

Citizens' Plan for
Watauga



Watauga County

Citizens' Plan for Watauga

The Watauga County Board of Commissioners and Watauga County Planning Board and staff are commended for recognizing the importance of updating the County's comprehensive plan and the absolute significance of "quality of life" issues for Watauga County. From the beginning of this process, Commissioner Kinsey has stressed that "this must be a citizens' plan."

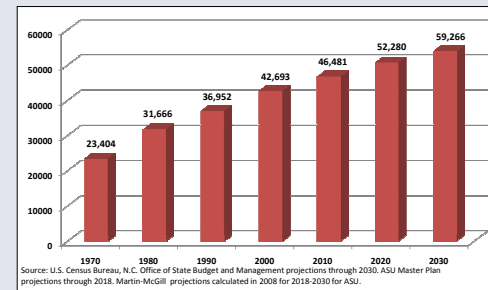
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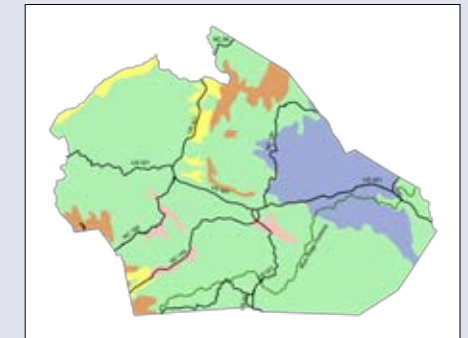
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Preface

The “Citizens’ Plan for Watauga” is an expression of the vision of Watauga citizens and leaders of the County’s goals and objectives for managing change in the community. The plan’s purpose is to provide a balance between managing change, preserving community traditions, protecting the natural environment and enhancing “quality of life.”

Human beings, the land on which we live, and our environment are undeniably interrelated. Sustaining an equitable balance in these relational elements is important for present and future generations.

Our individual and collective decisions and actions affect the quality of human life and the quality of our natural environment. By understanding these principles, and the consequences of continuing to violate them, we establish a common basis for working toward becoming a “sustainable community.”

This document is a reflection of the Watauga community’s concern for such principles. At the same time, this plan focuses on new issues that have emerged, such as “sustainability” and “green” issues, which are of great importance to the future of the Watauga community.

Sustainability Principles

- A natural resource will only be available for a finite time if the depletion rate exceeds the replacement rate. Thus, unconstrained use of resources affects future generations.
- Human activity produces harmful substances, which must be mediated to maintain balance in the natural systems.
- Humans and other living creatures make up ecosystems, which are inter-dependent. Ecosystems are most stable when they include a diversity of species. Overuse and pollution of the natural environment has implications for maintaining the earth’s biodiversity.
- Human needs have physical, economic, environmental, cultural, social and spiritual dimensions. They can be met equitably without compromising the physical environment. To achieve social stability and the cooperation required for large-scale changes related to the first three principles, we must work together to achieve greater fairness.

This emphasis on sustainability and the efficient use of land and other natural resources is particularly relevant given the great recessionary decline in our national and local economies since 2007. It is essential that the community acts to protect its vital economic and natural resources. Further, strategic community investments in capital improvements must be carefully weighed against the collective benefits and economic gain derived from such investments. This re-emphasis on sustainability points to the greater need to plan and prioritize to achieve strategic community goals and meet essential needs.

Plan Oversight Group (POG)



POG members from left to right: Buck Robbins, Fred Badders, Shelton Wilder, Charlie Wallin, Winston Kinsey and Steve Loflin. Absent from photo is Bill Sherwood.

Beginning the Planning Process

Photo by Hugh Morton

The Watauga County Board of Commissioners named residents from each commission's district and the County Planning Board to the Plan Oversight Group (POG) and appointed Commissioner Winston Kinsey as the direct representative from the County Commission. The POG recognized the inevitability of change, the necessary management of existing resources, and most of all, the essential need to have a broad-based process involving as many citizens as possible from all parts of the County. The first product of the comprehensive planning effort was the "Citizens' Plan for Watauga," Phase 1, presented to the County Commission on April 14, 2008. Several issues of concern emerged from the community meetings held around the County in Phase 1 of the process.

