

**COMPREHENSIVE
DEVELOPMENT PLAN**
Carroll County, Virginia

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Carroll County Board of Supervisors

**Carroll County
COMPREHENSIVE DEVELOPMENT PLAN**

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CHAPTER I

Introduction

A. The Comprehensive Plan

The premise of the comprehensive plan is that it will be a guide for future decisions regarding the provision of public services. It will be a roadmap for changes in the use of land to the improvement of the health, safety, and welfare of Carroll County citizens.

The essential characteristics of the plan are that it is comprehensive, general, and long range. It is comprehensive in that the plan encompasses the entire county (outside the incorporated towns) and all of the elements, natural, physical, and social, which influence development. It is general in that the plan does not indicate specific locations nor contain detailed regulations. Long range means that the plan looks beyond the foreground of pressing current issues to a desirable possible future in 20 years.

B. Purpose

Title 15.2 of the Code of Virginia, 1950, as amended, is devoted to regulations affecting counties, cities, and towns, Subsection 2223 states, “The local planning commission shall prepare and recommend a comprehensive plan for the physical development of the territory within its jurisdiction and every governing body shall adopt a comprehensive plan for the territory under its jurisdiction.”

“In the preparation of a comprehensive plan the commission shall make careful and comprehensive surveys and studies of the existing conditions and trends of growth, and of the probable future requirements of its territory and inhabitants. The comprehensive plan shall be made with the purpose of guiding and accomplishing a coordinated, adjusted, and harmonious development of the territory, which will in accordance with present and probable future needs

and resources, best promote the health, safety, morals, order, convenience, prosperity, and general welfare of the inhabitants.”

Subsection 2223 goes on to state that the plan, “with the accompanying maps, plats, charts, and descriptive matter, shall show the long-range recommendations for the general development of the parts of the county covered by the plan. It may include, but need not be limited to:

- 1) The designation of areas for various types of public and private development and use, such as different kinds of residential, business, industrial, agricultural, mineral resources, conservation, recreation, public service, floodplain, drainage, and other areas;
- 2) The designation of a system of transportation facilities, such as streets, roads, highways, parkways, railways, bridges, viaducts, waterways, airports, ports, terminals, and other like facilities;
- 3) The designation of a system of community service facilities such as parks, forests, schools, playgrounds, public buildings and institutions, hospitals, community centers, waterworks, sewage disposal or waste disposal areas, and the like;
- 4) The designation of historical areas and areas for urban renewal or other treatment;
- 5) The designation of areas for the implementation of reasonable ground water protection measures;
- 6) An official map, a capital improvements program, a subdivision ordinance, a zoning ordinance and zoning district maps, mineral resource district maps, and agricultural and forestall district maps, where applicable; and
- 7) The location of existing or proposed recycling centers.

The plan shall include: the designation of areas and implementation of measures for the construction, rehabilitation, and maintenance of affordable housing, which is sufficient to meet the current and future needs of residents of all levels of income in the locality while considering the current and future needs of the planning district within which the locality is situated.”

C. Relationship To Other Plans

The comprehensive plan is a policies statement, an overview of land use in the county and the first major step in the county’s planning effort. This plan is supplemented by the following more detailed plans, which have been developed by the county, citizen groups, regional organizations, and state and federal governments.

Carroll County Comprehensive Plan: The Carroll County Planning Commission has reviewed in detail the recommendations that were made in the update of the Comprehensive Plan adopted in 1999.

Carroll County 604(b) Study: In 1997 a comprehensive water and sewer study was completed for Carroll County. The recommendations contained in that study became a part of the comprehensive plan in 1999 and were reviewed again by the Planning Commission during this 2005 rewrite.

Take Charge 2020: A committee of interested citizens volunteered their time to participate in a comprehensive strategic planning process designed to improve the quality of life for county residents. The committee divided itself into four (4) groups and reported on its recommendations in eleven (11) categories of development for the county. The Planning Commission has reviewed their recommendation and included many of them in this plan in Chapter IX.

Vision 2025: The Mount Rogers Planning District Commission conducted a strategic planning process during 2001 and 2002. The applicable goals, objectives, and strategies of that planning process have become a part of this plan.

Regional Transportation Plan: The Mount Rogers Planning District Commission has prepared and approved a set of Regional Transportation Priorities. The Planning Commission reviewed those priorities and included the appropriate recommendations in this rewrite of the Carroll County Comprehensive Development Plan.

The Comprehensive Plan is not an end in itself, it is a living document, a continuing study through which issues relating to the future of the county can be resolved by citizens and their representatives. The plan should be revised and supplemented as necessary. State law requires that it be reviewed at least every five years.

D. Legal Status Of Plan

Legal status of the Comprehensive Plan is described under Subsection 2232 of Title 15.2 in the *Code of Virginia*, 1950, as amended. That part of the code reads as follows:

A. Whenever a local planning commission recommends a comprehensive plan or part thereof for the locality and such plan has been approved and adopted by the governing body, it shall control the general or approximate location, character and extent of each feature shown on the plan. Thereafter, unless a feature is already shown on the adopted master plan or part thereof or is deemed so under subsection D, no street or connection to an existing street, park or other public area, public building or public structure, public utility facility or public service corporation facility other than railroad facility, whether publicly or privately owned, shall be constructed, established or authorized, unless and until the general location or approximate location, character, and extent thereof has been submitted to and approved by the commission as being substantially in accord with the adopted comprehensive plan or part thereof. In connection with any such determination, the commission may, and at the direction of the governing body shall, hold a public hearing, after notice as required by § [15.2-2204](#).

B. The commission shall communicate its findings to the governing body, indicating its approval or disapproval with written reasons therefore. The governing body may overrule the action of the commission by a vote of a majority of its membership. Failure of the commission to act within sixty days of a submission, unless the time is extended by the

governing body, shall be deemed approval. The owner or owners or their agents may appeal the decision of the commission to the governing body within ten days after the decision of the commission. The appeal shall be by written petition to the governing body setting forth the reasons for the appeal. The appeal shall be heard and determined within sixty days from its filing. A majority vote of the governing body shall overrule the commission.

C. Widening, narrowing, extension, enlargement, vacation or change of use of streets or public areas shall likewise be submitted for approval, but paving, repair, reconstruction, improvement, drainage or similar work and normal service extensions of public utilities or public service corporations shall not require approval unless involving a change in location or extent of a street or public area.

D. Any public area, facility or use as set forth in subsection A which is identified within, but not the entire subject of, a submission under either § [15.2-2258](#) for subdivision or provision 8 of § [15.2-2286](#) for development or both may be deemed a feature already shown on the adopted master plan, and, therefore, excepted from the requirement for submittal to and approval by the commission or the governing body; provided, that the governing body has by ordinance or resolution defined standards governing the construction, establishment or authorization of such public area, facility or use or has approved it through acceptance of a proffer made pursuant to § [15.2-2303](#).

E. Approval and funding of a public telecommunications facility by the Virginia Public Broadcasting Board pursuant to Article 12 (§ [2.2-2426](#) et seq.) of Chapter 24 of Title 2.2 shall be deemed to satisfy the requirements of this section and local zoning ordinances with respect to such facility with the exception of television and radio towers and structures not necessary to house electronic apparatus. The exemption provided for in this subsection shall not apply to facilities existing or approved by the Virginia Public Telecommunications Board prior to July 1, 1990. The Virginia Public Broadcasting Board shall notify the governing body of the locality in advance of any meeting where approval of any such facility shall be acted upon.

F. On any application for a telecommunications facility, the commission's decision shall comply with the requirements of the Federal Telecommunications Act of 1996. Failure of the commission to act on any such application for a telecommunications facility under subsection A submitted on or after July 1, 1998, within ninety days of such submission shall be deemed approval of the application by the commission unless the governing body has authorized an extension of time for consideration or the applicant has agreed to an extension of time. The governing body may extend the time required for action by the local commission by no more than sixty additional days. If the commission has not acted on the application by the end of the extension, or by the end of such longer period as may be agreed to by the applicant, the application is deemed approved by the commission.

E. Historical Overview

Carroll County is located in Southwestern Virginia. It is bordered by Patrick County to the southeast, Floyd County to the east, Pulaski and Wythe Counties to the north, Grayson County and the City of Galax to the west, and Surry County, North Carolina to the south. The Town of Hillsville is the county's Seat of Government and lies near the geographic center of the county. Hillsville is located 80 miles southwest of Roanoke, Virginia, 94 miles east of Bristol, Virginia-Tennessee, and 60 miles northwest of Winston-Salem, North Carolina. Five magisterial districts – Fancy Gap, Laurel Fork, Pine Creek, Pipers Gap, and Sulphur Springs – divide the county for legal purposes.

The county, formed mainly from Grayson County in 1842 and partly from Patrick County in 1954, is situated within three (3) physiographic provinces. The bulk of the county is in the Blue Ridge Province, a broad, rolling plateau, which extends from the southwest to the northeast across the county. A small portion of the county, in the northwest corner, lies in the Ridge and Valley Province. The remainder lies in the Piedmont Province at the foot of the Blue Ridge Escarpment.

Land area in the county total 494 square miles (316,160 acres). Most of the gentle rolling land is forest devoted to agriculture and open space, with approximately 50 percent covered by forest. The Jefferson Nation Forest covers the northwest corner of the county. Local relief (difference in elevation between highest and lowest points) is 2,470 feet.

CHAPTER II PHYSIOGRAPHY

A. Physiographic Provinces and Geology

The majority of the Carroll County area lies in the Blue Ridge Physiographic Province. A small portion of the county's northwestern corner is in the Ridge and Valley Province and a part of the Piedmont Province occupies a section in south central Carroll County (see Map 1).

- 1) Blue Ridge Province—This is mountain plateau characterized by moderate to steeply rolling land with much of the area having a slope in excess of 20 percent. Within the county, the most prominent features of the province are the northwest and southeast slopes.

The pre-Cambrian rocks of the Blue Ridge Province are igneous and metamorphic. The lava flows, gneissic and schistose rock have been moved (faulted) with respect to one another; and with the work of erosion a plateau-like region has resulted.

- 2) Ridge and Valley Province—This region consists of parallel valleys and ridges oriented in a roughly northeast to southwest direction. Several of these ridges form the northwest border of Carroll County. These ridges consist of Paleozoic-Cambrian dolomite, shale, and sandstone.
- 3) Piedmont Province—Part of the southeastern corner of the county extends into the Piedmont Province. This province is underlain by Triassic sedimentary rocks and sporadic basaltic sills and dikes. The Piedmont Province consists generally of gently rolling low hills, dropping gradually toward the Coastal Plains and the Atlantic Ocean

B. Relief

Elevations in Carroll County vary from a maximum of 3,570 feet at Fisher Peak to a low of 1,100 feet above sea level in the southeast near Cana—where Lovills Creek flows into North Carolina (see Cross Sections A, B, and C). It is in the southern portion of the county that the most striking changes in elevation occur. Stretching northeast from Fisher Peak, the Blue Ridge Escarpment separates the lowlands of North Carolina from the Blue Ridge Plateau. Northward from the escarpment, the land slowly drops toward the New River with long, low parallel ridges. To the west of the New River, Chestnut Knob (a point on Ewing Mountain—the eastern extremity of Iron Mountain), rises to an elevation of 3,374 feet. In the northeast corner of the county, Bear Knob (near the Carroll-Pulaski County line), a peak on Macks Mountain reaches 3,390 feet.

Slightly more than half of the total land area has a slope in excess of 20 percent. Most of the more gently sloping land occurs in four areas (see Map 1).

C. Climatology

Carroll County has a moderate continental climate. The maximum average temperature occurs in July and is about 75.1 degrees Fahrenheit with the average minimum temperature in January being about 34.6 degrees Fahrenheit. The growing season averages about 180 days (see Table II-A for temperature and precipitation information).

Table II-A
AVERAGE TEMPERATURE AND PRECIPITATION
CARROLL COUNTY, VA
1971-2004

Month	Average Temperature (in degrees F)	Average Precipitation (in inches)
January	34.6	3.5
February	37.7	3.1
March	45.3	4.0
April	54.4	3.4
May	62.8	4.3
June	70.9	3.9
July	75.1	4.5
August	73.7	3.9
September	67.0	4.2
October	55.8	3.4
November	46.9	3.3
December	38.1	3.2
Average Annual	55.2	44.7

SOURCE: National Climatic Data Center, National Oceanic and Atmospheric Administration. Climate at a Glance: Climate Summary. 1971-2004.

Average annual rainfall in Carroll County is about 44.7 inches. Precipitation during the six warm months, April through September, ranges from an average of 28 inches in the southeast to less than 24 inches in the northwest. Snowfall averages about 20 inches annually.

The prevailing winds in the county are from the west with southern and northern winds occurring infrequently. The mountains, along with the westerly wind flow, tend to isolate the county from the effects of severe storms originating over the Atlantic Ocean.

D. Hydrology

1) Surface Water

Carroll County is situated in two major watersheds (see Map 2). The eastern continental divide runs through the county, roughly along the Blue Ridge Parkway. To the south, the headwaters of the Yadkin River drain to the Atlantic Ocean. To the north, tributaries of the New River drain to the Gulf of Mexico.

The major streams of the Yadkin River Basin in Carroll County include Stewarts Creek, Paul's Creek, and Lovills Creek (see Table II-B). All drain south into North Carolina. The largest, Lovills Creek, is a water source for Mount Airy, North Carolina.

The New River, with headwaters in North Carolina, flows through the northeastern portion of the county northward to the Ohio River. In Carroll County, it has a gradient (defined as drop in feet per stream mile) of 14 feet per mile and ranges from 300 to 800 feet in width with numerous rapids and shallows.

The Carroll County tributaries of the New River are Chestnut Creek, Crooked Creek, Little Reed Island Creek, and Big Reed Creek. All are shallow, relatively fast moving streams with gradients between 10 and 20 feet (see Table II-B).

The Department of Housing and Urban Development (HUD) designated special flood hazard areas in Carroll County in 1975. This was preliminary study will be followed by a much more accurate 100 year floodplain delineation.

There are two dams on the New River in Carroll County—the Byllesby and Buck. They are 54 feet and 32 feet high, respectively, and are owned and operated by the Appalachian Power Company.

2) Groundwater

Except for a small area along the northwestern boundary, igneous and metamorphic rocks underlie Carroll County. These rocks have been deeply weathered and have sufficient permeability to absorb and hold groundwater. However, recharge to full storage, except in aquifers near streams and below the elevation of their beds, is slow because of the steep land surface and low absorption rate of most soils. These conditions produce a few low springs.

The range of estimated potential well yield is 20 to 100 gallons per minute. It is possible that a series of shallow wells would provide sufficient water for moderate demands in some of the larger stream valleys.

In the northwestern portion of the county, the New River crosses folded and faulted dolomite, limestone, and shale formations. The groundwater recharge capability in the area is not known, but conditions seem to be favorable for obtaining large quantities of groundwater at properly located sites.

Table II-B
STREAM DATA
YADKIN AND NEW RIVER BASINS
CARROLL COUNTY

Stream	Drainage Area (a) (Sq. Miles)	Length (b) (Miles)	Computed 7-Day-10-Year Low Flow at Mouth (Cu./Ft./Sec.) (c)
<u>Yadkin River Basin</u>			
Stewarts Creek	16.2	6.9	1.4
Pauls Creek	18.1	8.3	1.6
Louvills Creek	25.1	8.8	2.1
Johnson Creek	17.1	8.7	Not Available
<u>New River Basin</u>			
Big Red Island Creek (f)	344.1 (e)	48.6	31.7
Little Reed Island Creek (f)	83.6	38.8	4.0
Greasy Creek	56.4 (e)	20.1	2.4
Burks Fork	44.6 (e)	23.7	2.2
Snake Creek	17.2	6.8	1.8
Laurel Creek	40.5 (e)	19.6	1.1
Shorts Creek (f)	12.1	9.7	Not Available
Crooked Creek	73.2	25.7	6.5
Brush Creek	11.9 (e)	6.0	1.9
Chestnut Creek	61.7 (e)	26.6	5.5

- a. Drainage Area—Area includes drainage area of all tributaries.
- b. Length—Distance from mouth to head of drainage area, or when the stream is formed by two other streams to the junction of said streams.
- c. One gallon equals 0.1337 cubic feet or one cubic foot equals approximately 7.5 gallons.
- d. Data based on that portion of the stream that is in Virginia.
- e. Mouth of stream not in Carroll County.

NOTE: Very little, if any change, in the stream data for the Yadkin and New River Basins in Carroll County. Data in this table is from the Carroll County Comprehensive Plan April 1978.

