidents in 2002. Of the reporting counties, Giles County has the lowest number of crimes per 100,000. The following data in Table 28 illustrates the variations in the crime index for Giles in 2000, 2001, and 2002.

Table 28

Crime Statistics

	2002			2006			2010		
		Incident Rate	Total		Incident Rate	Total		Incident Rate	Total
Locality	Population	Per 100,000	Incidents	Population	Per 100,000	Incidents	Population	Per 100,000	Incidents
Floyd Co. SO	14,400	2069.44	298	15,026	2003.19	301	15,279	2022.38	309
State Police			9			21			34
Giles Co. SO	9,810	968.39 (10)	95	9,592	4211.84	404	10,454	4151.52	434
State Police			6			13			2
Montgomery Co. SO	28,280	4929.27	1,394	31,747	5219.39	1,657	30,731	4822.49	1,482
State Police			171			122			144
Pulaski Co. SO	23,039	2569.55 (11)	592	23,016	4770.59	1,098	23,252	7349.9	1,709
State Police			45			75			31
Radford City SO	15,500	(0)	0	15,319	9804.82	1,502	16,408	7910.77	1,298
State Police			19			7			3

PARKS AND RECREATION

At the present time, Giles County does not have a centralized park system, nor does the County have a full time parks and recreation director. The County owns and operates the 166-acre Castle Rock Recreation Area. Recreation facilities found at Castle Rock include a golf course and clubhouse, a basketball court, a swimming pool, two tennis courts, picnic facilities, and primitive camping. Giles County Country Club offers golf, swimming, and tennis facilities to its users.

With thousands of acres of National Forest land in the County, there are plenty of camping and hiking facilities for young and old alike. White Rocks Recreation Area is located northeast of Pembroke and Pearisburg. This facility has nearly fifty campsites with restroom and showers facilities, as well as a 1.5-mile hiking loop. Another site is the Cascades Recreation Areas, which has picnic sites on Little Stony Creek, and a 4-mile loop trail leading to and from the waterfalls. The National Forest offers a plenty of hiking trails that are part of the world famous Appalachian Trail. Other trails and camp areas found in Giles County include Rice Fields, Angels Rest, Nature Conservancy Trail, War Spur and Chestnut Trails, Walnut Flats Campground, Ribble Trail, Loop Trail Interior Picnic Area, and Falls of Dismal.

The Giles County Wellness Center (located just off Route 460, along Clendenin Road) is a 9,000 square foot facility and features: full locker facilities, FLEX resistance training machines, cardiovascular machines, exercise classes, basketball, volleyball, and education/informational programs. Its mission is to provide superior services though motivating, educating and encouraging participants to have the tools for a healthy lifestyle.

The Town of Narrows operates Boom Park, a park located near the mouth of Wolf Creek, which offers swimming, picnic shelters, and basketball courts. The Town also has approximately twenty to twenty-five acres of recreational sites throughout the Town that include two baseball fields, two football fields, and four tennis courts. Indoor facilities include three gyms, each of which are located at the high school, elementary school, and the old high school, also known as the Annex. The Virginia Department of Game and Inland Fisheries maintain one public boat landing approximately 2 miles outside of Town limits. The Pearisburg Recreation Department offers a variety of sports and recreational activities for area residents. The program provides organized leagues and teams in a variety of sports. A town park is located next to the Community Center. The twenty-acre facility features a picnic shelter, playground, three tennis courts, and a public swimming pool.

45The Giles Senior Center, operated by the County of Giles, is also located at the town park. Parking is available throughout the park and Community Center complex. The latest addition to Pearisburg recreation is Whitt-Riverbend Park. This 28-acre river bottom is located on the banks of New River. The facility is open for public use for fishing, primitive camping, walking, and bird watching. There is also a canoe and kayak access available at the park. Future plans include picnic facilities and improved boating access.

The Town of Glen Lyn owns and operates a Town park which includes a boat landing, picnic areas, a caboose for kids, a multi-use facility with kitchen, multi-use recreation field, and a campground. The Town also has a boat landing maintained by the Virginia Department of Game and Inland Fisheries

The Town of Rich Creek has three recreational facilities; Woodland Park, which consists of a picnic shelter, basketball court, tennis court, and children's playground; Rich Creek Community Center, which has a baseball field, gym, and a proposed mini-park; Gentry's Landing, which is operated by the Rich Creek Lions Club, offers campsites for recreational vehicles, tents, etc.

The Town of Pembroke has one recreational facility, an American Legion park sponsored and maintained by the local American Legion Chapter. The park has a ball field, picnic area and a meeting hall for various activities. The Town of Pearisburg's recreational facilities include a Town park next to the Pearisburg Community Center. The twenty-one acre facility provides a picnic shelter, playground, two basketball courts, and three tennis courts. The senior center and community swimming pool are also located at the Town park. The Pearisburg Community Center's gymnasium is used for indoor basketball, aerobics, western dancing, karate, and volleyball. A private country club is located in Town with a pool, tennis courts, and a nine-hole golf course. Both Eggleston and the Village of Newport's parks contain picnic areas and playground equipment.