These issues and others are addressed in the "Citizens' Plan for Watauga." From these citizen responses, the POG developed recommendations in numerous work sessions addressing the issues that are important to citizens. The key question derived from Phase 1 was; "What do the County's citizens want this plan to accomplish?" Watauga County citizens answered the question with the following responses:

- The "Citizens' Plan for Watauga" must demonstrate that the concerns and priorities of the public are shared by the Board of Commissioners.
- It should indicate that the County Commission is prepared to take a proactive leadership role.
- It should reflect communication with public and private agencies and groups working independently for Watauga's future, such as the NC Department of Transportation, the National Park Service and economic development organizations.
- It must establish goals and place the responsibilities for meeting them.
- It should suggest strategies and approaches for reaching goals.
- It must report on the plan and involve the citizenry.
- Finally, it should establish a process for periodic review and updating.

Prominent Community Issues from Community Meetings

1. Traffic congestion
2. Water availability
3. Protection of natural resources
4. Farmland/large tract preservation
5. Land use divisions that are appropriate
6. Preservation of unique community identities and mountain heritage
7. Economic development/employment/affordable housing
8. Emergency services keeping pace with growth
9. Educational opportunities
10. Widespread recreational opportunities



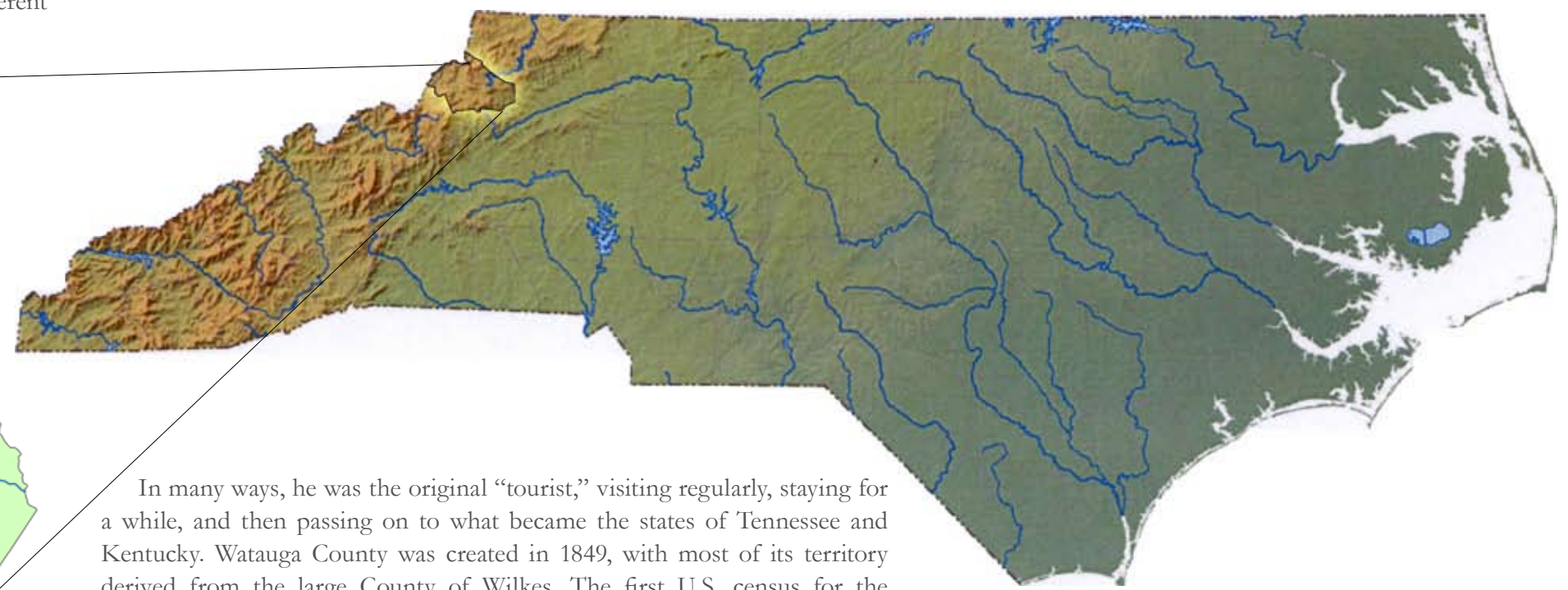


Watauga County

Watauga County is located in northwest North Carolina. Ashe, Avery, Caldwell and Wilkes counties in North Carolina and Johnson County in Tennessee bound the County. The County has a complex geology and falls within the Unaka Mountain Range and Blue Ridge Mountain Range. The County is the headwaters for four major river basins: Yadkin, New, Watauga and Catawba; all four flow in different directions.

The human history of the area of Watauga County starts with the "Native" Americans, probably several thousand years B.C. In later eras, the Cherokee, Catawba and perhaps Shawnee hunted, camped and had some agricultural villages here. The name Watauga is probably of Cherokee origin.