SOURCE: Virginia Department of Conservation and Economic Development Division of Water Resources. New River Basin Comprehensive Water Resources Plan. Vol. 1. Planning Bulletin 201. 1966. P. 38-39.; Mount Rogers Planning District Commission, and Thompson & Litton. Water Quality Management Plan for New and Yadkin River Hydrologic Planning Unit. Vol. 11. 1973. Appendix B.

E. Soils

The soils of Carroll County have been mapped and delineated into 11 soil associations. A soil association is a region that has a distinctive proportional pattern of soils—that is, each association has a certain repeating pattern of soils and other features that give it a characteristic landscape. The soils in one association may occur in another, but in a different pattern. An association normally consists of one or more major soils and one or more minor soils, and is named for the major soil.

The following are descriptions of the soil associations in Carroll County (see Table II-C).

- 1) Manor-Talladega-Watauga Association: Shallow to moderately deep, well-drained to excessively drained, micaceous, sloping to very steep soils on strongly dissected uplands.
- 2) Ramsey-Wiekert-Hazel association: Shallow to moderately deep, excessively drained, very stony and channery, sloping to very steep soils on strongly dissected uplands.
- 3) Hazel-Manor-Gilpin association: Shallow to moderately deep, well-drained to excessively drained, sloping to very steep, soils on dissected uplands.
- 4) Madison-Wickham-Talladega association: Deep, well drained and excessively drained, gently sloping to steep soils on uplands.
- 5) Madison-Talladega association: Deep to shallow, well-drained and excessively drained, gently sloping to steep soils and uplands.
- 6) Chester-Glenelg-Manor association: Deep and moderately deep, well-drained or somewhat excessively drained soils on dissected uplands.

- 7) Porters-Chester-Glenelg-Manor: Deep to shallow, well-drained or somewhat excessively drained, gently sloping to very steep soils on strongly dissected uplands.
- 8) Chester-Glenelg-Manor-Porters association: Deep and moderately deep, well-drained to excessively drained soils on uplands.
- 9) Stony land-Manor-Rock land association: Moderately deep and deep, well-drained, gently sloping to steep soils on uplands.
- 10) Myersville-Chester-Glenelg association: Deep and moderately deep, well-drained, gently sloping to very steep soils on uplands.

Ratings in the Table II-C are the average for soils on 0-15 percent slopes. When steeper slopes are encountered, limitations are greater. Other soil properties considered in rating are soil drainage class, seasonal water table flooding hazard, stoniness, rockiness, and depth to bedrock.

M—Moderate: Soil and/or site characteristics are such that they impose limitations to use that should be recognized and evaluated prior to design use. Such limitations can generally be corrected or modified by design or through installation of practices designed to overcome limitations.

S—Severe: Soil and/or site characteristics present limitations to use that are generally both difficult and expensive to overcome. Individual site surveys are recommended, and development should be considered in view of the survey results.

SOURCE: U.S.D.A. Soil Conservation Service. "Soil Association Maps and Interpretations of Bland, Smyth, Washington, Wythe, Grayson, and Carroll Counties." Unpublished data. 1972.

CHAPTER III
Population Characteristics and Trends

A. Historic Trends

Carroll County’s population has fluctuated dramatically over the past century. Between 1900 and 1950, the county’s population gradually increased from 19,303 to 26,695. This steady growth was propelled by an expanding agricultural economy. During the 1950s, significant changes in methods of agricultural production, an aftermath of World War II, began to decrease the demand for farm labor. The economy of Carroll County could not sustain the unemployed farm laborers and a significant out-migration was initiated. The actual low point for the 20-year period of population decline may have been reached in the mid-1960s when population declines seem to have “bottomed out” for many localities in Southwest Virginia, including Carroll County. This regional population trend is supported by the Mount Rogers Planning District population figures in Table III-1.

Table III-1
Population¹
Carroll County, Galax, MRPDC, and Virginia
By Year
1950-2000

	1950	1960	1970	1980	1990	2000
Carroll County	26,695	23,718	23,092	27,270	26,594	29,245
Galax ²	5,248	5,254	6,278	6,524	6,670	6,837
MRPDC	163,757	160,065	159,412	181,118	178,205	190,020
Virginia	3,318,680	3,966,949	4,651,448	5,346,797	6,189,197	7,078,515

1. US Census Bureau, Decennial Census.

2. Galax became an independent city in 1953.

Between 1970 and 1980, Carroll County’s population increased at a rate of 1.8 percent per year as seen in Table III-2. During that decade, the 18.1 percent increase was driven by a boom in manufacturing, specifically in the textile and furniture industries. This rapid growth

was stifled during the 1980s as the county’s population decreased by 2.5 percent, then grew again during the 1990s at an average annual rate of one percent.

The decline in the 1980s had little effect on the overall population growth of the last 50 years. Overall, between 1950 and 2000, Carroll County’s population increased by 9.6 percent at an annual rate of 0.2 percent. Nevertheless, this population trend lagged behind both the Mount Rogers region and the Commonwealth of Virginia. From 1950 to 2000, statewide population grew by 2.3 percent per year on average, while the population in the Mount Rogers region grew at a rate of 0.3 percent per year.

Table III-2
Population Change¹
Virginia, MRPDC, and Carroll County
By Decade
1950-2000

Decade	Virginia			MRPDC			Carroll County		
	Numeric Change	Percent Change	Average Annual Growth	Numeric Change	Percent Change	Average Annual Growth	Numeric Change	Percent Change	Average Annual Growth
1950-1960	648,269	19.53%	1.95%	-3,692	-2.25%	-0.23%	-2,977	-11.15%	-1.12%
1960-1970	684,499	17.26%	1.73%	-653	-0.41%	-0.04%	-626	-2.64%	-0.26%
1970-1980	695,349	14.95%	1.49%	21,706	13.62%	1.36%	4,178	18.09%	1.81%
1980-1990	842,400	15.76%	1.58%	-2,913	-1.61%	-0.16%	-676	-2.48%	-0.25%
1990-2000	889,318	14.37%	1.44%	11,815	6.63%	0.66%	2,651	9.97%	1.00%
1950-2000	3,759,835	113.29%	2.27%	26,263	16.04%	0.32%	2,550	9.55%	0.19%

1. Analysis done by MRPDC based on the data found in Table III-1.

As shown in Table III-3, natural increase (the number of births minus the number of deaths) has not been a factor in Carroll County’s population growth. These figures indicate a sustained decline in the county’s young adults in the years of greatest childbearing potential. Thus, there are two main factors driving Carroll County’s population trend, an out-migration of young adults and an in-migration of older age groups.

Table III-3
Natural Increase¹
Carroll County
By Year
1995 - 2003

Year	Live Births	Deaths	Natural Increase
1995	307	297	10
1996	284	322	-38
1997	303	321	-19
1998	254	298	-44
1999	288	311	-23
2000	259	293	-34
2001	274	294	-20
2002	296	312	-16
2003	284	326	-42

1. Virginia Department of Health, Live Births and Deaths.

B. Population Distribution and Density

The distribution of Carroll County’s population has followed the same basic pattern over the past 40 years. Overall, population is distributed relatively evenly across the county, with the exception of a heavier concentration of people between Galax and Hillsville. As can be seen in Table III-4, both the Pipers Gap and Sulphur Springs magisterial districts, the two districts that border the City of Galax, maintain the largest population concentrations in the county. While the population change in the Sulphur Springs district over the past 20 years was not the greatest in the county, Sulphur Springs still has the highest population of the five districts. Development along U.S. Route 58 between Galax and Hillsville continues to spur the expansion of residential growth from these two population centers, especially in the Woodlawn community.

Table III-4
Population Distribution Change¹
Carroll County
By Magisterial District
1980 - 2000

District	Population			Percent Change
	1980	1990	2000	1980 - 2000
Fancy Gap	4,542	4,443	4,926	8.45%
Laurel Fork	4,499	4,375	4,769	6.00%
Pine Creek	3,550	3,293	3,623	2.06%
Pipers Gap	6,787	6,860	7,530	10.95%
Sulphur Springs	7,892	7,623	8,397	6.40%
Total:	27,270	26,594	29,245	7.24%

1. US Census Bureau, Decennial Census.

The population density of Carroll County calculated using the 2000 total population (29,245) and land area (477.7 square miles) is 61.22 persons per square mile. Based on 1970 census data, the county's population density was only 46.74 persons per square mile. Typically, any area with less than 50 persons per square mile is considered rural; therefore, based on population and land area, Carroll County would not be classified as rural. However, if the population concentrated along the U.S. Route 58 corridor is removed from the calculation, then Carroll County has a population density of only 53.21 persons per square mile and better represents the county's rural nature. The 36 square miles along the U.S. Route 58 corridor between Galax and Hillsville (two miles on each side of U.S. Route 58) has a population density of 159.39 persons per square mile and a total population of 5,738. In comparison, the Commonwealth of Virginia has a population density of 177.77 persons per square mile, while the population density of the Mount Rogers Planning District is 68.19 persons per square mile.

C. Racial Composition

Historically, the population of Carroll County has been predominantly white. The results of the 2000 Census indicate that, while the county’s population is still predominantly white, the percentage of non-white population has increased since 1990. Tables III-5 and III-6 list selected racial data for Virginia, the Mount Rogers Planning District, Carroll County, and Galax in 1990 and 2000 respectively.

Table III-5
Selected Racial Data¹
Virginia, MRPDC, Carroll County, and Galax
By Population and Percentage
1990

Locality or Region	Total Pop.	One Race							
		White	Percent	Black or African American	Percent	Asian	Percent	Hispanic or Latino	Percent
Virginia	6,187,358	4,791,739	77.4%	1,162,994	18.8%	156,036	2.5%	160,288	2.6%
MRPDC	178,205	172,973	97.1%	4,497	2.5%	351	0.2%	681	0.4%
Carroll County	26,594	26,286	98.8%	109	0.4%	26	0.1%	151	0.6%
Galax	6,670	6,219	93.2%	387	5.8%	15	0.2%	65	1.0%

1. U.S. Census Bureau, 1990 Census.

As Tables III-5 and III-6 indicate, between 1990 and 2000 the Hispanic population in Carroll County grew by 217 percent from 151 persons in 1990 to 479 persons in 2000. Overall, Hispanics comprised 0.6 percent of the total population of the county in 1990 and 1.6 percent of the total population in 2000. The county’s remaining non-white population remained statistically equal from 1990 to 2000.

Table III-6
Selected Racial Data¹
Virginia, MRPDC, Carroll County, and Galax
By Population and Percentage
2000²

Locality or Region	Total Pop.	One Race							
		White	Percent	Black or African American	Percent	Asian	Percent	Hispanic or Latino	Percent
Virginia	7,078,515	5,120,110	72.3%	1,390,293	19.6%	261,025	3.7%	329,540	4.7%
MRPDC	190,020	181,880	95.7%	5,115	2.7%	464	0.2%	2,476	1.3%
Carroll County	29,245	28,436	97.2%	129	0.4%	28	0.1%	479	1.6%
Galax City	6,837	5,887	86.1%	428	6.3%	48	0.7%	757	11.1%

1. U.S. Census Bureau, 2000 Census.

2. 1990 and 2000 data are not comparable because in 2000, for the first time, individuals could report one or more race; in 1990 individuals could report only one race. The selected 2000 data shown here excludes the data on individuals reporting more than one race.

D. Age/Sex Characteristics

Over the past thirty years, Carroll County’s population has grown older. In an on-going trend, females outnumbered males by 380 in 1990 and 413 in 2000. This trend leads to a higher median age for females than for males, which has consistently increased for both sexes since 1970 as shown in Table III-7.

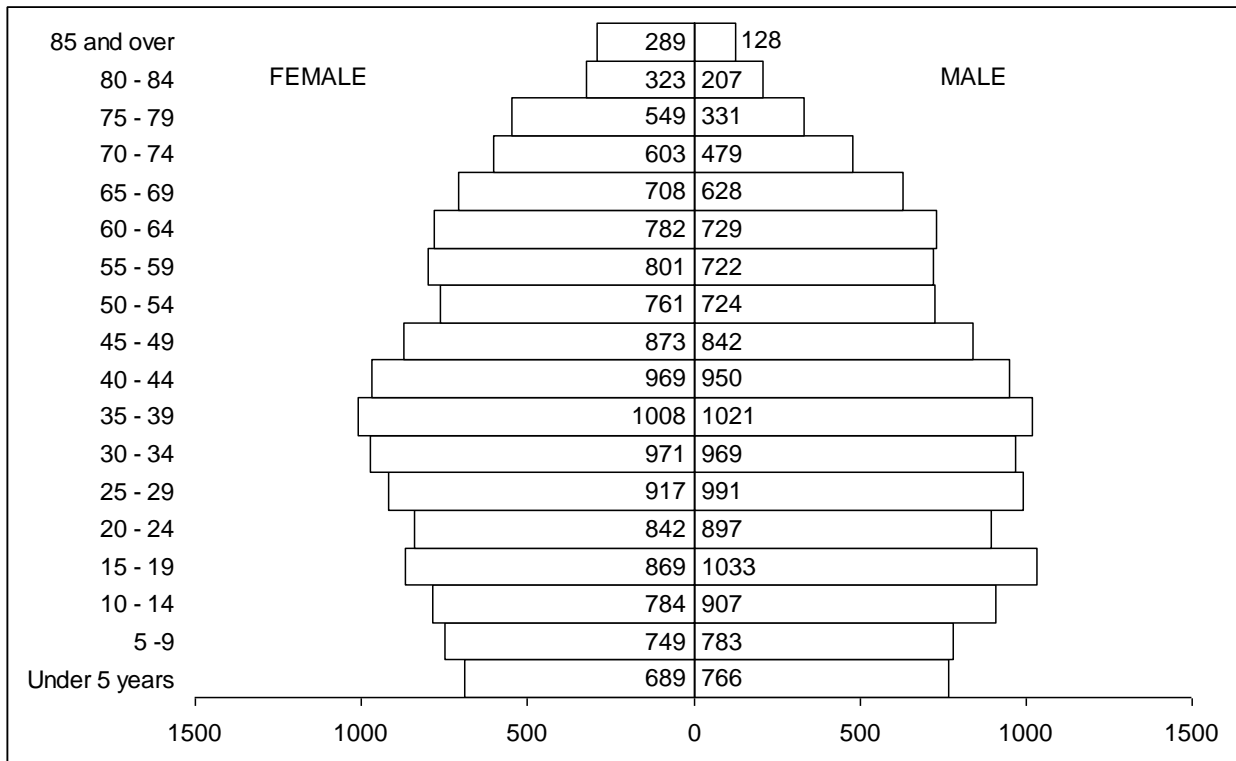
Table III-7
Median Age¹
Carroll County
By Year
1970 - 2000

Year	Males	Females	Total Population
1970	30.7	32.4	31.6
1980	31.7	34.8	33.3
1990	36.0	39.6	37.8
2000	39.2	42.3	40.7

1. U.S. Census Bureau, Decennial Census.

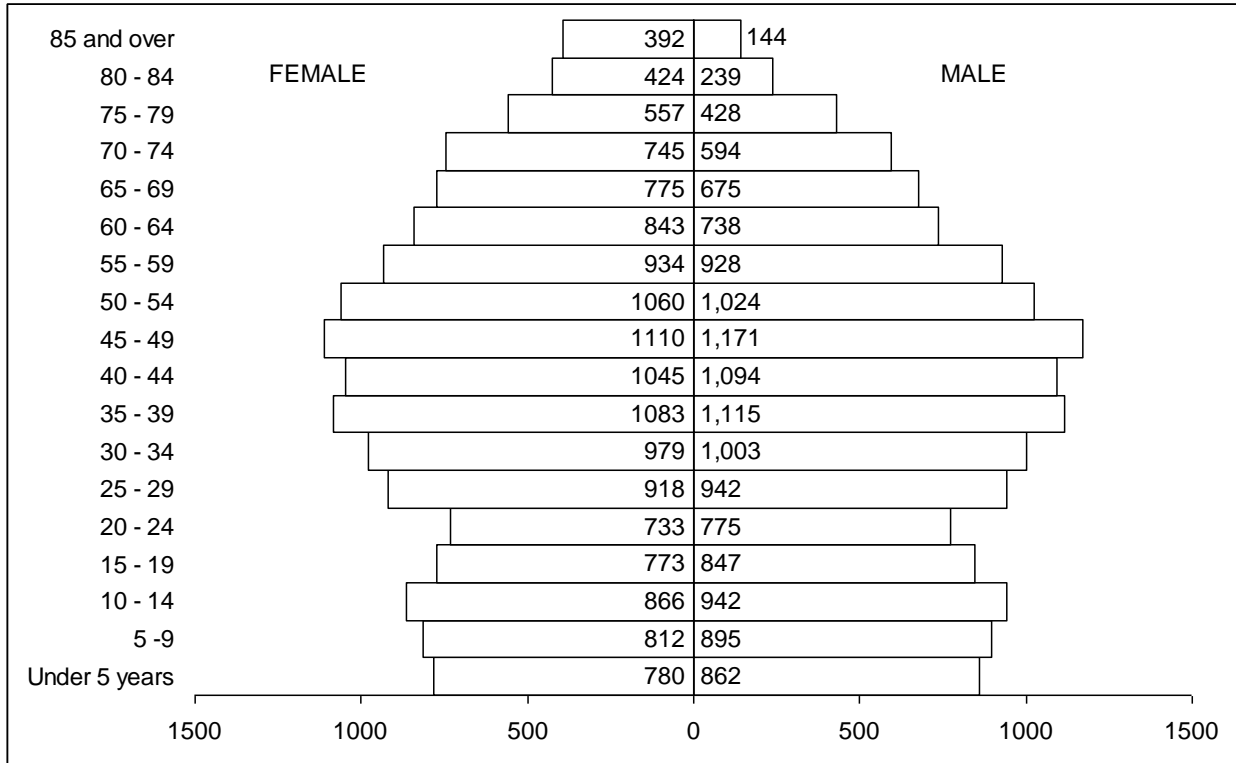
As can be seen in Table III-8 and by comparing the population pyramids from 1990 and 2000, the county experienced growth in practically all age groups. Males continue to outnumber females in the 0 to 19 age brackets, while females continue to outnumber males in the 50 and older age categories. As a percentage of the county's total population, the youngest age categories (0 to 19) are declining, a fact supported by the negative natural increase in the county beginning in 1995. Since 1980, the 60 and over age brackets have experienced the highest rate of growth. Overall, Carroll County's population is growing older and in-migration continues to be the most contributing factor to population growth.