TOURISM

Tourism plays a major financial role in the Giles County economy, accounting for over 27 percent of total taxable sales in 1989, and declining to 22 percent of total taxable sales in 1996. This figure includes Traveler Spending, and Travel Payroll. Tables 27-32 contain information relating to revenue generated by tourism in Giles County, the New River Valley, and Virginia. Some of Giles County's major tourist attractions include:

- Mountain Lake, the East Coast's highest natural lake of its size (53 acres);
- The Cascades, one of Virginia's highest and most scenic waterfalls at 66 feet high;
- The New River, considered by some to be the second oldest river in the world (the Nile being the oldest), offers class 1, 11, III and IV rapids for white water enthusiasts as well as many miles of tranquil stretches for the more casual boater, swimmer and fisherman;
- Over 50 miles of the Appalachian National Scenic Trail, the most famous long distance hiking trail in the world;
- 53,000+ acres of the Jefferson National Forest which includes, besides the Appalachian Trail, over 100 miles of other hiking, cross country skiing and equestrian trails; White Rocks Recreation Area and for back-country camping enthusiasts, excellent hunting and fishing locations; Peters Mountain and Mountain Lake Wilderness Areas;
- Giles County's panoramic vistas as seen from its two major thoroughfares, U.S. Routes 460 and 100 and numerous scenic state routes such as Routes 42, 61, 604, 635, and 700 (which leads up to Mountain Lake).
- Giles County also boasts three covered bridges, and three municipal/private campgrounds along the New River offering accommodations for trailers and tent campers.
- Each of the five towns in Giles County provide parks to serve County residents.
- Several community groups operate meeting halls/picnic areas for use by public and private groups.

Between 1997 and 2001, payroll generated from tourism increased by over $300,000. Employment generated during this time period is rather disappointing with only one new job being created. This is the lowest in the New River

Valley. Montgomery County, which credits its large tourism numbers to Virginia Tech, had the largest increase in generated employment with 148 jobs.

Table 29

Tourism

	Travel Expenditures		Payroll Generated		Employment Generated	
JURISDICTION	**2006**	**2010**	**2006**	**2010**	**2006**	**2010**
Floyd County	$16,155,669	$20,046,700	$3,298,939	$3,777,828	202	210
Giles County	$20,655,218	$21,506,778	$3,773,500	$3,884,275	225	219
Montgomery County	$97,226,676	$111,742,268	$19,041,950	$21,360,794	1,154	1,213
Pulaski County	$40,354,507	$46,421,441	$8,840,976	$9,743,595	549	577
Radford City	$12,373,281	$13,376,856	$2,285,076	$2,411,331	133	131
Virginia	$17,664,097,921	$18,893,241,576	$4,262,749,947	$4,450,771,601	208,236	203,734

Source: 2006 and 2010 Locality Economic Impact Estimates, Virginia Tourism Corporation, 2012.

NEW RIVER AND WALKER CREEK

The New River, considered the oldest river in North America, cuts a trail of history through its valleys. Its predecessor was the larger Teays River, which emptied into the Gulf of Mexico. After glacial recessions, the New River formed a channel to the Ohio River and acquired some of the same channels the Teays had previously run. An Indian tribe known as the Canahay occupied the New River Valley prior to European settlement, using it as hunting grounds. The river valley beckoned pioneers along Indian trails, which followed its course. Colonial settlement and commerce emerged in the region during the western migration of the mid-late eighteenth and early nineteenth century.

The New River is a valuable natural resource providing historic, economic, and cultural value to the region. It serves as the chief identity, and thus namesake, of the region. The New River is a source for diverse recreational activity and provides visual interest in the beauty of its free flowing waters and the topography of its valley.

The Walker Creek watershed is the largest in Giles County aside from the New River. It is an ecosystem in itself, characterized by some of the best and most abundant farmland in the County. Walker Creek has also been identified as a potential surface water source for future public water supply. The significance of this area signals concern for voluntary conservation measures to protect an important source of water for the County.

Since the New River and Walker Creek are important assets to Giles County, a corridor study is needed to determine a manner in which development can occur with minimal environmental impact on both of these water bodies. The New River Valley Planning District Commission conducted a preliminary visual corridor study in 1990. Canoeists photographed and subjectively mapped foreground, middle ground, and background views they deemed important from the water. Also, points of interest and issues of concern were noted.

The canoeists recorded diverse topography along both waterways. Steep cliffs of prehistoric geological

formation rise almost vertically along some areas of the New River. Other outstanding views ranged from gently rolling farmland, historic structures, and meadows, to large mountain ranges. Wildlife sighted included Red-tailed Hawks, Kingfishers, Blue Herons, Osprey, Beaver, and several varieties of game fish. Unpleasant views included discarded batteries, remnants from road work, sewage discharges, old gasoline pumps, and other garbage.

Water quality is principally affected by industrial, direct effluent discharges, and municipal discharge. The environmental quality described from the federal Natural and Scenic River Act of 1971 is one of "largely undeveloped, pastoral landscape characterized by dispersed agricultural uses and rural segments including low density residential development." Additional study and data for a visual corridor and Scenic Rivers designation is needed. With other similar projects, local group involvement and citizen participation have been instrumental in their success.

The visual corridor will be an element in the future open space plan for the County. Scenic River designation on the state level for the New River and Walker Creek in Giles County would be a valuable tool in protecting these resources for the future.

HERITAGE RESOURCES

Giles County is rich with prehistoric and historic sites and areas. These heritage resources complement Giles County's natural setting and enhance its tourism potential. A recreation and tourist attraction such as Mountain Lake, with its stone resort hotel and rustic cottages, is also an important historic resource.

Giles County is noted for its pristine rural landscapes defined by traditional farmstead, fields, and woodlots. Some of Giles County's significant historic resources are located in Pearisburg, the county seat. The Giles County Courthouse (1836) is one of the oldest and finest public buildings in Southwest Virginia and is listed in the National Register of Historic Places and the Virginia Landmarks Register. Nearby is the 1829 Andrew Johnston House, a Federal-style brick house that is owned and operated as a museum by the Giles County Registers.