Chart III-1
Population Pyramid¹
Carroll County
1990



1. U.S. Census Bureau, 1990 Census.

Chart III-2
Population Pyramid¹
Carroll County
2000



1. U.S. Census Bureau, 2000 Census.

Table III-8
Population Distribution
Carroll County
By Age Groups
1980-2000

Age Group	1980		1990		2000	
	Number	Percent	Number	Percent	Number	Percent
0-19	8,254	30.3%	6,580	24.7%	6,777	23.2%
20-59	13,914	51.0%	14,258	53.6%	15,914	54.4%
60 and over	5,102	18.7%	5,756	21.6%	6,554	22.4%
Total:	27,270	100%	26,594	100%	29,245	100%

1. US Census Bureau, Decennial Census.

E. Population Projections

Estimating population size into the future is an inexact science based on historic trends and available information. Any projections should be viewed with caution, especially those based on small population numbers, as is true for the communities that comprise the Mount Rogers Planning District.

High-range projections for Carroll County made in 1973 by the Virginia State Water Control Board were fairly accurate; however, it is still best to view population projections as educated guesses. Population projections for the same time period (1975 to 2000) released by the Virginia Department of State Planning and Community Affairs in 1975 were much lower than the Virginia State Water Control Board projections and the actual population figures reported in the census. Factors affecting local populations include changing economic conditions, rate of natural increase, and migration trends. Projections are based on information available at the moment; the estimates cannot account for unforeseen circumstances, such as industrial closings, that can greatly affect the future of a community.

Table III-9, shown below, shows population projections made by the Virginia Employment Commission for Carroll County, the surrounding region, and the state. Behind Bland County, Carroll County's population is projected to grow by the second highest percentage (19.34 percent) in the Mount Rogers region between 2000 and 2030 and is predicted to have the highest overall growth in the region during that time period.

Table III-9
Population Projections¹
Mount Rogers Region and Virginia
By Decade
2000 to 2030

Locality or Region	2000 Census²	2010 Estimate	2020 Estimate	2030 Estimate	Difference 2000 - 2030	Percent Difference
Bland County	6,871	7,600	8,300	8,800	1,929	28.07%
Carroll County	29,245	31,000	32,900	34,900	5,655	19.34%
Grayson County	17,917	17,100	17,299	17,500	-417	-2.33%
Smyth County	33,081	33,800	34,500	35,200	2,119	6.41%
Washington County	51,103	52,400	53,400	54,400	3,297	6.45%
Wythe County	27,599	28,600	29,599	30,600	3,001	10.87%
City Bristol	17,367	16,800	16,600	16,400	-967	-5.57%
City Galax	6,837	6,800	6,800	6,800	-37	-0.54%
MRPDC	190,020	194,100	199,398	204,600	14,580	7.67%
Virginia	7,078,515	7,892,900	8,601,900	9,275,101	2,196,586	31.03%

1. Virginia Employment Commission, March 2005.

2. US Census Bureau, 2000 Census.

CHAPTER IV ECONOMY

A. Labor Force, Employment, and Unemployment

Like other rural localities in Southwest Virginia, Carroll County's economic base has evolved from predominantly agricultural to a concentration of employment in the manufacturing, service, and trade sectors. The unemployment rate has generally been a problem in the Mount Rogers region since the national economic downturn in 1991-92. The lack of infrastructure (water and sewer) and limited industrial recruitment have been limiting factors to job growth. Until Carroll County can expand its industrial base, much of the county's labor force will continue to look for opportunities in the City of Galax, Wythe County, Surry County, North Carolina, and other locations. A review of data on commuting patterns reveals that only around 50 percent of the county's resident workforce can find jobs in the county.

According to the Virginia Employment Commission, employment in the county fluctuated between 1995 and 2004, with unemployment reaching 10.1 percent in 2001. In 2003, nearly 32 percent of the county's workforce employed in non-agricultural jobs was employed in the manufacturing industry. The next largest industry sector based on employment was the retail trade sector, at approximately 16 percent, followed by the accommodation and food service sector with 14.5 percent of the county's workforce. Nevertheless, both the retail trade and manufacturing sectors have suffered a dramatic loss of jobs during the early 2000s, with a decline of 28.9 percent in manufacturing jobs and 23.6 percent in retail trade jobs. The sectors with the greatest increase in employment during the same period were the service sectors, specifically the healthcare and social assistance sector and administrative and waste services sector.

Table IV-A
Non-Agricultural Employment
Carroll County
1999 and 2003
By Industry

Industry	1999		2003		Percent Change
	Persons	Percent	Persons	Percent	
Construction	450	9.0%	468	10.6%	4.0%
Manufacturing	1,964	39.3%	1,397	31.7%	-28.9%
Wholesale Trade	59	1.2%	69	1.6%	16.9%
Retail Trade	925	18.5%	707	16.0%	-23.6%
Transportation and Warehousing	285	5.7%	273	6.2%	-4.2%
Information	40	0.8%	38	0.9%	-5.0%
Finance and Insurance	74	1.5%	75	1.7%	1.4%
Real Estate, Rental, and Leasing	30	0.6%	27	0.6%	-10.0%
Professional and Technical Services	73	1.5%	73	1.7%	0.0%
Administrative and Waste Services	37	0.7%	47	1.1%	27.0%
Health Care and Social Assistance	336	6.7%	460	10.4%	36.9%
Arts, Entertainment, and Recreation	47	0.9%	36	0.8%	-23.4%
Accommodation and Food Services	573	11.5%	640	14.5%	11.7%
Other Services (except Public Administration)	108	2.2%	97	2.2%	-10.2%
TOTAL	5,001	100.0%	4,407	100.0%	-11.9%

Source: Virginia Employment Commission, Quarterly Census of Employment and Wages

Carroll County has been faced with periods of unemployment in excess of the state and national unemployment rates. In the ten-year span between 1995 and 2004, the unemployment rate peaked at 10.1 percent and hovered between 6.0 to 8.3 percent from 1999 to 2003. These rates are far in excess of the state and national averages. With approximately 50 percent of Carroll County residents forced to leave the county for jobs in localities such as the City of Galax and Wythe County, areas where jobs have not been plentiful, unemployment has swelled in Carroll County due to the lack of economic stimulus to absorb those seeking jobs. The boom in unemployment during the early 2000s is largely due to the relocation of textile industries out of the United States.

**Table IV-B
Labor Force
Carroll County
1995 - 2004
By Year**

Year	Civilian Labor Force	Employed	Unemployed	Unemployment Rate
2004	14,655	13,949	706	4.8
2003	13,508	12,581	927	6.9
2002	13,423	12,311	1112	8.3
2001	13,678	12,294	1384	10.1
2000	13,624	12,807	817	6
1999	13,930	13,012	918	6.6
1998	13,711	12,981	730	5.3
1997	13,708	13,166	542	4
1996	13,932	13,113	819	5.9
1995	14,194	13,513	681	4.8

Source: Virginia Employment Commission

An analysis of employment trends over the past ten years, shown in Table IV-B, shows the rather dramatic fluctuation of unemployment in Carroll County with a fairly sharp decline in the county's annual unemployment rate between 2001 and 2004. The Virginia Employment Commission had only released provisional data for 2004 during the development of this plan. While the decline in unemployment in 2004 is probably accurate, the increase in labor force and total employed persons is worthy of note. Continued growth in employment and labor force will result from a diversification of the county's economy, retention of existing industries, and recruitment of new industry.

B. Income

As shown in Table IV-C, median income values in Carroll County are much lower than median values in the state. In fact, 1999 values in the county are lower than 1989 state values. Nevertheless, the rate of change in Carroll County is slightly higher than the state, which

indicates that, although the county values are lower, the county's income is increasing faster than the state.

Table IV-C
Income
Carroll County and Virginia
1989 and 1999
By Income Type

Income Type	Carroll County			Virginia		
	1989	1999	Percent Change	1989	1999	Percent Change
Median Household Income	21,564	30,597	41.9%	33,328	46,677	40.1%
Median Family Income	24,885	36,755	47.7%	38,213	54,169	41.8%

Source: U.S. Census Bureau, Decennial Census

1) Per Capita Personal Income

In 2003, Carroll County had an average per capita personal income (PCPI) of \$21,476. This PCPI ranked 84th in the state and was 63.7 percent of the state average (\$33,730) and 68.2 percent of the national average (\$31,472). The county's average annual growth rate of PCPI over the past 10 years was 3.6 percent, while the average annual growth rate for Virginia was 4.5 percent. Southwest Virginia has a tradition of income below the state average, and these figures indicate that Carroll County is falling further behind the state in income levels.

2) Household Income

In Carroll County, 13.9 percent of households had incomes less than \$10,000 and just over a quarter of the households had annual incomes ranging from \$10,000 to \$24,999. In contrast, 22.8 percent of the households in the county have incomes exceeding \$50,000. Table IV-D provides data on household income in the county.

Table IV-D
Household Income
Carroll County
2000

By Income Category

Income Category	Households	Percent
Less than \$10,000	1,693	13.9%
\$10,000 to \$14,999	1,068	8.8%
\$15,000 to \$24,999	2,258	18.5%
\$25,000 to \$34,999	1,912	15.7%
\$35,000 to \$49,999	2,479	20.3%
\$50,000 to \$74,999	1,882	15.4%
\$75,000 to \$99,999	473	3.9%
\$100,000 or greater	423	3.5%
TOTAL	12,188	100.0%

Source: U.S. Census Bureau, 2000 Census

3) Poverty Income

Another indicator of income distribution is poverty status of the population. Tables IV-E and IV-F provide data on persons and families below the poverty level for the county with comparative data for the state.

As shown by the data in Table IV-E, the overall “poverty rate” in Carroll County is slightly higher than the rate in the Commonwealth. The disparity is particularly strong when one looks at the groups with persons age 65 and over and families with female householder. Female householder families with children under eighteen is the family group with the highest poverty rate, with 41.5 percent living in poverty.

Table IV-E
Poverty Status
Carroll County and Virginia
1999
By Population Group

Group	Carroll County			Virginia
	All persons for whom poverty status was determined	Number below poverty level	Percent below poverty level	Percent below poverty level
All Persons	29,083	3,623	12.5%	9.6%
Persons 65 & up	4,909	691	14.1%	9.5%
All Families	8,821	767	8.7%	7.0%
Families with children under eighteen	3,630	481	13.3%	11.4%
Families with female householder	971	311	32.0%	23.0%
Female householder with children under eighteen	595	247	41.5%	29.8%

Source: U.S. Census Bureau, 2000 Census

Table IV-F
Children in Poverty
Carroll County and Virginia
1989 and 1999
By Locality

Locality	Families in Poverty				Families in Poverty with Related Children 5 to 17 Years Old			
	Number		Percent		Number		Percent	
	1989	1999	1989	1999	1989	1999	1989	1999
Carroll County	815	767	10.0%	8.7%	299	264	3.7%	3.0%
Virginia	126,897	129,890	7.7%	7.0%	46,451	53,065	9.4%	8.9%

Source: U.S. Census Bureau, 2000 Census

Data published by the U.S. Census Bureau for 2000, shows the rate of families living in poverty decreased by 1.3 percent during the 1990s. The same declining trend can be seen for families living in poverty with related children 5 to 17 years old. The rate of poverty for this family group is much lower in Carroll County than in Virginia.

4) **Average Weekly Wage**

Another measure of income in the county is average weekly wage information from the Virginia Employment Commission. Table IV-G indicates the change in average weekly wage rates between 1997, 2000, and 2003.

Table IV-G
Average Weekly Wage
Carroll County, Mount Rogers Planning District, and Virginia
1997, 2000, and 2003
By Locality

Locality	1997	2000	2003	Percent Change 1997 - 2003
Carroll County	\$346	\$394	\$419	21.1%
MRPD	\$399	\$450	\$496	24.3%
Virginia	\$568	\$676	\$741	30.5%

Source: Virginia Employment Commission

Carroll County's wage rate remained well below the state average and only slightly lower than the average for the Mount Rogers Planning District. By 2003, the average weekly wage had climbed to 56.5 percent of the state average, compared to 66.9 percent for the planning district. Carroll County has had a consistently lower weekly wage than the planning district for the entire period.

Table IV-H shows the average weekly wages per worker by industry sector and locality during the third quarter of 2004. Carroll County's average wage for all industries was the lowest in the planning district. Furthermore, the City of Galax and Carroll County have the lowest average weekly wages in the manufacturing sector in the entire planning district.

Table IV-H
Average Weekly Wage
Mount Rogers Planning District Localities
Third Quarter 2004
By Industry and Percent of State

Locality	All Industries	Percent	Manufacturing	Percent	Retail	Percent
Bland	\$589	77.8%	\$799	101.1%	\$272	60.4%
Carroll	\$405	53.5%	\$498	63.0%	\$342	76.0%
Grayson	\$420	55.5%	\$639	80.9%	\$285	63.3%
Smyth	\$500	66.1%	\$640	81.0%	\$335	74.4%
Washington	\$519	68.6%	\$595	75.3%	\$360	80.0%
Wythe	\$455	60.1%	\$614	77.7%	\$386	85.8%
Bristol	\$510	67.4%	\$681	86.2%	\$349	77.6%
Galax	\$457	60.4%	\$463	58.6%	\$363	80.7%

Source: Virginia Employment Commission

C. Tax Base

Real estate and personal property in Carroll County represent the two major sources of income available to the county. These two indicators provide a good measure of the overall economic base and relative wealth of the county's citizens. The following tables compare real estate fair market values and personal property values between 1998 and 2003. As can be seen in the table IV-I, real estate fair market values and fair market values per capita in the county have grown at a much slower rate than in the Commonwealth. However, personal property values, shown in Table IV-J, grew at a much faster rate than personal property values in the state.

Table IV-I
Fair Market Value of Real Estate
Carroll County
1998 and 2003

	Carroll County			Virginia
	1998	2003	Percent Change	Percent Change
Fair Market Value	\$955,806,400	\$1,082,787,000	13.3%	52.1%
Fair Market Value Per Capita	\$32,846	\$36,705	11.7%	42.8%

Source: Virginia Department of Taxation

Table IV-J
Personal Property Values
Carroll County
1998 and 2003

	Carroll County			Virginia
	1998	2003	Percent Change	Percent Change
Total Personal Property Value	\$167,771,881	\$235,717,187	40.5%	36.0%
Personal Property Value Per Capita	\$5,765	\$7,990	38.6%	27.6%

Source: Virginia Department of Taxation

D. Economic Sectors

1) Agriculture

The 2000 Census found that a total of 307 county residents (16 years and older) were employed in agricultural production, a decrease from 419 in 1990 and 677 in 1980. Although the number of persons employed in agriculture in Carroll County is relatively small and continues to decline, the economic impact of agriculture cannot be ignored. In 2002, 120,910 acres of land was devoted to farms from which \$25.9 million in farm products were sold. Table IV-K provides some comparative data from the 1997 and 2002 Census of Agriculture.

Table IV-K
Agricultural Data
Carroll County
1997 and 2002

	2002	1997	Percent Change
Land in Farms (acres)	121,910	121,894	0.0%
Number of Farms	953	1,115	-14.5%
Average Farm Size (acres)	128	109	17.4%
Total Market Value of Products Sold	\$25,912,000	\$19,873,000	30.4%
Average Per Farm	\$27,190	\$17,823	52.6%

Source: U.S. Department of Agriculture, Census of Agriculture 2002 and 1997

The average market value of products sold per farm increased by 52.6 percent between 1997 and 2002, an increase that far outpaced the inflation rate for the period. The consumer price index rose 19.4 percent between 1997 and 2002. Of the \$25.9 million in agricultural products sold in 2002, 25.3 percent of the value was from crops and 74.7 percent was from livestock and poultry products. The percentage of farms with sales of \$10,000 or more was 34.1 percent and for those with sales of \$100,000 or more was 4.3 percent. The average value of buildings and land per acre in 2002 was \$2,587.

2) **Manufacturing**

Carroll County has a manufacturing employment base that has fluctuated greatly since the early 1990s. Employment peaked at 2,303 persons in 1998, declined to 1,345 in 2001, and slowly increased to 1,397 persons in 2003. Between 1998 and 2003, employment in the manufacturing section declined by 39.3 percent. Based on employment, manufacturing is still the largest industry sector in the county.

The employment base is quite diversified as shown in Tables IV-L and IV-M. Like most counties in the region, Carroll County did experience an out-migration of textile industries; nevertheless, the county has been able to recruit and retain several manufacturing firms with a range of industry types, including textiles.

**Table IV-L
Major Employers
Carroll County
2004**

Rank	Employer	OC *	Size Code**
1	Carroll County School Board	30	9
2	SW Virginia Training Center	20	7
3	Parkdale Mills	50	7
4	Kentucky Derby Hosiery Company	50	7
5	Paxar Americas, Inc.	50	6
6	County of Carroll	30	6
7	Wayn Tex Inc	50	6
8	VDOT	20	6
9	D.L.B., Inc.	50	6
10	B Microfarads Inc	50	6
11	Cockerham's Fuel Center & Restaurant	50	6
12	Hills Trucking Company	50	5
13	Trinity Mission	50	5
14	Carroll Mental Health Center	30	5
15	Turman Sawmill	50	5
16	D.B.T. America, Inc.	50	5
17	Flowers Transport	50	5
18	Young & Associates of VA Inc	50	5
19	Heritage Hall Health Care	50	5
20	Sowers Construction Company	50	5
21	Johnson Family Ford, Mercury	50	5
22	McDonald's	50	5
23	Zip Mart	50	4
24	Eagle Carports	50	4
25	South West Virginia Home Health Care	50	4

Ownership Code (OC)*	Ownership Type
10	Federal Government
20	State Government
30	Local Government
50	Private
Size Code**	Number of Employees
9	1000+ Employees
8	500-999 Employees
7	250-499 Employees
6	100-249 Employees
5	50-99 Employees
4	20-49 Employees

Source: Virginia Employment Commission, 2005

Table IV-N
Major Manufacturing Employers
Carroll County
Third Quarter 2004

Company Name	NAICS Classification	Number of Employees
Parkdale Mills	Textile mills	250 to 499
Kentucky Derby Hosiery Company	Apparel manufacturing	250 to 499
Paxar Americas, Inc.	Textile mills	100 to 249
Wayn Tex Inc	Textile mills	100 to 249
B Microfarads Inc	Computer and electronic product manufacturing	100 to 249
Turman Sawmill	Wood product manufacturing	50 to 99
D.B.T. America, Inc.	Machinery manufacturing	50 to 99
Eagle Carports	Fabricated metal product manufacturing	20 to 49
Parkdale America	Textile mills	20 to 49
Tri State Carports Inc	Fabricated metal product manufacturing	20 to 49

Source: Virginia Employment Commission

3) **Retail Trade**

A good indicator of the health of the local retail trade industry is the trend in taxable retail sales. Taxable retail sales data portray the size and volume of the retail trade industry and demonstrate how much revenue is being redistributed in the local economy via sales tax revenues. Taxable retail sales reflect the total

taxable value of retail goods exchanged within a locality. Table IV-M displays retail sales data for the county comparing 1999 with 2004 and the percent change with that of the state.

**Table IV-M
Retail Sales
Carroll County
1999 and 2004**

	Carroll County			Virginia
	1999	2004	Percent Change	Percent Change
Total Retail Sales	\$88,398,207	\$120,694,419	36.5%	26.9%
Total Retail Sales Per Capita	\$3,027	\$4,064	34.2%	19.1%

Source: Virginia Department of Taxation

As shown in Table IV-M, Carroll County's retail sales increased by 36.5 percent between 2000 and 2004 as compared to a 26.9 percent increase for the state. The rate of change in retail sales per capita, at 34.2 percent, was well above the state's per capita increase of 19.1 percent. More detailed information is available on retail sales by the type of business category. Table IV-N provides this data and compares the years 2000 and 2004.

**Table IV-N
Retail Sales
Carroll County
2000 and 2004**

By Business Category

Business Category	2000	2004	Percent Change
Apparel Group	\$2,362,207	\$1,734,607	-26.57%
Automotive Group	\$10,143,308	\$12,472,607	22.96%
Food Group	\$42,014,252	\$42,053,387	0.09%
Furniture, Home Furnishings, & Equipment Group	\$1,860,194	\$952,355	-48.80%
General Merchandise Group	\$12,045,803	\$10,631,244	-11.74%
Lumber, Building Material, & Supply Group	\$1,451,477	\$1,448,086	-0.23%
Fuel Group	***	***	***
Machinery, Equipment, & Supplies Group	\$746,282	\$862,355	15.55%
Miscellaneous	\$25,512,788	\$50,539,778	98.10%
Total	\$96,136,311	\$120,694,419	25.55%

Source: Virginia Department of Taxation

4) Services

Both national and state trends in employment have confirmed increases in the proportion of the workforce employed in the service industry. The term “service industry” is widely misused, with many people stereo-typing the industry as low-paying and dead-end. A closer look at the component businesses contained within the service sectors reveals higher paying types: healthcare, consulting, engineering, accounting, etc. These businesses require specialized jobs skills and offer above-average pay.

Table IV-O
Service Employment
Carroll County
Third Quarters 2000, 2002, and 2004
By Job Category

Job Category	3rd Quarter 2000	3rd Quarter 2002	3rd Quarter 2004	Percent Change 2000 - 2004
Trade, Transportation, and Utilities	1,366	1,190	1,141	-16.5%
Financial Activities	100	100	100	0.0%
Professional and Business Services	127	116	135	6.3%
Education and Health Services	1,725	1,855	1,954	13.3%
Leisure and Hospitality	701	742	797	13.7%
Other Services	104	96	98	-5.8%
Public Administration	236	228	250	5.9%
Total	4,359	4,327	4,475	2.7%

Source: Virginia Employment Commission

While many of the industry sectors in Carroll County have declined in employment, such as manufacturing and retail trade, the service industry continues to grow. Between 2000 and 2004, service industry employment increased by 2.7 percent. In contrast, employment in the manufacturing sector declined by 15.2 percent during that same period.

5) Tourism

The tourism industry is often overlooked as an important element of a local economy. Carroll County, with easy access to Interstates 77 and 81, the Blue Ridge Parkway, and the State of North Carolina, can benefit from private, state, and federal recreational attractions that add economic benefits from tourism.

Table IV-P provides a glimpse at tourism-related data and trends through 2001, including jobs, taxes collected, and traveler spending.

Carroll County's major travel attractions include: the Blue Ridge Parkway, Blue Ridge Music Center, Southwest Virginia Farmers' Market, and several museums and historic sites. There are excellent camping, hiking, and picnicking opportunities, including the New River Trail State Park, Beaver Dam Creek Walking Trail, and Devil's Den Nature Preserve. Traditional music and heritage crafting can be experienced throughout the county, especially along the Crooked Road: Virginia's Heritage Music Trail.

Carroll County has embraced tourism as an important component of the local economy. The Crooked Road: Virginia's Heritage Music Trail is expected to triple the number of tourists visiting Southwest Virginia between 2003 and 2008. As the county continues to support this initiative and develop new attractions, the economic impacts should increase significantly.

**Table IV-P
Tourism
Carroll County
1997 - 2001**

Travel Impacts¹					
	1997	1998	1999	2000	2001
Traveler Spending	\$35,850,000	\$36,503,000	\$40,278,000	\$37,799,470	\$34,868,895
Change from Previous Year	11.2 %	1.8 %	10.3 %	-6.2 %	-7.8 %
Travel Payroll	\$6,540,000	\$6,593,000	\$7,192,000	\$6,834,987	\$6,555,113
Travel Employment	460	455	481	438	417
State Travel Taxes	\$1,810,000	\$1,864,000	\$2,168,000	\$2,040,000	\$1,933,236
Local Travel Taxes	\$2,570,000	\$2,684,000	\$2,888,000	\$2,722,457	\$2,491,069
Retail Sales, Excise Tax Collections and Excise Tax Rates²					
	1997	1998	1999	2000	2001
State Taxable Lodging Sales	\$3,445,921	\$3,843,647	\$4,261,612	\$4,314,091	\$3,745,694
Local Lodging Excise Tax Collected	\$44,582	\$83,249	\$105,730	\$0	N/A
Local Lodging Excise Tax Rate	2.0 %	2.0 %	2.0 %	2.0 %	2.0 %
State Taxable Food Service Sales	\$9,237,078	\$10,813,960	\$11,694,892	\$12,048,390	\$12,806,355
Local Food Serv. Ex. Tax Collected	\$165,578	\$279,962	\$321,164	\$0	N/A
Local Food Service Tax Rate	4.0 %	4.0 %	4.0 %	4.0 %	4.0 %
Local Admissions Ex. Tax Collected	\$0	\$0	\$0	\$0	N/A
Local Admissions Tax Rate	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
Lodging³					
	Hotel / Motel	Bed & Breakfast	Cabin / Cottage	Campground	Total
Establishments	13	1	0	4	18
Share of State	1.0 %	0.2 %	0.0 %	1.8 %	0.8 %
Rooms	605	8	0	249	862
Share of State	0.5 %	0.4 %	0.0 %	1.0 %	0.6 %

Source: Virginia Tourism Corporation

1. Travel Economic Impact Model, Travel Industry Association of America.

2. Total state taxable sales, state lodging sales, and state food service sales: Virginia Department of Taxation. Local lodging, local food service, and local admissions excise taxes collected: Auditor of Public Accounts. Local lodging, local food service, and local admissions excise tax rates: Weldon Cooper Center for Public Service at the University of Virginia.

3. Survey of lodging establishments: Virginia Tourism Corporation.

*** Indicates data withheld by the Department of Taxation to avoid identification.

6) Commuting to Work

The 2000 Census data regarding commuting to work reveal that Carroll County sends approximately half of its workforce to surrounding localities for employment. Approximately 6,641 residents commuted out for jobs, compared to 3,314 in-commuters to the county. Interstate 77 bisects Carroll County and serves as a direct link to Wythe County to the north and Surry County, North Carolina to the south. Over 36 percent of the out-commuters that live in Carroll County commute to these two counties for jobs. Approximately 33 percent of the out-commuters that live in Carroll County commute to the City of Galax. To reduce the number of residents that commute out of the county for employment, Carroll County must continue to focus on opportunities for expanding its industrial base and diversifying its economy.

**Table IV-Q
Commuting Patterns
Carroll County
2000**

People who live and work in the county: 6,806			
Out-Commuters to:		In-Commuters from:	
City of Galax	2,189	Grayson County	1,172
Surry County, NC	1,827	City of Galax	783
Wythe County	627	Wythe County	403
Pulaski County	469	Surry County, NC	249
Patrick County	229	Floyd County	169
Forsyth County, NC	218	Patrick County	132
Grayson County	173	Pulaski County	107
Montgomery County	94	Alleghany County, NC	57
Floyd County	85	Mercer County, WV	30
Alleghany County, NC	75	Wilkes County, NC	20

Work Elsewhere	655	From Elsewhere	192
Total Out-Commuters	6,641	Total In-Commuters	3,314
Net In-Commuting: -3,327			

Source: U.S. Census Bureau, 2000 Census

CHAPTER V HOUSING

A. Existing Housing Conditions

The housing stock in Carroll County grew by 20.2 percent between 1990 and 2000 to a total of 14,680 housing units. This rate of growth in housing slightly outpaced both the Mount Rogers Planning District and the Commonwealth of Virginia, as shown in Table V-1. The number of vacant housing units in Carroll County also increased during the 1990s, however, at a slightly lower rate than the Mount Rogers Planning District.

Like neighboring Grayson County, much of the increase in vacant housing units can be attributed to the development of recreational homes. Housing units identified as seasonal, recreational, or occasional use in the 2000 Census numbered 1,380, an increase of 502 units since 1990. The growth in Carroll County's recreational housing is influenced largely by the county's subdivision policies, the lack of a zoning ordinance, and the Blue Ridge Parkway.

**Table V-1
Total Housing Units¹
Carroll County, MRPDC, and Virginia
By Occupancy Status
1990 and 2000**

Status	Carroll County		Percent Change	MRPDC		Percent Change	Virginia		Percent Change
	1990	2000		1990	2000		1990	2000	
Occupied	10,463	12,186	16.5%	69,085	78,701	13.9%	2,291,830	2,699,173	17.8%
Vacant	1,746	2,494	42.8%	7,450	10,789	44.8%	204,504	205,019	0.25%
TOTAL:	12,209	14,680	20.2%	76,535	89,490	16.9%	2,496,334	2,904,192	16.3%

1. U.S. Census Bureau, Decennial Census.

Table V-2
Housing Composition¹
Carroll County
By Type of Housing Unit
1990 and 2000

Housing Units	1990		2000	
	Carroll County	Percent of Total	Carroll County	Percent of Total
1-unit, detached	9,203	75.40%	10,687	72.80%
1-unit, attached	63	0.50%	68	0.50%
2 units	91	0.70%	76	0.50%
3 or 4 units	192	1.60%	173	1.20%
5-9 units	115	0.90%	163	1.10%
10-19 units	43	0.40%	56	0.40%
20-49 units	0	0.00%	40	0.30%
50 or more units	0	0.00%	0	0.00%
Mobile home	2,347	19.20%	3,412	23.20%
Other ²	155	1.30%	5	0.00%
Total:	12,209	100%	14,680	100%

1. U.S. Census Bureau, Summary Tape File 3, 1990 and 2000.

As shown in Table V-2, 23 percent of the housing in Carroll County is composed of mobile homes. The Pipers Gap and Fancy Gap districts, the two most southwestern districts in the county, have the highest percentage of mobile homes. Overall, the number of mobile homes has increased in the county from 2,347 in 1990 to 3,412 in 2000.

Single family, detached housing units continues to be the largest housing category in the county; although, the percentage of single family, detached units decreased by 2.6 percent during the 1990s. The remaining housing types remained statistically similar between 1990 and 2000. Other than mobile homes and single family detached units, the “other” housing unit category,

which includes boats, recreational vehicles, vans, etc., witnessed the most significant statistical change during the 1990s. Between 1990 and 2000, the number of “other” housing units decreased from 155 to 5.

Table V-3 lists values for owner-occupied housing in Carroll County, the Mount Rogers Planning District, and the Commonwealth of Virginia for 1990 and 2000. The number of housing units valued at over \$100,000 increased dramatically in Carroll County during the 1990s. In 1990, there were only 11 houses valued at \$200,000 or higher. By 2000, the number of housing units in that value range had increased to 149. The U.S. Census Bureau reports housing unit values from sample data and not 100 percent data; therefore, the figures listed in Table V-3 do not represent the total housing data presented in other tables throughout this chapter.