Downtown Pearisburg has a number of historic commercial, residential, and religious buildings dating from the early years of the nineteenth century through the early twentieth century. Pearisburg, in conjunction with affected property owners, designated a portion of the downtown area as an Historical District with the approval of the Virginia Department of Historic Resources and National Park Service.

Another historically significant community in Giles County is Newport, which covers about 22 square miles, includes the Village of Newport's Historic District, which is also registered in the National and Virginia Registers of Historic Places. Although many of the Village's pre-1902 resources were destroyed in a fire (1902), Newport's historic core survives today. Some of the historic buildings in the village include the 1820's Epling-Dunkley House, the Newport Woolen Mill, Newport United Methodist Church, and the impressive turreted Queen-Anne-style Walter Miller House. The area around Newport is a particularly rich historic landscape, including the 1872 Sinking Creek Furnace and three covered bridges.

Eggleston, Narrows, and Pembroke are three historic Giles County communities with a railroad- influenced history. In Pembroke, the old Pembroke Post Office, a gingerbread turn-of-the-century structure, is now serving as Virginia's smallest public library. Outside of Giles County's towns and villages are numerous log, frame, and brick farmhouses dating from the period of the county's formation at the beginning of the nineteenth century through the Victorian and early-twentieth century periods. The Giles County Historical Society, the New River Valley Preservation League, and the Roanoke Regional Preservation Office (a division of the Virginia Department of Historic Resources) can provide preservation assistance and information on the history and the location of many of

Giles County's historic sites and areas.

PUBLIC SERVICE AUTHORITY

The Giles County Public Service Authority (PSA) was formed in 1992. The PSA is owned and operated by the county of Giles and the towns of Narrows, Pearisburg, Pembroke, Rich Creek, and

Glen Lyn. A board of directors appointed to represent the towns and the county provide overall guidance to the PSA's Executive Director. The PSA serves County residents by providing solid waste collection and disposal, recycling programs, and by supplying water to all five towns and the County. Presently, the PSA operates a water treatment plant located in Bluff City, with a capacity of 2.0-million gallons per day.

Solid waste collection is conducted five days a week throughout Giles County for residents and businesses. The PSA performs the collection effort for the five towns and the County under an agreement with each of the six entities.

The PSAs collection and disposal service is provided in two ways. First, curbside collection is provided to all residents of the County who are located on state maintained paved roads throughout the County. There are some more heavily populated areas located on state maintained unpaved roads that can petition the board for service and have done so successfully. These areas must meet the population requirements and also must be safe to travel with loaded refuse collection vehicles. Secondly, the PSA provides dumpster service to businesses located throughout the County and also provides seven green box sites strategically located to provide service to customers which do not receive curbside pickup or otherwise choose to use them. Six of these collection sites are capable of accepting household waste only and are not equipped or manned to accept large items, construction debris, appliances, etc. These sites are located in Bluff City, Narrows-Stockpen, Pembroke, Newport, White Gate, and Big Stoney Creek. The PSA also owns and operates a convenience center in Hoges Chapel. This convenience center is equipped to accept brush, tires, used oil, appliances, etc. It is open six days a week.

The PSA also provides recycling bins at the collection sites and other appropriate places in the County. The recycling bins accept mixed paper, glass, plastic bottles, and aluminum. The recycling effort is operated out of the PSA convenience center lot in Hoges Chapel.

In an effort to provide quality service at a reasonable price to the residents of Giles County, the County Board of Supervisors elected to join the New River Resource Authority (NRRA) in July 1998. The NRRA landfill is located on Cloyds Mountain in Pulaski County. Through an agreement between the Board of Supervisors and the NRRA, the PSA was able to dispose of its collected solid waste at the landfill for $36.50 per ton. These rates are expected to decline as the volume of waste increases. The PSA is currently collecting and disposing of approximately 10,500 tons of solid waste per year. This price was a substantial reduction from the average $49.50 the PSA paid to use the landfills in Montgomery County and Mercer County (WVa). This decrease in price has enabled the PSA to establish an equipment replacement schedule and escrow accounts for capital improvements that the PSA could not have otherwise accomplished without a substantial rate increase.

SEWER FACILITIES

The Towns of Narrows, Pearisburg, Rich Creek, Pembroke, and Glen Lyn each operate wastewater collection and treatment systems which serve the towns and county residents living adjacent to each towns' corporate limits. Each of these facilities discharges treated wastewater into the New River. Generally, the County's rivers and streams are of good quality and considerations in planning efforts should strive to protect these water supplies. Industries which

produce significant amounts of effluent are required to provide for treatment-when needed-to preserve the quality of streams. The Celanese plant near Bluff City operates under a discharge permit with the Department of Environmental Quality for discharge of treated waste into the New River.

NARROWS SEWAGE TREATMENT PLANT

The Town of Narrows constructed a secondary sewage treatment plant. Construction of the rotating biological facility was completed in 1991. The plant has a design capacity of 250,000 gallons per day (gpd). Sludge handling is through aerobic digestion. Dewatering is accomplished on sand beds. The Town is currently exploring upgrade options for the sewage treatment plant.

PEARISBURG SEWAGE TREATMENT PLANT

The Pearisburg secondary sewage treatment plant is a rotating biological contactor facility designed for a hydraulic load of 275,000 gallons per day. Sludge handling is through aerobic digestion. Dewatering is accomplished on sand beds. The treatment plant was completed in 1990 and opened in 1991. The average flow is 200,000 gpd. The Town is currently working on an upgrade to the treatment plant. The drying beds will be replaced with a centrifuge system, making the plant more efficient.