Table V-3
Comparative Values For Owner-Occupied Housing Units¹
Carroll County, MRPDC, and Virginia
By Value Range
1990 and 2000

Value	1990			2000		
	Carroll County	MRPDC	Virginia	Carroll County	MRPDC	Virginia
Less than \$15,000	325	2,177	20,639	108	675	8,034
\$15,000 to \$19,999	225	1,525	12,696	37	475	4,727
\$20,000 to \$24,999	318	1,919	16,453	48	788	8,249
\$25,000 to \$29,999	291	2,227	20,612	149	788	8,249
\$30,000 to \$34,999	451	2,733	28,805	135	1,487	11,605
\$35,000 to \$39,999	462	2,944	33,788	227	1,445	15,289
\$40,000 to \$49,999	1,043	5,580	80,038	743	3,652	37,545
\$50,000 to \$59,999	595	4,591	94,809	808	4,212	55,812
\$60,000 to \$74,999	658	4,942	164,226	1,043	6,475	129,210
\$75,000 to \$99,999	375	3,465	214,633	1,244	9,367	277,848
\$100,000 to \$124,999	92	965	114,156	545	4,165	197,618
\$125,000 to \$149,999	41	594	91,711	257	2,520	175,670
\$150,000 to \$174,999	12	256	73,883	196	1,440	133,343
\$175,000 to \$199,999	3	76	59,018	86	832	100,656
\$200,000 to \$249,999	6	145	73,874	42	595	127,984
\$250,000 to \$299,999	0	55	43,568	27	403	81,629
\$300,000 to \$399,999	5	46	37,098	71	367	75,399
\$400,000 to \$499,999	0	19	13,982	0	62	31,694
\$500,000 or more	0	13	14,445	9	115	32,054
TOTAL units sampled:	4,902	34,272	1,208,434	5,775	39,678	1,510,798
Median housing value:	\$43,100	\$45,563	\$90,400	\$68,900	\$72,938	\$125,400

1. U.S. Census Bureau, Decennial Census.

Table V-4, provides a breakdown of housing in Carroll County by the year constructed. During both the 1970s and 1990s the county witnessed the greatest increase in new home construction, which corresponds to increased population growth during those decades. Over 1,500 or 10.6 percent of the housing units in Carroll County were constructed on or prior to 1939. While this may appear to be a high percentage of older housing, Carroll County does have

a lower percentage of houses constructed during this time period than neighboring Grayson and Wythe Counties.

**Table V-4
Housing Units¹
Carroll County
By Year Constructed
2000**

Year Built	Number	Percent
Built 1999 to March 2000	341	2.3%
Built 1990 to 1998	2,964	20.2%
Built 1980 to 1989	2,106	14.3%
Built 1970 to 1979	2,864	19.5%
Built 1960 to 1969	2,188	14.9%
Built 1950 to 1959	1,655	11.3%
Built 1940 to 1949	1,008	6.9%
Built 1939 or earlier	1,554	10.6%
TOTAL:	14,680	

1. U.S. Census Bureau, 2000 Census.

The majority of housing units in Carroll County are owner-occupied, with approximately 82 percent of the 12,186 occupied units falling in that tenure category. While the total number of owner-occupied housing units in 2000 was 1,299 units higher than in 1990, the actual percentage of owner-occupied housing units decreased slightly during the decade. This trend did not occur in the Mount Rogers district as a whole, as owner-occupied housing units increased by 0.2 percent across the district.

**Table V-5
Comparative Housing by Tenure¹
Carroll County and MRPDC
By Occupancy Status
1990 and 2000**

Tenure	1990				2000			
	Carroll County	Percent	MRPDC	Percent	Carroll County	Percent	MRPDC	Percent
Owner-occupied	8,656	82.7%	52,736	76.3%	9,955	81.7%	60,189	76.5%
Renter-occupied	1,807	17.3%	16,349	23.7%	2,231	18.3%	18,512	23.5%
Total:	10,463		69,085		12,186		78,701	

1. U.S. Census Bureau, Decennial Census.

As shown in Table V-6, renter-occupied housing units are available at approximately the same rate in Carroll County and the Mount Rogers region. Median gross rent increased by the same rate in the county and the district; however, both are significantly lower than the median gross rent in Virginia. While the rate of change between 1990 and 2000 was lower in Virginia, the actual median gross rent in 2000, \$650, was 43 percent higher than Carroll County and the Mount Rogers region.

**Table V-6
Comparative Median Gross Rent¹
Carroll County, MRPDC, and Virginia
By Specified Renter-Occupied Housing Units
1990 and 2000**

	Carroll County			MRPDC			Virginia		
	1990	2000	Percent Change	1990	2000	Percent Change	1990	2000	Percent Change
Median Gross Rent	268	366	36.7%	270	369	36.7%	495	650	31.3%

1. U.S. Census Bureau, Decennial Census.

The status of housing in a community can also be viewed based on what proportion of a person's income is used to pay for housing. Higher housing costs limit resources for other

necessities, such as food, utilities, and medicine. This can become a severe problem for retired people living on fixed incomes and facing other economic pressures, such as high costs for medical care and prescription drugs. Similar issues can afflict younger age groups for people in low-pay jobs. The struggle to survive and meet basic needs can become overwhelming.

Table V-7
Rental Costs as Percent of Household Income¹
Carroll County, MRPDC, and Virginia
By Age Group
2000

	Carroll County	Percent of Those Computed	MRPDC	Percent of Those Computed	Virginia	Percent of Those Computed
15 to 64 years						
Less than 30%	882	64.4%	8,815	70.3%	451,535	65.1%
30% or more	488	35.6%	3,726	29.7%	242,000	34.9%
SUBTOTAL:	1370		12,541		693,535	
Not computed: ²	228		2,011		51,027	
65 and over						
Less than 30%	118	45.7%	1,289	55.0%	41,213	48.5%
30% or more	140	54.3%	1,053	45.0%	43,768	51.5%
SUBTOTAL:	258		2,342		84,981	
Not computed: ²	178		812		13,890	
TOTAL:	2,034		17,706		843,433	

1. U.S. Census Bureau, 2000 Census.

2. "Not computed" includes households that did not report either rental costs or income.

Table V-7 provides an overview of income versus rental costs for people in the income-earning years and for those in the 65 and over age group. In 2000, 35.6 percent of the income-earning age group, those between the ages of 15 and 64, spent 30 percent or more of total income on housing in Carroll County. In contrast, more than 54 percent of senior citizens who rent spent too much on housing in the county. Both age groups have a higher percentage of renters that spend 30 percent or more of total income on housing than renters in the Mount Rogers Planning District or the Commonwealth of Virginia.

Individuals who spend 30 percent or more of total income on housing are considered cost-burdened by the Virginia Department of Housing and Community Development and the Virginia Center for Housing Research. Those who spend more than 50 percent of total income on housing are considered severely cost-burdened. Typically, those who have the most trouble paying for housing include those living on limited, fixed incomes (elderly and disabled) and low-wage workers.¹

B. Substandard Housing

Since 1960, housing conditions have steadily improved in Carroll County. While the high proportion of substandard housing units in the county has been a concern in the past, efforts to alleviate this problem have proven highly successful. The 1960 Census identified housing units as either “sound,” “deteriorating,” or “dilapidated,” with 35.8 percent of housing units classified as deteriorating or dilapidated.

Table V-8
Condition of Dwelling Units¹
Carroll County
1960

Condition	Number	Percent
Sound	4,433	64.2
Deteriorating	1,750	25.4
Dilapidated	718	10.4
Total	6,901	100.0

1. Source: U.S. Census Bureau, 1960 Census

As illustrated in Tables V-9 and V-10, housing conditions have improved dramatically since 1960; however, determining the exact level of improvement between 1960 and 2000 is difficult, because the classification method used by the U.S. Census Bureau has changed. Using

¹ Further detail is available in the five-year strategic plan by the Virginia Department of Housing and Community development called the “Consolidated Plan of the Commonwealth of Virginia, 2003 – 2007.”

the current classification system adopted in 1970, substandard housing has fallen from 38.0 to 1.8 percent of the total occupied housing stock in the county, while overcrowded housing has fallen from 10.0 to 1.6 percent.

Table V-9
Condition of Occupied Housing Units¹
Carroll County
1970, 1980, 1990, and 2000

Condition	1970		1980		1990		2000	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Standard ²	4,998	62.0%	8,616	88.5%	9,983	95.4%	11,964	98.2%
Substandard ³	3,069	38.0%	1,125	11.5%	480	4.6%	222	1.8%
Total	8,067	100.0%	9,741	100.0%	10,463	100.0%	12,186	100.0%
Overcrowded ⁴	803	10.0%	516	5.3%	220	2.1%	201	1.6%

1. Source: U.S. Census Bureau, Decennial Census

2. Standard is defined as having complete plumbing facilities.

3. Substandard is defined as lacking complete plumbing facilities.

4. Overcrowded is defined as more than 1.01 persons per room. A unit identified as being overcrowded may also be identified as standard or substandard.

A windshield survey conducted by Mount Rogers Planning District Commission staff in early 2005 resulted in a larger number of residential structures that appear to be substandard or deteriorated. Conditions were assigned using a ranking system that included an analysis of siding, shingles, windows, and exterior paint. Generally, if two of these characteristics appeared to be in poor condition (cracked or broken windows, missing shingles, etc.) the structure was considered to be substandard. A deteriorated structure appeared to have more than two of these characteristics in poor condition and seemed unsuitable for habitation.

Table V-10
Condition of Residential Structures^{1,2}
Carroll County
2005

Condition	Number	Percent
Standard	13,274	88.2
Substandard	1,507	10.0
Deteriorated	264	1.8
Total	15,045	100.0

1. Source: Mount Rogers Planning District Commission

2. Based on exterior conditions

C. Second Home Development

Second homes, or housing built for seasonal or recreational use, are tracked by the U.S. Census based on vacancies and sub-categories that include rental and seasonal housing. Some housing is simply listed as “other vacant,” with no special use attached. In 1990 the Census presented this data based on uses of condominiums and “not condominiums.” For Carroll County there were no condominiums listed, so the only other choice came under the “not condominiums” category. In this group, housing for seasonal, recreational, or occasional use amounted to 878 units. Another 634 units went into the “other vacant” category.

**Table V-11
Vacancy Status¹
Carroll County
By Status
1990 & 2000**

Status	1990		2000	
	Number	Percent	Number	Percent
For rent	122	7.0%	212	8.5%
For sale only	112	6.4%	148	5.9%
Rented or sold, not occupied	*	*	282	11.3%
For seasonal, recreational, or occasional use	878	50.3%	1,380	55.3%
For migrant workers	*	*	0	0.0%
Other vacant	634	36.3%	472	18.9%
TOTAL:	1,746	100.0%	2,494	100.0%

1. U.S. Census Bureau, Decennial Census.

* - Indicates a status category that was not used during the 1990 Census.

In the 2000 Census, housing identified as seasonal, recreational or occasional use in Carroll County amounted to 1,380 units. A comparable number of 1,164 seasonal units are listed for neighboring Grayson County. The figures are lower in other counties in the Mount Rogers region, with 536 seasonal units in Smyth County and 583 seasonal units in Washington County.

Within its own boundaries, Carroll County's seasonal housing count went from 878 to 1,380 between 1990 and 2000. This represents an increase of 502 units, or 57.1 percent, over the decade. The trend in the increased development of second homes has raised concerns among the political leadership of Carroll County, due to issues over the long-term impacts of development in remote rural regions. Seasonal, mountainside housing is concentrated in the two southernmost districts in Carroll County, Fancy Gap and Laurel Fork. A prime factor for seasonal home development in the southern sections of the county is the presence of the Blue Ridge Parkway.

D. Housing Programs

Programs exist in Carroll County to help eligible recipients with home purchase, emergency housing needs, weatherization, heating costs, and rehabilitation of low-income housing. Available programs and services for Carroll County include the following:

- *District III Senior Services*: This agency provides services to people aged 55 and over in Bland, Carroll, Grayson, Smyth, Washington, and Wythe counties, and the cities of Bristol and Galax. Services include a limited range of home repairs. The agency is based at 4453 Lee Highway outside of Marion. For more information call 276-783-8157.
- *Carroll County Department of Social Services*: This agency, located in the Carroll County Governmental Complex, provides rental assistance to eligible recipients (276-728-9186).
- *Hostel of the Good Shepard*: This is a 20-bed emergency shelter for the homeless located at 405 West Center Street in Galax. Call 276-236-7573 for more information.
- *Mountain Shelter, Inc.*: This nonprofit agency is based at 170 East Main Street in Wytheville. It develops low-income housing in Smyth, Wythe, Bland, Carroll, and Grayson counties, and the City of Galax. Call 276-228-6280 for more information.

- *Rooftop of Virginia Community Action Agency*: This nonprofit agency, serving Carroll County, Grayson County, and the City of Galax, stands at 205 North Main Street in Galax. Its services include a weatherization program to insulate homes and reduce high utility costs. Call 276-236-7131 for more information.

**CHAPTER VI
COMMUNITY FACILITIES**

A. Education

The Carroll County public school system operates one high school, two intermediate schools, and seven elementary schools. The following table lists pertinent data concerning public schools in the county.

**Table VI-A
SCHOOL PLANT DATA
CARROLL COUNTY
2005**

School	Location	Acreage	Enrollment	Capacity	Year Built/Renovations
Carroll Co. High School	Hillsville	72.25	898	900	1969
Carroll Co. Intermediate School	Hillsville	22.76	703	560	1936,1947,1954,1979,1980,1982
Fancy Gap Elementary	Fancy Gap	10.00	169	280	1957,2001
Gladesboro Elementary	Hillsville	8.04	149	258	1955,1962,2001
Gladeville Elementary	Galax	14.97	305	368	1962,2001
Hillsville Elementary	Hillsville	92.90	430	556	2005
Laurel Elementary	Austinville	6.35	271	390	1955,1980,2001
Oakland Elementary	Galax	14.73	212	280	1953,1968,2001
St. Paul Elementary	Cana	27.12	436	621	1951,1973,2006
Woodlawn Intermediate School	Woodlawn	23.27	514	600	1908,1937,1952,1962,1974

SOURCE: Superintendent of Schools, Carroll County, 2005.

Only one of the schools exceeds capacity, and one school's enrollment is extremely close to exceeding capacity. Five of the schools have been renovated within the past four years, and one school plans renovations for 2006. Also, the Crossroads facility was completed in 2005 in Galax. The Carroll County Extension Agent also provides educational assistance.

There are no institutions of higher education in Carroll County; however, Carroll County is part of a service area of Wytheville Community College, a two-year multi-purpose institution located in Wytheville, Virginia.

B. Libraries

The Carroll County Public Library is located in Hillsville. Operating hours for library are Monday 10am-8pm, Tuesday through Friday 10am-8pm, Saturday 10am-2pm, and closed on Sunday.

C. Health

Carroll County residents may receive medical attention requiring hospitalization primarily from the Twin County Regional Hospital located in the City of Galax on Carroll County's western border. The Twin County Regional Hospital is located on an 18.76-acre site. This hospital is licensed for 141 beds. At present, there are 20 beds for the psychiatric ward, eight for ICU, 17 for OB, and 25 patient rooms on the second and third floors. In addition to the 141 beds, there are 13 beds for the emergency room and 20 beds for ambulatory surgery.

Other hospitals available to Carroll County citizens, although not located in Carroll County, are: Northern Surry Hospital in Mount Airy, North Carolina and Pulaski Community Hospital, Pulaski, Virginia.

Some of the services provided by the Carroll County Health Department include: family planning, pediatric care, childbirth classes, car seat classes, and maternity clinics. Programs

offered or associated with the department include: WIC, Every Woman's Life, Sexually Transmitted Diseases, Children's Care Connection, Immunization, Communicable Diseases, ADAP (HIV positive medication program), and the administering of flu vaccines. The health department also issues permits for wells and septic systems, performs inspections for any facility preparing and selling food, and prepares birth and death certificates.

D. Social Services

Carroll County provides several social service agencies to meet the needs of the residents. Agencies located within the Carroll County government complex include: the Carroll County Department of Social Services, Carroll County Health Department, Carroll County Extension Agent, Carroll County Disability Services Board, and the Carroll County Victim-Witness Program.

Numerous other agencies serve residents of Carroll County. These agencies include: Mount Rogers Community Services Board—Carroll County Counseling Center, Joy Ranch Home for Children, Golden Harvest Thrift Shop, Willing Partners, Mountain Shelter, Virginia Employment Commission, Southern Carroll County Community Center, Rooftop of VA-CAP, Mountain View Youth and Family Services, and Preserving Safe and Stable Families Program.

These agencies provide programs to assist in improving the quality of life for low-income individuals and families in Carroll County. For example, the programs offered by the Rooftop of Virginia Community Action Program (CAP) include housing, winterization, crafts, childcare, and head start. Preserving Safe and Stable Families Program provides a program for after school tutoring and mentoring.

E. Recreation

Recreational opportunities are abundant in Carroll County. A substantial amount of outdoor recreational opportunities are available in the county. Hiking, biking, canoeing, fishing, and golfing are highly prevalent in the county. Hiking and biking locations include, but are not limited to: Beaver Dam Creek Walking Trail, Granite Quarry Overlook, Agricultural Lease Interpretative Overlook, and Carter Pines Community Park. The major canoeing locations in Carroll County are the Fries to Byllesby New River Route and Lovill's Creek Lake Recreation Area. Some of the prime fishing areas are the Crooked Creek Wildlife Management Area and Stewart's Creek Wildlife Management Area.