RICH CREEK SEWAGE TREATMENT PLANT

The Town of Rich Creek is in the design phase of the development of a secondary sewage treatment plant. The preliminary design of the facility is for a plant having a capacity of 150,000 gallons per day. In order that the towns may cooperate in the operation and testing at the treatment plant, the designs of each of the plants will be very similar.

PEMBROKE SEWAGE TREATMENT PLANT

The Town of Pembroke secured a planning grant from the Virginia Department of Housing and Community Development in the early nineties to design a secondary sewage collection and treatment facility for the Town. Up until that point, the Town relied on individual septic systems and cesspools for waste disposal.

GLEN LYN SEWAGE TREATMENT PLANT

In 1986, the Town of Glen Lyn constructed a secondary sewage treatment plant to treat the Town's wastewater. The design capacity of the plant is 40,000 gallons per day, with an average flow of 16,000 gpd. The treatment type is extended aeration.

SECTION II
GILES COUNTY COMPREHENSIVE PLAN
2012 UPDATE

GOALS, POLICIES AND STRATEGIES

GROWTH MANAGEMENT/DEVELOPMENT PATTERNS

Giles County plans and manages its population growth in a manner compatible with preserving the natural environment, insuring the provision of services, and protecting both natural and man-made elements.

Goal 1: **Provides the best possible distribution of land uses, by type and density, to meet the physical, social, cultural, and economic needs of present and future residents in a manner which would maintain or improve the quality of the natural and man-made environment.**

Policy 1.1: Utilize all applicable planning, legislative, and implementation tools necessary to achieve a desirable balance between population growth and distribution, and the environment.

Strategy 1.1.1: Update County Zoning Ordinance.

Policy 1.2: Guide development by the County through the County's capital facilities program, rather than providing such facilities in response to private decision-makers.

Policy 1.3: Develop an open space plan in accordance with guidelines prepared by the Department of Conservation and Recreation Resources, Division of Planning in cooperation with the New River Planning District Commission.

Policy 1.4: Insure that residential development densities are compatible with utility and road capabilities and plans for the County.

Strategy 1.4.1: Maintain minimum lot size requirement of 1 acre in zoning ordinance for areas not served by public water/sewer.

Policy 1.5: Limit the densities, placement and types of development activities that occur in areas identified by the DRASTIC map and field surveys as having high susceptibility to groundwater contamination.

Strategy 1.5.1: Provide management guidelines for land uses capable of groundwater contamination.

Strategy 1.5.2: Division of Natural Heritage – DCR. Continue to enforce Section 3-10 of the Giles County Subdivision Ordinance which prohibits sinkhole dumps, and sets forth requirements for uses and development in the vicinity of sinkhole and other karst features. The County recognizes the Division of Natural Heritage – DCR as its evaluative authority when necessary.

Policy 1.6: *Omitted*

Policy 1.7 Protect the county's citizens from the indiscriminate placement of waste management facilities.

Strategy 1.7.1: Maintain permit process for waste management facility placement. Also, continue enforcement of the zoning ordinance which guides the placement of waste management facilities (i.e. recycling, junk yards, and landfill facilities).

Strategy 1.7.2: Discourage placement of convenience centers and green boxes or other waste management facilities from being placed in the vicinity of the road view, drainages, waterways, sinkholes and houses without providing adequate screening.

Policy 1.8: Encourage growth in existing or desired future population nodes and focus future development into serviceable areas of the County.

Strategy 1.8.1: Maintain the designation of the Pembroke-Newport section of the County as the major growth area.

Policy 1.9: *Omitted*

Policy 1.10: Promote the redevelopment of those areas within the Towns capable of renewed vitality.

Strategy 1.10.1: Support the Towns' revitalization efforts to assure that developments are attractive to the industrial/Commercial prospects.

Policy 1.11: Retain open space and scenic vistas.

Strategy 1.11.1: In conjunction with the Virginia Outdoors Foundation and the Virginia Department of Historic Resources, seek voluntary conservation easements for areas in the County that are rich in scenic or historic value. The County will have a greater participatory role in the decision-making process of state and federal agencies whose policies affect Giles County.

Strategy 1.11.2: Protect ridgelines and other scenic vistas.

Strategy 1.11.3: Identify and protect prime farmlands (defined by the U.S. Department of Agriculture "[as] the land that is best suited to producing food, feed, forage, fiber and oilseed crops. It has the soil quality, growing season, and moisture supply needed to economically produce a sustained high yield of crops when it is treated and managed by using acceptable farming methods. Prime farmland produces the highest yields with minimal input of energy and economic resources. Farming it results in the least damage to environment.") through future land use planning, open space planning, public facility location, and other land use development tools.

Strategy 1.11.4: Identify on the Giles County Future Land Use Map a recommended conservation corridor based on scenic vista criteria and encouraging landowners owning property within the view-shed to protect the scenic and environmental quality of the identified corridor areas.

ECONOMIC DEVELOPENT

Goal 2: Encourage and assist the stimulation of economic activity in the County, New River Valley and the State to achieve a healthy, diverse economy while maintaining the scenic beauty and environmental quality.

Policy 2.1: Prime industrial sites, existing and proposed; should be encouraged for industrial uses. The arrangement, size and location of sites should be conveniently accessible to living areas, have a location and arrangement so that noise, traffic, dust, smoke, odors and vibrations will not adversely influence adjacent areas.

Strategy 2.1.1: Continue Site Survey Program through the County's Industrial Development Authority and Industrial Development Commission, in conjunction with the New River Valley Planning District Commission to identify potential future industrial sites in the County that are in conformity with the Comprehensive Plan.

Strategy 2.1.2: Continue to encourage and assist with the development of the Wheatland Eco Park as endorsed by the County IDA.