Carroll County also provides residents and visitors the opportunity to enjoy competitive and leisure activities. There are three golf courses located within the county: Olde Mill Golf Resort, Skyland Lakes Golf Club, and the Blue Ridge Golf Course. Other competitive sports, such as baseball, basketball, and football, are available through the county recreation program; and these sports are also available through the public school system.

The location that encompasses the most outdoor activities would be the New River Trail State Park. The state park provides opportunities for hiking, biking, canoeing, horseback riding, fishing, and wildlife observing. Camping in the county is also available at the New River Trail State Park and at the Fox Trail Campground.

A small portion of the Jefferson National Forest (the Mount Rogers National Recreation Area) lies within the northwestern corner of Carroll County, and thirty miles of the Blue Ridge Parkway is located within the county. The Blue Ridge Parkway, completed in 1977, is a 469-mile scenic route through Virginia and North Carolina. According to Blue Ridge Parkway Superintendent Daniel Brown, the Blue Ridge Parkway is also consistently one of the most

visited national park areas administered by the National Parks Service. Approximately 20 million tourists travel the Blue Ridge Parkway annually, thus causing a great economic impact for the counties in which the parkway lies. The economic impact can be as great as two million dollars per year for the 29 counties of Virginia and North Carolina. The Blue Ridge Parkway not only provides Carroll County residents with recreational opportunities, but with the possibility of substantial economic growth.²

A recent addition to Carroll County tourism is *The Crooked Road: Virginia's Heritage Music Trail*. *The Crooked Road* is a driving route through the coalfields, Appalachian Mountains, and the Blue Ridge Mountains of Virginia. Carroll County is home to two stops on the trail: the Blue Ridge Music Center and the Rex Theatre. The Blue Ridge Music Center is located near mile marker 213 on the Blue Ridge Parkway in both Carroll and Grayson Counties. Phase I of the music center opened in 2001, which includes an outdoor amphitheatre with seating capacity for 2,000 people, picnic areas, and a gift shop. Phase II is currently underway and will include an interpretive center, exhibit gallery, an indoor auditorium, and a music library and classroom for school groups.³

The second stop on *The Crooked Road* is the Rex Theatre, located in the City of Galax. Every Friday night since 1999, WBRF-FM 98.1 has broadcast “Blue Ridge Backroads” live from the Rex Theatre. Listeners in four states are able to enjoy the sounds of “Old Time Mountain Music.”⁴

Visitors to the area are encouraged to visit the Blue Ridge Plateau Visitors Center located in Hillsville. The visitor center is situated off Interstate 77 Exit 14. The center provides visitor

² Brown, Daniel. “An Intro from the Superintendent of the Blue Ridge Parkway: Parkway Marks 70th Anniversary—Three Score and ten.” www.blueridgeparkway.org

³ www.thecrookedroad.org/BRMC

⁴ www.thecrookedroad.org/Fiddlers

information for the entire state of Virginia, as well as, emphasizing information on Carroll, Grayson, Patrick, and Floyd Counties, and the City of Galax.

F. Fire Departments

Carroll County has three volunteer fire departments: Hillsville, Cana, and Laurel Fork. The Hillsville and Cana departments have three stations. The Hillsville Fire Department consists of 42 volunteers; Cana Fire Department-43 volunteers; and Laurel Fork Fire Department-31 volunteers. The three volunteer fire departments combined provide Carroll County with 11 pumper trucks, 16 tanker trucks, and 16 auxiliary vehicles of varying types.

G. Rescue Squads

Carroll County is served by eight rescue squads: Dugspur Rescue Squad, Laurel Fork Rescue Squad, Carroll County EMS, Cana Rescue Squad, Pipers Gap Rescue Squad, Lansburg Rescue Squad, Carroll County Search and Rescue, and Laurel Rescue Squad. Fire and rescue dispatch are also available through the Twin County Hospital dispatch. The membership for each squad is as follows: Dugspur-15, Laurel Fork-14, Carroll EMS-37, Cana-19, Pipers Gap-33, and Laurel-38. There are 29 rescue vehicles available for residents of Carroll County.

H. Law Enforcement

The Carroll County Sheriff's Department is the primary law enforcement agency in the county, headquartered in Hillsville. A total of thirty-four personnel work at the Sheriff's Department. The Sheriff's Department consists of seventeen full-time deputies, one part-time deputy, five dispatchers, three investigators, three civil processors, two school resource officers, one secretary, one clerk, one search and drug dog, and the sheriff.

The Hillsville Police Department also protects and serves Carroll County. The Police Department is comprised of twelve personnel: seven full-time police officers, two sergeants, one

lieutenant, one chief, and one office manager. Fourteen Virginia State Police officers are assigned to Carroll County.

All communications for local law enforcement agencies are handled through the central dispatch in the Sheriff's office. Communications with the FBI, State Police, and other outside law enforcement agencies are also handled through the central dispatch.

I. Water Supply and Treatment

The Carroll County PSA operates eight water systems in the county: Carroll County and Route 100, Woodlawn, Gladeville/Cranberry, Tower Road, Cana, Fancy Gap, Industrial Park, and Hillcrest. The Carroll County water system is located along Route 58 East in Hillsville, Route 221 North in Hillsville and beyond, Route 100 North, Lovelle Road, Whitestown Road, Little Vine Road, Double Cabin Road, Hardscuffle, and Spring Willow Road. The Woodlawn system is located within the Woodlawn section of Carroll County. The Gladeville/Cranberry system is located along Route 58 West, Cranberry Road, Glendale Road, Hebron Road, and Riverhill Road. Tower Road system provides water along Tower and Bedsaul Roads, and also a small section of Pipers Gap Road. The Cana system water supply runs North and South along Route 52 and across the North Carolina border. Fancy Gap system provides water to the area surrounding U.S. Interstate 77 Exit 8. The Industrial Park system provides water to the area surrounding U.S. Interstate 77 Exit 14 and the Hillcrest subdivision off of Route 666.

Carroll County PSA operates 27 wells and purchases water from the Town of Hillsville for the Industrial Park water system and from the City of Galax for the Tower Road water system. The gallons per minute (GPM) for the wells range from 12 GPM to 145 GPM, with the average being 28.6 GPM. The wells range from three to 40 years old and are all located in the vicinity of their respective water systems. The county wells, the Town of Hillsville, and the City

of Galax treat 669,340 gallons per day (GPD). The plants for the 27 wells are capable of treating 1,111,200 GPD. The City of Galax is capable of treating 48,960 GPD, and the Town of Hillsville can treat up to 125,000 GPD.

J. Waste Water Transport and Treatment

Carroll County PSA operates five sewer systems and maintains two sewage treatment plants, both of which furnish primary and secondary treatment and disinfection of the effluent. One sewer treatment plant is located northwest of the Town of Hillsville near Fancy Gap/U.S. Interstate 77 Exit 8 and serves the west sector. This plant consists of an Imhoff tank, trickling filter, and final clarification tank. The effluent is discharged into Little Reed Island Creek.

The second sewer treatment plant is located near the Southwest Virginia Training Center. This plant is a 1.8 acre aerated stabilization pond with a ten-foot water depth. The effluent from this plant is discharged to Beaver Dam Creek, a tributary of Little Reed Island Creek.

Sewage from the collection sites located at the Carroll County Industrial Park/U.S. Interstate 77 Exit 14 area and from Hillsville East area is pumped to the Town of Hillsville for treatment. Sewage from the Route 58 and Gladeville/Cranberry areas are pumped to the City of Galax for treatment.

The five sewage systems are capable of treating the waste from approximately 30,000 households; however, on a daily basis, the systems only treat the waste from approximately 13,209 households.

The Fancy Gap system consists of 1,000 feet of eight-inch gravity sewer line and a plant capable of treating 30,000 gallons per day. The Hillsville East system is comprised of 3,000 feet of gravity sewer line, 3,000 feet four-inch pump line, and one sewer pump station. The Industrial Park system includes 1,000 feet of ten-inch gravity sewer line, 4,000 feet of eight-inch

gravity sewer line, 6,000 feet of six-inch pump line, and two sewer pump stations. The Training Center system consists of 3,000 feet of eight-inch gravity sewer line and plant capable of treating 39,900 gallons per day. The Gladeville/Cranberry system is comprised of approximately 100,000 feet of eight-inch gravity sewer line, 7,000 feet of six-inch pump line, and two sewer pump stations.

K. Solid Waste

Currently, only one landfill is available in Carroll County. Carroll and Grayson Counties and the City of Galax operate the landfill as a regional landfill. Due to the annexation on June 30, 2001, the landfill is now entirely located within the Town of Hillsville. Originally, this landfill contained 70 acres, with a majority of the land usable. The Carroll/Grayson/Galax Solid Waste Authority purchased 153 additional acres for the landfill, but only approximately 35 acres are currently usable.

**Table VI-B
LANDFILL FEES**

Type of Solid Waste/Service	Cost
Pick-Up	\$7.00
Appliances	\$5.00/each
Car	\$3.00
Car Tire	\$1.00
Car Tire on Rim	\$2.00
Truck Tire	\$4.00
Truck Tire on Rim	\$8.00
Tractor Tire	\$20.00
Skidder Tire	\$50.00
Municipal Waste	\$50.00/ton
Brush	\$2.50/100lbs (\$5.00 min.)

The City of Galax and the Town of Hillsville provide pick-up for their residents. Collection services for the county residents are provided from Waste Industries, LUSK, or Mount Pilot. Commercial collection services are provided from Cooke Rental, Waste Industries, and LUSR.

Carroll County also provides a convenience collection site in Cana on Epworth Church Road. This location is for residential trash only.

L. Public Utilities

Appalachian Electric Power system provides electricity for Carroll County. AEP has hydroelectric generating plants in the Northwestern portion of the county on the New River. Natural gas for Carroll County is provided through Duke Energy transmission lines. Currently, there is no distributor for the natural gas.

Telephone services for the county are provided by Sprint and Citizens Cable. Cellular phone services are available through U.S. Cellular, Nextell, and Verizon. Adelphia, Time-Warner, and Citizens Cable provide cable television. The four primary broadband Internet providers are Adelphia, Sitarstar, Sprint, and Time Warner. Carroll County also has two wireless providers: Trificient Technologies and Crossroads Technologies, Inc.

M. Transportation Networks

Carroll County is bisected east to west by U.S. Routes 58 and 221 and north and south by U.S. Route 52 and U.S. Interstate 77. Interstate 77 was completed in 1977 and significantly improved traffic congestion along U.S. Route 52. Interstate 77 averages 38,000 vehicles per day.

The existing routes all have dangerous sections, primarily two-lane highways with inadequate turnoff lanes. Route 58 between Galax and Hillsville is the most heavily traveled road in Carroll County. An average of 16,000 vehicles per day use Route 58. Residential and

commercial growth along this road is creating increasingly dangerous traffic conditions. Hopefully, the entire length of Route 58 will be constructed into a four-lane highway. Converting Route 58 into a four-lane highway would provide better traffic flow for Carroll County and would be an outlet for Interstate 81 traffic. The creation of a four-lane highway would also result in an increase of east/west commercial and tourism traffic and provide the opportunity for more economic growth.

Carroll County is also home to the Twin County Airport. Twin County Airport is located just west of I-77 near Exit 19. This is approximately six miles northwest of the Town of Hillsville. The Twin County Airport Commission was chartered in 1964 by an Act of the General Assembly of the Commonwealth of Virginia. Participating localities are: Carroll and Grayson Counties, the Towns of Hillsville, Fries, and Independence, and the City of Galax. The Airport Commission consists of one appointed representative from each locality, except for Galax, which, by charter, has two appointed representatives. The Airport Commission establishes policy for airport matters, authorizes project submittals, and approves the annual operating budget. Future improvement plans for the Twin County Airport include a new terminal with a conference room, offices, and a pilots' lounge, additional T-Hangars, and a runway extension to 5,000 feet. The airport's hours of operation are Monday thru Friday 8:00AM to 5:00PM.

**CHAPTER VII
LAND USE AND DEVELOPMENT ISSUES**

A. Existing Land Use

The MRPDC staff conducted an extensive land use survey in the summer of 2005 and, in conjunction with the Carroll County Real Estate Assessor, has compiled the following information related to the current land uses in Carroll County. Table VII-A, Comparative Land Use, details comparative changes in land use by broad category for the study area.

**Table VII-A
Comparative Land Use
Carroll County
By Type
1973 and 2005**

Category	Acres		Percent of Total	
	1973	2005	1973	2005
Agricultural/Open Space	148,275	140,758	46.90%	44.52%
Commercial	145	398	0.05%	0.13%
Industrial	290	1,244	0.09%	0.39%
Residential ^{5,6}	6,895	11,890	2.18%	3.76%
Public/Semi-Public	8,942	10,257	2.83%	3.25%
Conservation/Recreation ⁷	151,613	151,613	47.95%	47.95%
Totals⁸	316,160	316,160	100.00%	100.00%

Source: MRPDC, 2005; Carroll County Real Estate Assessor

⁵ Includes 2,475 acres of land being used for second homes as indicated on the 1973 Carroll Comp Plan.

⁶ MRPDC and the Carroll County Assessor allotted approximately 0.5 acre in 1973 and 1.0 acre in 2005.

⁷ Includes all water areas, open and wooded land in private ownership.

⁸ Hillsville is included in the commercial, industrial, public/semi-public, conservation/recreation categories.

B. Land Use Comparison Summary

Conservation/Recreation land use is the largest single use of land in Carroll County. This classification accounts for 47.95 percent (151,163 acres) of all land. Included in this class are lands owned/managed by the federal and state governments. These include the following: the Mount Rogers National Recreation Area (7,065 acres), the Blue Ridge Parkway (1,854 acres), the Crooked Creek Fishing Area (1,818 acres), the Stewart Creek Wildlife Management Area (1,221 acres), and the New River Trail (368 acres). Private and commercial campgrounds and golf courses combine for 1,077 acres of recreational land use. Those lands now devoted to conservation and recreation are generally not considered when discussing new residential, commercial, and industrial developments. Additional land for these usages will most likely come from land currently classified as agricultural.

Agriculture comprises the second largest type of land use, using approximately 44.52 percent (140,758 acres) of the county. The 2.38 percent decrease in agricultural land use from 1973 to 2005 is probably primarily due to the increase in residential and commercial/industrial land use.

Commercial land use totals 0.13 percent (398 acres); and land in industrial use equals 0.39 percent (1,244 acres). Commercial and industrial land use combined has almost quadrupled since 1973.

Residential land use total acreage has almost doubled in percentage and acreage since the previous analysis in 1973. At that time, residential land use accounted for 2.18 percent of land (8,942 acres). The current percent of residential land use is 3.76 (11,890 acres).

Mobile homes have dramatically increased since the previous analysis, so much so, that the Carroll County Board of Supervisors has implemented a Mobile Home Ordinance.

Public/Semi-Public uses account for 3.25 percent of all existing land use. Public and semi-public land uses include the following: highways and railroads (7,931 acres), churches and cemeteries (575 acres), schools (304 acres), and miscellaneous—fire, police, rescue, county, SWVTC, and others (1,447 acres).

A category not listed on the land use table, but still very significant to Carroll County is timberland. Carroll County has 182,605 acres of timberland, 1,453 acres of which is reserved timberland. The forests have been important to the area since settlement. Today over 50 percent of the land remains timberland. While the woodland has changed due to insect, disease, fire and timber harvesting they continue to be very important to the local economy.

Carroll's forests are probably its most important natural resources. Planning that will set guidelines to maintain a viable forest resource is essential to insuring a quality environment for Carroll County residents. Our forests provide a very functional asset to our community. Their importance to our community ecologically and socially should be emphasized.

Ecologically, woodlands help maintain good water quality. Forest filters and traps sediments and absorbs pollutants from overload and runoff and subsurface flow. Woodlands act as natural buffers along the New River, its major tributaries, and smaller perennial and intermittent streams by preventing excess nutrients, like nitrogen and phosphorous, from entering and polluting our waterways. Tree roots help maintain clean ground water and trapping harmful pollutants.

Forests provide essential ecosystems for a variety of plants and animals. They provide food, shelter, cover, nesting and bedding areas for a wide variety of wildlife.

The forests of Carroll County play an important economic role in the community. Based on Timber Severance taxes paid from 2001 to 2005 2.2 million was paid to Carroll County landowner for timber sold. The 2006 publication Virginia's Forest Our commonwealth describes how \$41.82 of economic value is generated from each dollar paid to a landowner for timber stumpage through such services as primary and secondary processing, transportation, harvesting, construction and marketing. Using this multiplier, the value of the timber harvested averaged \$92,000,000.00 in economical activity. These figures do not include values such as hunting, recreation, tourism, air quality, and aesthetical benefits, which are important to our economy.

Socially, timberland provides a pleasant environment for Carroll residents to live and work. It promotes public health and safety through the reduction of noise, air, water and visual pollution. Timberland promotes and preserves the appearance, life styles, and traditions, which have existed in Carroll County for decades.

C. Current Land Management Policies

Carroll County currently has five land management policies: the Subdivision Ordinance, the Mobile Home Ordinance, the Special Assessment Program, the Airport Safety Ordinance, and a Flood Plain Ordinance. The Subdivision Ordinance focuses on the platting of lots, the layout of streets, and the building of any public utilities as is necessary to adequately subdivide the land. The Subdivision Ordinance may also regulate the design and standards, particularly in areas of environmental and aesthetic controls. Supervisors amended this ordinance in September 2004 to accommodate the growing population of Carroll County.

As previously mentioned, the Board of Supervisors has also adopted a Mobile Home Ordinance. The purpose of this ordinance is to ensure the proper development of mobile home parks and individual mobile homes.

The most recent addition to the land management policies in Carroll County is the Special Assessment Program. There are three classifications for land use under this program—Agriculture, Horticulture, and Forestry. The purpose of this policy is to determine the taxes due on land by use value instead of market value, and to promote the preservation of these land uses for the public benefit. This program was adopted by the Board of Supervisors on June 19, 2003 and has been in effect since January 1, 2004.⁹

On January 8, 1992, Carroll County adopted an Airport Safety Ordinance as required by Virginia Code Section 15.1-491.02 (the code number at that time). The County also recognizes certain criteria, as outlined by the Virginia Department of Aviation, for airport zoning: To implement effective land use planning and control measures around airports, it is necessary to identify specific planning boundaries. These boundaries will identify airport environments for land-use planning purposes. Federal and state airport design criteria, safety of flight requirements and land use provisions unique to the community should be incorporated in the zoning process. Airport safety zones, standard aircraft traffic patterns, over flight areas, noise contours, and FAR Part 77 height restriction criteria should be considered by land use planners as central elements when developing zoning ordinances, airport overlay districts, and comprehensive land use plans for the community. All of these factors should be considered for airport-compatible land uses. In general, land use for residences, schools, churches, hospitals, daycare centers, nursing homes, uses resulting in large open-air assemblies of people, such as amphitheatres and stadiums in over flight areas should be discouraged. Compatible uses include commercial, industrial, agricultural,

⁹ Carroll County Special Assessment Program, Land Use Program, June 2003.

golf courses, parks, and other similar uses. Carroll County follows these criteria, the Airport Safety Ordinance, and any regulations specified by the FAA.¹⁰

Carroll County participates in the Federal Emergency Management Agency's National Flood Insurance Program. To be eligible to participate in this program, Carroll County adopted a flood plain ordinance on October 11, 1983. The ordinance is entitled: An Ordinance of the County of Carroll, Virginia Establishing a Flood Plain District, Requiring the Issuance of Permits for Development, Providing for Certain Minimum Standards for Development, and Providing Factors and Conditions for Special Exceptions to the Terms of the Ordinance. The ordinance serves four main purposes: to regulate uses, activities, and development which could cause an increase in flooding; restrict or prohibit certain uses, activities, and development to flood prone areas; require flood prone areas to be protected from flooding and flood damage; and to protect individuals from buying lands and structures which are unsuited for intended purposes because of flood hazards.¹¹

D. Physical Constraints to Development

The survey of existing land use and a study of the land use maps show that most of the intensive uses of land in Carroll County has taken place around the City of Galax, the Town of Hillsville, the Town of Fries, and smaller communities such as, Cana, Fancy Gap, Lambsburg, Woodlawn, Laurel Fork, and Dugspur. This trend is beginning to change to linear development along the major roads of the county.

1) Slope Constraints

¹⁰ Virginia Department of Aviation, 2005; Carroll County Chair of Airport Commission, 2005

¹¹ An Ordinance of the County of Carroll, Virginia Establishing a Flood Plain District Requiring the Requiring the Issuance of Permits for Development, Providing for Certain Minimum Standards for Development, and Providing Factors and Conditions for Special Exceptions to the Terms of the Ordinance, 1983.

Slightly over 50 percent of the land in Carroll County has slopes of 20 percent or greater. Slopes of 20 percent or greater do not preclude development; however, they add special problems for development. The provision of services is more difficult and therefore more costly, the costs of constructing and maintaining roads is increased, the use of septic tanks for sewage treatment is generally limited by steep slopes, and in some instances public sewage treatment systems are not economically feasible. Erosion and sediment control during and after construction is also an additional cost factor. Low densities and extreme care in planning are recommended when developing on slopes of 20 percent and greater.

A hidden cost in the development of steep areas is the cost of improving existing roads to handle traffic generated by the development. Costs of reconstructing and improving existing roads can be extremely high and the cost of improving access roads should be recognized as part of the cost of any additional development, especially in areas with rough terrain. Also, the Virginia Department of Transportation will not accept roads with grades higher than 10 percent for state maintenance.

2) Watershed and Surface Water Constraints

The boundaries of the watersheds are an important restriction to the provision of sewage collection facilities, since gravity flow is the cheapest way to transport sewage. Once a watershed boundary is crossed, it becomes necessary to either provide treatment in that watershed or to pump sewage to the watershed where treatment facilities are located. Either alternative can be costly. This is a problem that must be dealt with along U.S. Route 58 from Hillsville to Galax

involving the Chestnut Creek, Crooked Creek, and Little Reed Creek watersheds. Another problem area, in Cana, involves Paul's Creek and Lovills Creek. Where watersheds pose a problem for the treatment of sewage, densities should be kept low enough so that septic systems can be safely used.

Development in a watershed is also important because of its effects on the flow of streams. Peak flow, low flow total run-off, and water quality are all affected by development. Such characteristics can be altered by the type of vegetation, the percentage of the watershed being developed, by alterations of the stream channels, and by changes in the height of the water table. In general, as development increases within a watershed, the peak flow of the streams is increased, the low flow is decreased during any dry weather, total run-off is increased, and water quality may decline if numerous septic tanks are in operation or there is increased soil erosion.

3) Floodplain Constraints

Flooding poses a limitation to development of approximately 2.6 percent of the land in the county.

The Virginia Building Code presently restricts residential construction within the 100-year floodplain. However, this does not prevent non-intensive uses such as recreation or agriculture or the development of structures not intended for human habitation.

Existing developments on floodplains are vulnerable to flooding and should be protected by prohibiting additional development. The modification of upstream channels should also be controlled to protect existing developments.

E. Development Issues

Carroll County has a scattered pattern of development. About 11.4 percent of the developed land is concentrated in the Town of Hillsville and the remaining 88.6 percent is scattered through the county.

Strip development is a major characteristic of existing developed areas. Almost all development in the rural areas is adjacent to the existing road network. Within “normal” subdivisions, all streets have to be built in accordance with VDOT standards. However, for recreational subdivisions (which are becoming more common due to the lack of road requirements), roads do not have to abide by VDOT standards.

This type of uncontrolled development will be extremely difficult, if not impossible, to serve with public water and sewerage. Septic systems can, and are, being used, but there are dangers that recharge areas for private water systems will be contaminated by septic tank discharges.

The impact of relatively random development on agricultural land has not been given adequate attention. As a result, valuable agricultural land is being forced out of production or converted to other uses.

Another issue is second home development. Starting in the mid-60’s with the Groundhog Mountain Complex, there has been a proliferation of second home developments (*See Housing chapter*).

The Existing Land Use Map shows that single second homes, as well as planned developments, are concentrated along the Blue Ridge Parkway. The developments range anywhere from minimal “A-frames” in the middle of open fields, to well-conceived and well-designed large-scale developments. Many of the larger developments attempt to be full-fledged

recreation resorts with golf courses, tennis courts, horseback trails and the like. Other developers have done nothing more than scratch out minimal access roads, divide the property into quarter-acre lots, sell the lots, and move on further down the road to start the process all over again.

These developments are causing several serious problems. First, because the majority of these developments are strung along the Blue Ridge Parkway, the local traffic volume on the parkway has greatly increased. Designed as a narrow greenbelt park to carry passenger vacation traffic leisurely through a pastoral countryside, the parkway has instead, at least during five to six months of the year, turned into one long traffic jam, particularly on the weekends. Massive amounts of public money are spent to provide the public with a “ribbon” park, but traffic congestion is making the parkway more difficult to use. If intensive development along the parkway is allowed to continue unabated, it will be turned into a “main street” for a linear city.

The provision of water and the disposal of sewage is another problem. Some of the developments are providing central water systems, but many are not. The water systems are being built with the notion that the summer weekend population can be adequately served. However, some may not be able to support a year-round population. Generally, second-home developments become year-round residences. If this happens, the water supply may be inadequate.

The problem with sewage disposal is even more serious. Many of the developments are built on the upper face of the Blue Ridge Escarpment. The soils along the escarpment are thin, rocky, excessively drained, and generally not suitable for development. Yet all of the developments are using individual septic tanks for each home rather than providing a central sewage disposal system. Here again, perhaps the soils can absorb the effluent from homes that are being used only a portion of the year, but it is problematical as to whether they can support

year-round usage. As the developments fill up and more and more second homes become permanent homes, major health problems will surface.

Carroll County must carefully weigh the consequences of continued intensive development along the Blue Ridge Parkway. A very fragile ecosystem exists. Slopes are steep, and soils are thin and rocky. The area is astride the New River-Yadkin River drainage divide. The delicate balance of nature along the parkway will be destroyed or severely damaged if care is not exercised. Problems, such as water treatment facilities becoming clogged with siltation from soil erosion, will increase and eventually cause severe hardships to the citizens downstream if the private land holdings along the parkway are allowed to develop basically uncontrolled. The Blue Ridge environment is a beautiful heritage to pass along to future generations, but it will not last if current trends are allowed to continue.

Any intensive development in Carroll County should be restricted to a relatively small part of the county. This means there will be competition between equally desirable tracts of land for alternative uses. If the county has a need for reserving land for future use for jobs, education, and other public purposes it needs to be identified now and protected from undesirable development. The amount of land retained for agricultural use will in turn be a limiting factor on residential, commercial, and industrial development. Such a course will also necessitate more prudent use of land resources in already established commercial, residential, and industrial centers.

Growth projections will require county planning commission members and county supervisors to make difficult decisions regarding future uses of land. Undeniably, there will be problems associated with the specific steps to be followed to put such a policy in action.

However, the kinds of decisions and the kinds of problems to be faced are those that can only be dealt with by informed and courageous elected and appointed officials.

CHAPTER VIII GOALS

In the previous chapters the Carroll County Planning Commission inventoried the economic, physical, and social attributes of Carroll County. In going through this process the Commission was enabled to identify some characteristics, which give the County potential for development. The Commission was also able to identify some barriers, which hinder the County from being able to achieve its potential. The Commission was also able to bring some issues to light.

Approximately 6 years ago a large group of Carroll county citizens engaged in a process with staff from Virginia Tech called “Take Charge.” The group printed a copy of the results of the deliberations, which included Goals, Objectives, and Recommendations. In these last two chapters of the Carroll County Comprehensive Plan the Planning Commission has included as much of that planning effort that the Commission felt was consistent with this update of the County’s Comprehensive Plan.

1) Vision 2025 Mount Rogers Region

From January through April of 2002, a series of 9 visioning sessions were held throughout the Mount Rogers Planning District. The ideas offered during the process were either ranked by the participants or assigned a numerical value of 0.5 and collapsed to mimic a voting process. The result of that has provided a “sense” of the ideas that carry the most weight for the region.

This process has relevance for Carroll County in determining its own future. For example, the County and only the County can determine what it needs to do to be a partner in the regional effort to improve education, government,

transportation, tourism, infrastructure, economy, etc. Some of the top priorities elicited for Vision 2025 are as follows:

- Educational opportunities for all ages, with emphasis on higher education and improved educational facilities.
- A region wide willingness to welcome change in order to advance to the future.
- Improved healthcare, human development, and sense of community and family.
- Protecting the region's natural resources, rural character, environmental cleanliness, and historic resources.
- More and better housing – affordable housing.
- Modernized downtowns as shopping areas and controlled physical development.
- Development of the region as a nationwide destination point for outdoor recreation.
- Development of a wider range of cultural attractions as well as more facilities for sporting competitions and possibly development of a major regional theme park.
- Creation of a diversified regional economy with more high-tech industry, along with alternating enterprises, such as eco-tourism.
- More workforce training in all categories.
- More small business development.
- Improved efforts and incentives to attract new industry to the region.

- Consolidated government to avoid duplication.
- Improved transportation systems on the ground and in the air.
- Planned growth and land-use control.
- More infrastructure development, especially water and sewer service.

A. General Goals

Carroll County's goals are to:

- 1) Provide a suitable living environment for the present and future residents of Carroll County.
- 2) Promote the wise use of the County's natural resources.
- 3) Promote the wise use of agriculture lands for their local economic benefit, scenic beauty, and place in Carroll County's heritage.
- 4) Promote the development of healthy, comfortable housing to meet present and future needs with concern for the requirements of the County's range of income, attributes, and ages.
- 5) Provide for orderly development consistent with good land use practices.
- 6) Promote the general quality of life by providing for a diversified economic base with opportunities for all residents.
- 7) Preserve and promote the heritage of County life for succeeding generations.
- 8) Encourage development that will promote the beauty of the County's natural environment and preserve the balance of man-made and natural ecology.

B. Specific Goals

Goals of the Carroll County Comprehensive Plan are presented here by specific category. As stated above, these goals are designed to be attainable. Attainment of these

goals will lead toward fulfillment of the previously stated general goals. It is important to point out that the development categories and their respective goals listed below are not necessarily presented in order of importance.

C. Agricultural and Natural Resource Goals

Historically, agriculture has been the predominant force behind the development and settlement patterns of the County. Agriculture still plays a key role economically and socially in the County, even though its place is of lesser economic importance than in the past. In addition, the importance of the natural resources of the County cannot be overstated. The area is rich in tangible natural resources such as soil, water, timber, and wildlife, as well as natural scenic beauty.

It is important, therefore, to preserve and maintain agriculture's role in the overall economy and life of the County and to preserve natural resources for the future residents of the communities in the County. Carroll County's goals for agriculture and natural resources are:

- 1) To protect highly productive agricultural lands from conflicting land uses;
- 2) To encourage the agricultural industry by protecting it from encroachment by residential, commercial, and recreational developments;
- 3) To encourage the location of residential, commercial, and industrial uses in marginal agricultural areas;
- 4) To protect surface and ground water supplies for the use of present and future populations of the County through the promotion of good land use development practices;
- 5) To encourage development away from stream valleys that flood; and

- 6) To encourage the implementation of good erosion and sedimentation control practices.

D. Commercial Goals

Traditionally, commercial activity within the County has been limited to scattered small general merchandise stores located within farming communities, while high density commercial development has occurred only in the population centers of Hillsville and Galax. Evidence suggests a change in this historic pattern, however, as the commercial sector expands to meet the increasing demands of the population. Increased commercial activity of recent years has resulted in the development of commercial establishments along major roadways, principally Highways 58, 52, and 221. Commercial activity is an important element within the economy of Carroll County and is likely to become more so. With the completion of Interstate 77 through the County, income from travelers has played an expanding role in the commercial sector. Carroll County's goals for commercial development are:

- 1) To encourage the development of commercial enterprises, which contribute to the overall economic development of the County and which foster an appreciation of its natural and man-made features;
- 2) To encourage the development of commercial centers to meet the needs of the existing and future populations of the County;
- 3) To encourage the development of commercial activities in or adjacent to the areas, which they primarily serve, such as convenience stores in residential areas, and agriculturally oriented enterprises in agricultural areas;

- 4) To promote convenient and safe access to commercial center by encouraging development in such a manner as to avoid linear or “strip” development along roadways; and
- 5) To work with the Town of Hillsville to establish the Town as a prime commercial center in the highlands of Virginia.

E. Industrial Goals

Through the growth of manufacturing employment, industrial activity has become the dominant economic factor in the County’s economy. It is important to recognize the changes that have occurred in the County’s employment. The result is that manufacturing jobs are now the predominant type of employment provided. In order to enhance the continued economic growth of the County and provide a stable and broad employment base to residents, the Comprehensive Plan emphasizes continued development of the industrial sector. Carroll County’s goals for industrial development are:

- 1) To promote industrial development, which will provide a broad range of employment opportunities for present and future residents, a diversified industrial base, and an improved tax base for the County;
- 2) To encourage industrial location in areas where it will have a minimum adverse impact on existing and future residential developments, agricultural lands, and natural resources;
- 3) To protect existing and potential industrial sites from encroachment by non-industrial activities, except when those activities are directly related to industrial functions;

- 4) To encourage use of industrial parks in order to more efficiently provide industry with needed public services; and
- 5) To encourage safe and attractive industrial sites by controlling the spacing, and entrances and exits of those sites.