Strategy 2.1.3: Continue to support and participate in Celanese Corporation's Planning Initiative as outlined by the EPA's Resource Conservation and Reclamation Act.

Policy 2.2: Support regional marketing and industrial development projects throughout the New River Valley as a means of achieving employment opportunities for County residents.

Strategy 2.2.1: *Continue to participate in regional cooperative marketing and economic development ventures that can be shown to benefit the county residents.*

Policy 2.3 Encourage and protect agriculture as a viable economic use of Giles County's land. Achieve a harmonious relationship between citizens and their environment.

Strategy 2.3.1: *Encourage biomass energy projects.*

Strategy 2.3.2: *Encouragement of plans that minimize conversion of prime farmland to other land uses should be given priority consideration in the development of the County's Zoning Ordinance as it is being developed in Strategy 1.1.1.*

Policy 2.4: Encourage recycling industry through economic development efforts.

Policy 2.5: Continue to encourage new and expanded commercial and industrial activities which will increase and diversify the county's economic base.

Strategy 2.5.1: *Continue to promote improved wages and more job training opportunities for the residents of the County.*

Strategy 2.5.2: *Continue to encourage diverse employment opportunities within the industrial/commercial sectors.*

Strategy 2.5.3: *Continue to develop partnerships with local higher learning institutions which expand their involvement in the development of industrial/commercial enterprises within the County.*

Policy 2.6: Create an Economic Development Plan for Giles County to be administered by an Economic Development Director.

Strategy 2.6.1: *Continue to support the Economic Development Director position and the County's IDA/ IDC initiatives and plans.*

Policy 2.7: Provide adequate water and sewer service for current and proposed industrial sites.

Strategy 2.7.1: *Continue to extend existing water and sewer facilities to existing and future industrial/ commercial areas and sites.*

Policy 2.8: Encourage the revitalization of the downtown sections of the County's towns.

Strategy 2.8.1: *Jointly with the Towns, support Downtown Revitalization Programs as a component of an Economic Development Plan for the County.*

Policy 2.9: Maintain and strengthen an economic development promotional program for Giles County in conjunction with other Regional and State programs.

Strategy 2.9.1: *Support advertising campaigns in cooperation with the New River Valley Economic Development Alliance to draw interest from new businesses to Giles.*

Strategy 2.9.2: *Support the creation and expansion of local tourism and businesses; that improve the quality of life and provide improved services locally.*

Strategy 2.9.3: *Continue to maintain and expand a local economic development promotional program for Giles County.*

Policy 2.10: Maintain and enhance the quality of life experienced by County residents.

Strategy 2.10.1: *Encourage the support of:*

- *Governmental cooperation on service delivery, planning and problem solving;*
- *Long range planning*
- *Continued state educational funding*

Policy 2.11: Promote economic development at a variety of locations throughout the County.

Strategy 2.11.1: Facilitate a broad range of commercial and industrial development, including tourism, retirement, and high tech industries.

PROVISION OF PUBLIC SERVICES

Goal 3: Seek to provide the residents and businesses in the County with a full range of quality public services to improve the overall quality of life.

Policy 3.1: Continue to insure the provision of adequate water and sewer service, and other utilities for current and future residential and industrial needs in a coordinated and planned manner.

Strategy 3.1.1: Continue to provide water service throughout Giles County, where feasible.

Strategy 3.1.2: Extend the provision of sewer service throughout Giles County, where feasible, using the New River Valley Regional Wastewater Study as a guide.

Strategy 3.1.3: Support extension of natural gas services countywide.

Strategy 3.1.4: Work with the Towns, the Virginia Department of Health, the Virginia Water Project staff and all available state, federal, and regional agencies in formulating a program for bringing nonconforming spring-fed public water systems up to state and federal standards.

Strategy 3.1.5: Work with Towns to extend existing water and sewer facilities to existing and future designated growth areas and areas where existing water and sewage treatment capabilities are in need of improvement.

Strategy 3.1.6: Support the expansion of broadband and wireless telecommunication services to areas of the County that is not served.

Policy 3.2: Encourage the provision of high quality and timely emergency response services to all County residents.

Strategy 3.2.1: Continue to support fire, rescue and ambulance services.

Strategy 3.2.2: Work to improve the International Standardization Organization (ISO) ratings of the County.

Strategy 3.2.3: Encourage the continuance of the Giles County Emergency Services Oversight Committee.

Policy 3.3: Base planning for the library system on standards of the Virginia State Library Board and the American Library Association. As a general guide, the library system should meet a standard of 2.0 books per capita. Encourage use of school libraries. Explore with Towns the options for provision of library services.

Policy 3.4: Maintain a safe and efficient solid waste program in Giles County.

Strategy 3.4.1: Implement an efficient solid waste collection program that provides adequate service in

rural areas and addresses collection of recyclable materials.

Strategy 3.4.2: *Develop ordinances that facilitate waste stream control, provide for reporting of recycled material volumes, promote recycling, and facilitate enforcement against illegal dumps.*

Strategy 3.4.3: *Develop a financial program that is sufficient to cover the operation and long-term capital requirements of the total waste management system.*

Strategy 3.4.4: *Implement strategy that will maintain the mandated recycling rate goal.*

Strategy 3.4.5: *Require all County departments and agencies to implement internal recycling programs and modify procurement policies to promote the purchase of recycled products.*

Strategy 3.4.6: *Require that the Giles County vehicle fleet participate in state programs aimed at recycling used tires and oil.*

Strategy 3.4.7: *Work with the Renew the New Committee along with PSA Recycling Coordinator to develop programs that make all County citizens aware of the need to recycle and how to recycle.*

Policy 3.5: Continue to provide animal control and animal shelter services in Giles County.

Strategy 3.5.1: *Support and encourage the efforts of volunteers and volunteer organizations, such as Giles County Animal Rescue, in assisting with care and adoption of shelter animals.*

Strategy 3.5.2: *Explore feasibility of and funding options for the future improvements to, or relocation of, the existing animal shelter facility.*

NATURAL RESOURCES

Goal 4: **Achieve a harmonious relationship between citizens and their environment and assure for all citizens a health and aesthetically pleasing County.**

Policy 4.1 Encourage voluntary and regulatory efforts that blend land development plans with environmental constraints.

Strategy 4.1.1: *Continue the enforcement of the zoning ordinance as it pertains to the presence of natural hazards, view scapes, air and water resources, energy, slope and floodways.*

Strategy 4.1.2: *Protect the County's groundwater resource by actively pursuing enforcement action against open dumps, particularly those in sinkholes.*

Policy 4.2: Reduce erosion and sedimentation of the County's streams, rivers and lakes.

Strategy 4.2.1: *Continue enforcement of the Giles County Erosion and Sediment Control Ordinance.*

Policy 4.3: Protect air quality in the County.

Strategy 4.3.1: *Continue enforcement of an open burning ordinance.*

Policy 4.4: Strengthen current civic beautification and litter control programs and provide support to existing volunteer programs such as Renew the New and support clean efforts such as River Clean Up and Ramps and Roads.

Strategy 4.4.1: *Encourage clubs and civic organizations to adopt roads or streams.*

- *Continue Public Works transportation for material picked up;*
- *Continue organized county wide clean up days.*

GOVERNMENT ADMINSTRATION

Goal 5: **Effectively provide governmental services and local government management.**

Policy 5.1: Develop effective tools for implementing the Comprehensive Plan.

Strategy 5.1.1: Keep the Comprehensive Plan current and realistic. The plan must always protect the public health, safety, convenience, and welfare of all the citizens of Giles County.

Strategy 5.1.2: Maintain up to date Land Use Regulations.

Strategy 5.1.3: Strengthen the process for ensuring that development proposals are coordinated with services.

Policy 5.2: Provide government services as efficiently and effectively as possible; maintaining a constant commitment to providing the highest quality of administration and service provision at the lowest cost possible.

Strategy 5.2.1: Provide timely response to citizen complaints about services, courteous response to such complaints and track trends in complaints as to type service, frequency and location.

Strategy 5.2.2: Continue inter-agency and inter-department communication and cooperation by instituting regular Department/Agency Head meetings.

Strategy 5.2.3: Update and refine ordinances and regulations on a regular basis; continue meetings with Towns; and joint meetings with local governments in the New River Valley.

Policy 5.3: Whenever possible, support government service through rate structures that allow the service to be self supporting and so that the beneficiaries of the service bear the cost of service provision.

Strategy 5.3.1: Continue mandatory connection policy for new water and sewer and expansions where the County had decided such service is to be extended.

Strategy 5.3.2: When allowing federal agencies to make land swaps to correct irregular boundaries or tracts, do not allow Giles County lands to be removed from the tax base.

Policy 5.4: Reference the County Future Land Use Plan and Map when addressing amendments to Official Zoning Map.

Strategy 5.4.1: Actively use the County Comprehensive goals, objectives, and policies when considering proposed changes in the zoning ordinance and map. Assure the public, agencies, and other organizations that the Comprehensive Plan is the County's policy statement and provides the official guidance for the development of the County.

HOUSING

Goal 6: Encourage diverse and affordable housing opportunities for all County Residents.

Policy 6.1: To encourage adequate housing for all segments of the community.

Strategy 6.1.1: To encourage diverse and affordable homeownership opportunities for all County Residents (i.e. Habitat for Humanity, Hammering in the Hills, the Indoor Plumbing and Rehabilitation Program and the New River Valley HOME Consortium, etc.).

Strategy 6.1.2: *Encourage adequate housing for elderly and handicapped persons.*

TOURISM AND RECREATION

Goal 7: **Promote the development of tourism and recreation as one element of economic development.**

Policy 7.1: Promote Tourism.

Strategy 7.1.1: *Encourage the Towns, County Officials, Giles County Chamber of Commerce and other partners in promoting Giles as a desirable tourist destination.*

Strategy 7.1.2: *Promote and improve better canoe/boat access facilities on County waterways (i.e. the New River).*

Strategy 7.1.3: *Encourage development of Tourism Infrastructure (i.e. hotels, restaurants, outfitters, signage, mapping, etc.)*

Strategy 7.1.4: *Continue cooperation with the U.S. Forest Service and Appalachian Trail Conservancy to promote usage of our public areas and trails.*

Policy 7.2: Preserve the County's heritage as illustrated in its historic structures and sites as educational tools, recreational areas, and economic development tools.

Strategy 7.2.1 *Continue cooperation with agencies involved with historic preservation.*

Strategy 7.2.2: *Promote heritage tourism through sites, buildings and communities which have historic or picturesque qualities.*

TRANSPORTATION

Goal 8: **Encourage and support a convenient and efficient transportation network.**

Policy 8.1: While the Giles County Board of Supervisors has passed a resolution in opposition to the construction of the proposed Interstate 73 through Giles County, the County recommends several provisions:

Strategy 8.1.1: *If Interstate 73 is constructed through Giles County, then it should be aligned with Virginia Highway 100, maintaining ARC design standards.*

Strategy 8.1.2: *If Interstate 73 is aligned on US Highway 460, then it should be maintained at ARC design standards, with interchanges at:*

- *Rt. 700*
- *Rt. 730*
- *The Towns of Pembroke, Pearisburg, Narrows, Rich Creek and Glen Lyn*
- *Rt. 42*
- *Major Secondary Routes*

Policy 8.2: Continue to support the completion of the four lane of US Rt. 100 South to the Pulaski County line.