F. Residential Goals

Residential development is the single most intensive use of developed land in rural areas. As the County expands, the demand for land for residential development far surpasses the demand for land for other uses. Carroll County has a relatively low projected rate of growth, but the greatest demand on the land will come from the residential sector. Carroll County's goals for residential development are:

- 1) To promote the construction of a broad range of housing types to accommodate the varied needs and incomes of the County's residents;
- 2) To encourage the "clustering" of residential development for the purpose of economical provision of community services;
- 3) To encourage residential development in or adjacent to the Town of Hillsville;
- 4) To encourage only low density development in areas where natural features such as slope and soil conditions dictate poor suitability for development;
- 5) To encourage land developers and builders to follow good conservation practices in the development of land;
- 6) To promote and encourage multi-family developments that are planned in harmony with surrounding land uses and located in areas with the necessary public facilities (water, sewer, streets, etc.);

- 7) To encourage the development of mobile home parks that are creatively planned, attractive, and adequately served by public facilities; and
- 8) To promote the location of singular mobile homes in such a manner so as to reduce conflicts with permanent residential structures and development.

G. Public Facilities and Service Goals

Activities under the category of public facilities and services include those provided by both the public and private sectors. Specifically, they may include such functions as public water supply and distribution systems, sewerage systems, schools, churches, parks, health and social services, fire protection, and rescue services. The planning for and provisions of these activities should be directed toward providing the maximum benefits for present and future residents of the County at the safest and most convenient locations, and in the most efficient and economical way. Although discussed separately, the relationships between them are strong and definite. Carroll County's goals for community facilities and services are:

- 1) To encourage consideration of the provision of essential services and facilities in the planning of commercial, residential, and recreational developments;
- 2) To require that provisions of vital services such as water, sewer, and other utilities be incorporated into plans for industrial developments;
- 3) To promote the location of public facilities, which serve large populations, such as hospitals, schools, and health clinics, near the intersection of major transportation routes;
- 4) To encourage the grouping of community facilities such as a library, fire station, rescue center, public health clinic, and governmental service facilities; and

- 5) To acquire sites for planned community facilities as much as possible in advance of need, by utilizing federal, state, and/or local funding.
- 6) To seek funding for broadband telecommunications infrastructure for business and industry in order to maintain a competitive environment in Carroll County, and to plan for wireless technology for the residential areas of the County.

More specifically, the plan sets forth the following goals by subject area.

H. Educational Facilities

School planning for the long-term should include members of the Carroll County and Hillsville Planning Commissions in order to facilitate a coordinated development process in the County.

I. Rescue Operation, Fire, and Police Protection

- 1) Essential public services such as fire protection and rescue operation should be available to all County residents with emphasis placed on the adequate provision of these services in areas of concentrated population.
- 2) Adequate police protection should be provided and conveniently available to all residents of the County.
- 3) These essential public services should be financially assisted by public funds whenever and wherever possible.

J. Solid Waste Disposal

- 1) Sanitary landfills should be maintained and operated in the most efficient and economical manner possible and in accord with the latest technology available.

- 2) Sanitary landfills should be planned as interim uses only, with land to be converted later to open space for dispersed use, timber management, recreation areas, or wildlife feeding and breeding areas.
- 3) Resource recovery and other alternative uses of solid waste should be studied and programs implemented where feasible.

K. Public Water and Sewer Facilities

- 1) The County should continue to work with the New River Water Authority in order to insure the long-term water needs of the County are met.
- 2) The County should continue a program of implementing the recommendations in the County's 604(b) study for the provisions of water and sewer facilities.
- 3) Where feasible, alternative methods of sewerage treatment and disposal should be constructed.

L. Transportation Goals

Transportation planning is vital to any community and should be an integral part of countywide comprehensive planning. Transportation systems should seek to provide for the efficient movement of people and goods within and between the County and other areas. Planning of this type should be accomplished also with a view towards safe and convenient access to and from specific sites as well as to and from major collector streets and arterial roadways. Thus far the plan has set forth goals under previously mentioned development categories concerned with this aspect of transportation planning. More specifically, Carroll County's goals for transportation are:

- 1) To encourage plans that minimize through traffic in residential areas and cause the least adverse effect possible on public centers such as schools, parks, and playgrounds;
- 2) To promote the construction of access roads to serve residential areas, parks, playgrounds, industrial parks, and commercial centers;
- 3) To preserve highly productive agriculture areas within the County by encouraging new highways to be routed where possible along existing right-of-ways;
- 4) To regulate building setback lines in areas of projected high density so as to provide for future road widening if and when needed;
- 5) To encourage subdivision design to consider street alignment with existing and future streets thus promoting a rational highway system.

M. Historic Preservation Goals

While the preservation of historic sites and structures is not a vital necessity in the development of a community, it is nevertheless important. All too often sites and/or structures of historic value are ignored and destroyed in programs of community development as a result such locations are lost to future generations. In the development of this plan, the preservation of historically and archaeologically important sites is deemed as important and the following goals are recommended:

- 1) To encourage the preservation of known sites and/or locations of important historic or archaeological value for the benefit of present and future residents of the County;
- 2) To contract with the state for a study of the County to identify such sites in order that they may be preserved;

- 3) To protect, wherever possible, historical landmarks against encroachment from incompatible land uses; and
- 4) To encourage the active use of historically important sites so that they may become or remain an integral function of County life.

CHAPTER IX

Conclusions and Recommendations

A. Introduction

The goals and objectives presented in the previous chapter and the analysis of the data contained in this document, as well as the conclusions from other studies conducted in the County, are the source of the conclusions and recommendations, which is the Comprehensive Plan for Carroll County.

The Planning Commission and their advisors have attempted to balance observed market trends against land suitability and the need for and the ability of the County to provide basic community services. This plan is intended to be used as a guide by builders, developers, and consumers in their decisions regarding future development in Carroll County. More importantly, it is intended to guide the County leadership in decisions concerning future development and the provision of services. As a guide, this plan should serve to steer development decisions so that in the future, orderly growth with economic and efficient services will result.

B. Findings of the Plan

Carroll County has taken an economic hit with the demise of the textile industry, but with the continued emphasis on tourism, infrastructure and regional partnerships the economic base is being rebuilt and the county has a promising economic future.

The completion of I-77 through the County has had a tremendous impact on the development of the County's economy. The availability of interstate transportation has been and is an advantage not to be taken lightly by County leaders as they attempt to attract desirable jobs to the county.

The County has approximately 50 percent of its land that is for all practical purposes off the table from a development standpoint because of its slope. When terrain rises 20 feet in a 100

feet of distance it has physical limitations, which make it to costly for most development. Therefore, it is very important that the county look at the remaining land as a resource worthy of protection for future generations.

The County has other stimulants to development on the horizon, which will add to the counties ability to compete for jobs in the future. These are the completion of U. S. Route 58 as a 4-lane highway, the construction of natural gas distribution lines thru Hillsville to Galax, and the construction of a fiber-optic backbone thru the county.

Because of events taking place from outside its future potential is bright; however, the county must step forward in its decision making to guide events and not be overcome by them. The recommendations contained herein are intended for that purpose.

C. Population

As discussed in Chapter III the county lost population from 1950 to 1970, and recovered the loss by 1980, lost some during the 1980's, and has been gaining population since. The Virginia Employment Commission predicts the trend to continue at least until 2030, with the population at that time projected to be 35,000 people. Depending upon how many of the recommendations in this plan are implemented the projection could be off by as many as 5,000 people.

Population growth in the county is dependent upon several things, including but not limited to, continued growth in the service sector of employment, replacing the manufacturing jobs lost in the County and surrounding areas with new jobs which pay more than the minimum wage, holding onto jobs in the furniture industry, and retirees continuing to move into the County.

Where the future population will locate in the county is also dependent upon the implementation of some of the recommendations contained in this plan. The growth areas recognized in the previous plan (the corridor adjacent to U.S. Route 58 from Hillsville to Galax including Route 100 east of Hillsville) is still viable. However, this Plan will draw attention to State Route 620 from Woodlawn to its intersection with Route 100, and U.S. Route 52 from its intersection with State Route 620 north of Hillsville to the Cana community south of Fancy Gap as an area upon which to give special attention for infrastructure development. The remainder of the population should be evenly dispersed thru the county.

D. Land Use Decisions

The following recommendations for future land use and provision of services are logical extensions of the goals and objectives as set forth in the previous chapter. In general the County should look at the I-77 interchanges as a Special Opportunity area for Business and Industry. The County should either get options to purchase the property around the interchanges or develop ordinances that will protect the land from premature development of a low or none revenue nature. These interchanges should be provided with a full complement of infrastructure (water, sewer, natural gas, fiber-optic broadband), this recommendation also applies to the corridor from Route 100 east of Hillsville to Galax and to the Cana community south of Fancy Gap.

The plan remains the same in terms of protecting the Crooked Creek watershed from development. If the county cannot provide the protection needed via ordinances and plans the private owners should be encouraged to seek the use of Land Trust and Conservation easement vehicles that are available to them.

E. Commercial Conclusions and Recommendations

As stated previously in this document Carroll County is making the transition from a manufacturing based economy to a more diverse economy based on Tourism, Manufacturing, Agriculture, Technology and Commerce. In order to accomplish the transition in an orderly and successful manner the County needs to do the following:

- 1) Continue to work with the Town of Hillsville to ensure that the infrastructure to serve present and future customers is in place,
- 2) Continue to work with the New River Water Authority to develop the New River as a source of water for both Wythe and Carroll Counties,
- 3) Continue the program for extending water and sewerage services to the I-77 interchange with State Route 620, the interchange at Fancy Gap, along U. S. Route 58 from Hillsville to Galax,
- 4) Continue to participate in the Crooked Road: Virginia's Heritage Music Trail,
- 5) Support and encourage the construction of facilities for the distribution of natural gas to the I-77 interchanges and along the Crooked Road,
- 6) Prepare a plan for the construction of a fiber-optic network to business and industry and a wireless system for the remainder of the County,
- 7) Seek funding for the construction of the Telecommunication network identified in the Plan,
- 8) Continue to push for the funding necessary to complete the construction of U. S. Route 58 from Patrick County to I-77 in Carroll County.
- 9) Instruct the County Planning Commission to prepare a zoning ordinance that will protect valuable commercial land from premature or unwanted development.

F. Industrial Conclusions and Recommendations

Although the County has fewer manufacturing jobs now than it had in 1990 manufacturing is still an important part of the economy and will continue to be into the time period covered by this Comprehensive Plan. The following actions are recommended to continue to maintain a healthy, balanced, vigorous economy:

- 1) The county should continue to work towards building the infrastructure necessary to compete for a broad range of prospects for employment,
- 2) The four interchanges in the County should all be provided with water, sewerage, natural gas, fiber-optic connection in addition to roads, electric power, and telephone service,
- 3) The County should continue to work with the New River Water Authority to develop the New River as a source of potable water for Wythe and Carroll Counties,
- 4) The County should continue to seek options on and to purchase land for business and industrial development,
- 5) The County should continue to support the Carroll, Galax, Grayson Industrial Facility Authority in its efforts to secure property for future industrial development,
- 6) The County should be aware of the importance of the U. S. Route 58 interchange with U.S. 52 and work with the Town of Hillsville to prepare a plan for the development of the interchange,
- 7) The County should work with the Town of Hillsville to see that the interchange is developed according to the plan,

- 8) The County should continue to work with local and regional organizations to see that the improvements to U. S. Route 58 are completed to I-77,
- 9) The County should continue to work with Regional and Subregional organizations to see that the best interests of Carroll County are implemented,
- 10) The County should prepare itself for and begin to recruit “Information Technology”-type industries.
- 11) The County should prepare a zoning ordinance that will protect land needed for future industrial use from premature or unwanted development.

G. Residential Recommendations

The problems identified with residential development in Chapter V are primarily related to money; i.e. those who have too little of it and those who have too much of it. The most significant problem identified dealt with the number of people in the County who have less than the standard amount of income to pay for housing. In particular the number of people over 65 who spend more than 50 percent of their income for housing is a troubling statistic. Another matter of concern is the number of housing units that are listed as substandard. The following actions are recommended to deal with these and other housing issues:

- 1) The County should continue to recruit businesses and industries that pay more than the minimum wage,
- 2) The County should review the information generated in the preparation of this plan and where neighborhoods of substandard housing exist, make a decision based on a principle that the “most gets studied first”, to go forward with feasibility studies for neighborhood housing projects. From the information

presented it would take more than twenty years to correct the problems, which exist today,

- 3) The County should continue its program of extending water lines to low and moderate income neighborhoods,
- 4) The County should seek funding for a program to have grant and loan assistance available for first time homebuyers,
- 5) The County should encourage the construction of housing units for the elderly and those with a disabling condition,
- 6) The County should conduct (with assistance from the Mount Rogers Planning District Commission) a study of all the subdivisions in the County that have non-state maintained roads to determine, the miles of unpaved streets in the county, and the number of housing units in these developments that appear to be occupied permanently.
- 7) The County should prepare and adopt a zoning ordinance that will protect existing developments from unwanted or incompatible development.

H. Transportation Conclusion and Recommendations

Transportation improvements have been vitally important to Carroll County over the years, none more important than the construction of I-77 in the middle 70's. There are several improvements needed in transportation, which will be very important to the County going forward. The following actions are recommended to deal with transportation issues important to Carroll County:

- 1) The County should work with local and regional organizations to mobilized support for the completion of U. S. Route 58 from Patrick County to I-77,

- 2) The County should conduct a study (with the assistance of the Mount Rogers Planning District Commission) of the Subdivisions in the county with privately maintained streets to determine the number of unpaved miles, and the apparent number of permanently occupied housing units,
- 3) The County should purchase land adjacent to the interchanges at Fancy Gap and the airport for future industrial development and construct access roads into them,
- 4) The County should advocate for a full interchange at exit 1 on I-77,
- 5) The County should work with the Town of Hillsville to prepare a plan for the development of the U. S. Route 58 by-pass of the Town,
- 6) The County should support the construction Route 94 from east of Fries to Galax across the low-water bridge,
- 7) The County should support the construction of a container loading facility in Wythe County, and
- 8) The County should continue to support the construction of the Twin County Airport to an all weather facility with a 5,000-foot runway.

I. Public Facilities Conclusions and Recommendations

Capital expenditures are an important part of any governmental operation as is the delivery of essential services. The degree to which a local government applies itself to service delivery and the effective maintenance of equipment and structures will define how effective that local government is and is a reflection of that government in the larger community. The recommendations contained herein are intended to prepare Carroll County to compete for jobs and to compare favorably with any county in Virginia on quality of life issues.

- 1) The County should continue to seek a productive use of the Carter Building yet maintain its integrity as a Historic Structure,
- 2) The County should prepare a plan for the construction of a fiber-optic network to the business and industrial community in Carroll County,
- 3) The County should prepare a plan for the provision of wireless broadband services to the remainder of the county,
- 4) The county should encourage the development of a feasibility study for the provision of eldercare facilities as well as childcare for older children,
- 5) The County should complete phases two and three for schools in Carroll County,
- 6) The County should prepare a plan for the improvement of secondary roads in the county with special emphasis on designation as a scenic by-way, with construction of a bike lane on each shoulder,
- 7) The County should prepare a plan for the installation of guard rails on secondary roads with special emphasis on safety,
- 8) The County should seek to work with Grayson County, and the city of Galax on the feasibility of integrating the City School System into each County's system,
- 9) The County should work with the Town of Hillsville to adjust the Town Boundaries when it is beneficial economically to both,
- 10) The County should continue to implement the recommendations contained in the 604b study for the construction of water and sewerage facilities,
- 11) The County should contract with the State to catalogue structures and places of Historical and Archeological significance in the county,

- 12) The County should initiate the installation of a Geographical Information System to serve all departments and the Town of Hillsville,
- 13) The County should initiate the process of transferring the Federally funded recreation land from federal ownership to local ownership so it can be used for industrial or commercial purposes, the revenue from the sale of the land equal to the Federal contribution should be used for Recreation Facilities in a more appropriate place in the County.
- 14) The recommendations contained in the Regional Hazard mitigation Plan relative to Carroll County are made a part of this for future consideration.
- 15) The County should prepare and adopt a countywide zoning ordinance in order to help implement the goals and strategies discussed in this Comprehensive Plan, as well as auxiliary planning documents.