Strategy 8.2.1: *Continue to annually make the request at the Virginia Department of Transportation's Annual Public Hearings.*

Strategy 8.2.2: *Pursue all available options and lobby for completion of the project with State Legislatures and Transportation Officers.*

Policy 8.3: Coordinate transportation planning with development of land.

Strategy 8.3.1: Improve secondary roads.

Strategy 8.3.2: Seek scenic byway status designation for appropriate roads.

Strategy 8.3.3: Develop bike lanes, if possible, in conjunction with upgrades of existing roads and construction of new road facilities where appropriate.

Strategy 8.3.4: Work with VDOT to develop Park and Rides in appropriate locations.

Policy 8.4: Population Growth and Alternative Transportation.

Strategy 8.4.1: Support regional public transit options, particularly with respect to special populations within the County such as the elderly, handicapped and unemployed.

Strategy 8.4.2: Encourage passenger rail service to the New River Valley.

Strategy 8.4.3: Continue County participation in the New River Valley Airport Commission, and encourage development of the Airport to serve corporate users and support industrial development.

EDUCATION

Goal 9: Provide the opportunity for all residents to receive appropriate education or training.

Policy 9.1: Reach and exceed the national levels of academic achievement as evidenced by:

- All schools earning state accreditation
- All schools successfully meeting the national Adequate Yearly Progress/NCLB benchmark
- Raise the salary of teachers to at least the national average
- Institute a staff development program that prepares teachers to become nationally certified
- Secure highly qualified teachers in all subject areas, as well as teacher assistants, when positions become vacant

Strategy 9.1.1: Improve the quality and diversity of educational classes and programs for all Giles County citizens by:

- *Increasing the opportunities for college level courses in the high school curriculum (i.e. Dual Enrollment courses, Distance Learning courses, NRCC Classes, etc.)*
- *Lowering the pupil teacher ratio in all schools*
- *Conducting a needs assessment, by 2016, to determine our future facility renovation needs, including the SB office*
- *Maintaining our facilities so they are operating as efficiently as possible*
- *Including career counseling services in the expanded services provided by staff*

Policy 9.2: Develop programs to attract and retain Giles County graduates to the area.

Strategy 9.2.1: Actively recruit Giles County graduates during their high school career and upon completion of College, Technical Training, or Military Service by:

- *Incorporation of Business Partnership agreements and student scholarships, which yield full time employment opportunities upon completion of high school, technical training, or college degree*
- *Apprenticeship programs incorporated in the Giles Technology Center, Giles High School, and Narrows High School*
- *the development of a combined branch campus with New River Community College and the Giles Technology Center*
- *Implementation of an Agriculture Lab that will meet the needs of the students at both high schools and the community*

Policy 9.3: Ensure that, regardless of age, every citizen in Giles County has an equal opportunity to excel in Giles County Schools and their programs.

Strategy 9.3.1: Develop and implement programs for preschool youth (i.e. VPI Program), average youth, high school drop outs, students who were non program completers in school and adult career switchers.

Policy 9.4: Expand and improve communication between parents, teachers, administrators, the school board, and the superintendent.

Strategy 9.4.1: Continue and expand programs to inform all citizens of the achievements and offerings of the Giles County School System and vigorously promote the importance of educational excellence in today's society by:

- *Mandating advisory committees for each school that are actively involved in each school's biennial plan and school improvement plans for No Child Left Behind*
- *Continuing the personnel selection teams that involve parents, teachers, and community members in the selection process of all professional and paraprofessional staff members*
- *Employing sufficient administrative and supervisory staff to ensure compliance with Giles County School Public Schools Mission statement*
- *Continuing and expanding information about Giles County Schools on the Internet*

PUBLIC HEALTH AND WELFARE

Goal 10: Work toward a better understanding of public health and welfare related issues and encourage the growth and development of new and existing facilities and varying disciplines of healthcare to meet the growing needs of the community.

Policy 10.1: Collaborate with the County Health Department and the New River Community Services Board in order to better identify and understand health related issues throughout the County.

Policy 10.2: Partner with the NRV Planning District Commission to establish an interjurisdictional task force to assess and monitor health related issues in both Giles County and the New River Valley.

Policy 10.3: Consider healthcare as a key component in the economic development of the county and assist in the development and sustainability of needed healthcare facilities.

60Existing and Future Land Use Guide

Giles County, characterized by its small town feel and natural beauty, is dotted with several towns, which include Glen Lyn, Narrows, Pearisburg, Pembroke, and Rich Creek. In addition, 63,352 acres of land are part of the Jefferson National Forest. These assets contribute to the richness of the County's land. The towns, combined with the many smaller communities in Giles County, create an opportunity for land use management and growth that capitalizes on the economic, educational, environmental, health, and public service infrastructures already in place.

As mentioned in the earlier chapters of the Comprehensive Plan, the 2000 U.S. Census indicates a slight

population increase in Giles County. In 1990, total population equaled 16,366, and in 2000 equaled 16,657 this equates to a 1.78 percent increase in population. In 2000, about 40% of the County's population lived in towns, while the remainder of the population lived in unincorporated areas of the County. Population is increasing faster in the towns than in the rural, unincorporated areas. The in depth analysis of the County's current population, hosing, environmental, educational, and employment trends outlined in the earlier chapters of the Comprehensive Plan provide the necessary detail to develop the land use guide.

Existing Land Use

The existing land use classifications as outlined in the Giles County Zoning Ordinance and Subdivision Ordinance, updated November 2000, include:

Conservation District (C-1)

Agricultural and Limited Uses District (A-1)

Rural Residential/Agricultural District (RRA- 1)

Residential Limited District (R- 1)

General Residential District (R-2)

Medium Density Residential District (R-3)

Planned Development District (R-4)

Mobile Home District (MH-1)

Community Center Business District (B-1)

General Business District (B-2)

Mixed Business/Residential District (B-3)

Light Industrial District (M-1)

General Industrial District (I-1)

Flood Hazard District (FH-1)

Solid Waste Management Facilities District (SWM-1)

The map on page 72 provides a visual illustration of the current zoning for Giles County. This map is specific and includes all current zoning districts. These zoning classifications create a mix of uses throughout the County.

Future Land Use Guide

During the planning process and the updating of the Comprehensive Plan, the town identified several goals, policies, and strategies that relate to future land use throughout the County. In particular, Goal One of the Comprehensive Plan states that the County will seek to "provide the best possible distribution of land uses, by type and density, to meet the physical, social, and economic needs of present and future residents in a manner which would maintain or improve the quality of the natural and man-made environment."

Future Land Use Map

The Future Land Use Map on page 73 illustrates the proposed and generalized land use pattern for Giles County. This map is general in nature and groups land uses into one of seven categories: conservation, agricultural, residential, business, industrial, historic preservation and transitional. Mostly, the Future Land Use map illustrates a pattern of continued growth in the areas where growth is already occurring. However, the future land use map also highlights the extent to which such development should be carried out, and presents the best use for key areas in the County. The plan reflects, based on the data presented in the Comprehensive Plan, the general direction the County wishes to follow concerning future land use decisions. A summary of the major land use recommendations follows:

Conservation District

The largest current land use designation in Giles County is Conservation (C-1), which includes the Jefferson National Forest, as well as other protected areas of the County. The designation of land as a conservation district protects areas of the County where human activities, left unrestricted, have a high potential for adversely impacting the environment and the safety and welfare of the public by accelerated soil erosion, reduced water quality, inappropriate uses of land, and generally the uneconomical provision of public services and facilities.

Rural Residential & Agricultural District

Land designated for agricultural use represents the land in the County identified as the most valuable for the production of food, fiber, and water resources. Lands in the agricultural area seek to maintain economic viability through agricultural practices. In addition, this district seeks to protect and conserve water and other natural resources. In the agricultural regions of the County plans should encourage the use of the land for viable economic purposes and discourage the conversion of land containing prime farmland (as defined by USDA and identified by the Giles County Soil Survey) into non-agricultural activities (Strategy 2.3.1).

Residential District

The designation of land as a residential district reflects areas of the County that, in general, already have residential development. Growth in already established residential areas accommodates new housing, while maintaining the agricultural and rural feel of the County. Policy 1.8 of the Comprehensive Plan states that the County should "encourage growth in existing or desired future population nodes and focus future development into serviceable areas of the County."

In a number of the areas designated as residential, access to County water and sewer is available. All efforts should be made to promote development along the existing service lines and connect new users to services (Policy 1.2).

Business District

In Giles County, businesses are generally concentrated in the towns or along the major road arteries that dissect the County. It is recommended that the County continue to follow this pattern of growth, and encourage businesses to locate in close proximity to one another to foster commercial activity (Strategy 1.6.1). Policy 1.10 of the Comprehensive Plan suggests that businesses should attempt to utilize existing infrastructure to "promote the redevelopment of those areas within the Towns capable of renewed vitality." In the areas of the county designated as business, care should be taken to locate commercial uses in locations that provide convenient access to customers (Policy 1.6).

Industrial District

Industrial sites are located primarily along Route 460. This location provides easy access for trucks and other large vehicles that may be making deliveries to companies. When developing land in industrial districts care should be taken to ensure that the surrounding land uses are compatible with one another. Specifically, industrial sites "should be conveniently accessible to living areas, have a location and arrangement so that noise, traffic, dust, smoke, odors and vibrations will not adversely influence adjacent areas" (Policy 2.1)

Industrial sites should be viewed as potential economic generators for the County. Development of industry in the designated areas of the County will promote economic growth while protecting scenic beauty and environmental quality (Goal 2, Comprehensive Plan). In addition, the County should pursue new business and encourage the expansion of existing businesses, with the intent of increasing and diversifying the County's economic base.

Transitional District

Transitional districts represent places in the County that contain a mix of uses. Often transitional districts are located between two more defined districts, and contain a mix of uses. In transitional districts, it is important to recognize the balance between uses, and make every effort to ensure the harmonious existence of residential, commercial, industrial and agricultural. These districts, when located along public service lines potentially allow for compact development. There are two general transitional districts located throughout the County: Commercial- Industrial and Commercial-Residential. At this time, the County should make every effort to ensure that the transitional areas continue to function, as often is the case that each use located in transitional areas benefit from all other uses.

Historic Preservation Area

Historic Preservation areas are located throughout the County. This designation comes from the Virginia Department of Historic Resources (DHR) and allows for the conservation of significant historic structures, landmarks, and properties. It is the intent of DHR that development in the historic preservation area should take into account the style and design of the existing structures. In addition, existing structures should be repaired and renovated, whenever possible, to their original condition. There are 2 special sectors in the eastern portion of the County identified as historic preservation areas by DHR, the Village of Newport and the *Greater Newport Rural Historic District*. There are currently no special zoning features identified for these

areas by the County. Another historic area located in the County is the Downtown Pearisburg Historic District, but land use control for this area is provided under the Town's zoning.