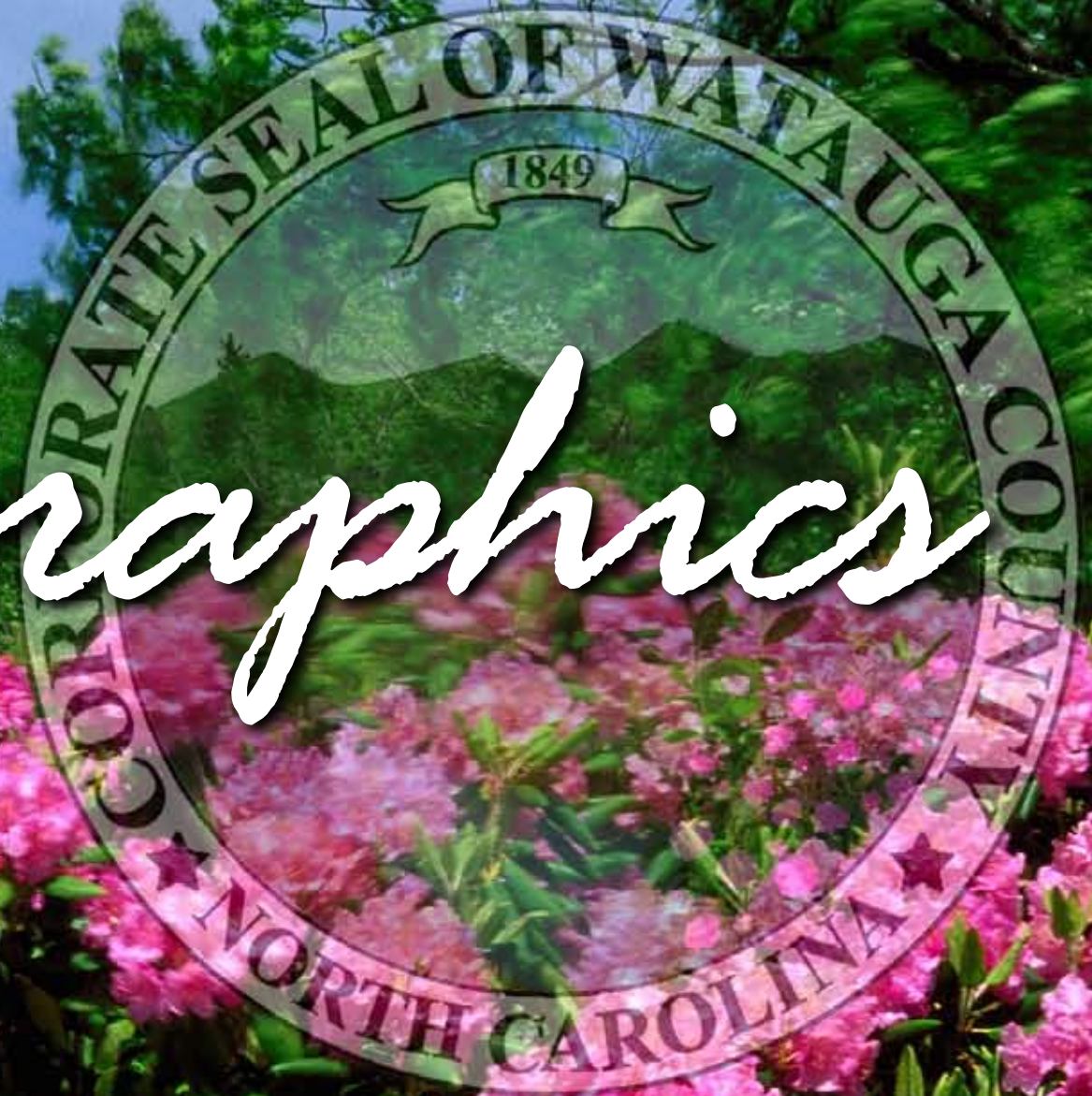
A few people of European descent were here by 1730. Later, would-be settlers had no easy access from the great wagon road of the Shenandoah Valley. As early as 1760, Daniel Boone was one of the early "long hunters," who came here from the Yadkin River in the Piedmont.



In many ways, he was the original "tourist," visiting regularly, staying for a while, and then passing on to what became the states of Tennessee and Kentucky. Watauga County was created in 1849, with most of its territory derived from the large County of Wilkes. The first U.S. census for the County was in 1850, which shows the population to be small in number and dedicated largely to subsistence agriculture. Most of the County's public records were destroyed by General George Stoneman's raid through the County near the end of the Civil War in 1865 and again with the burning of the courthouse in 1872.

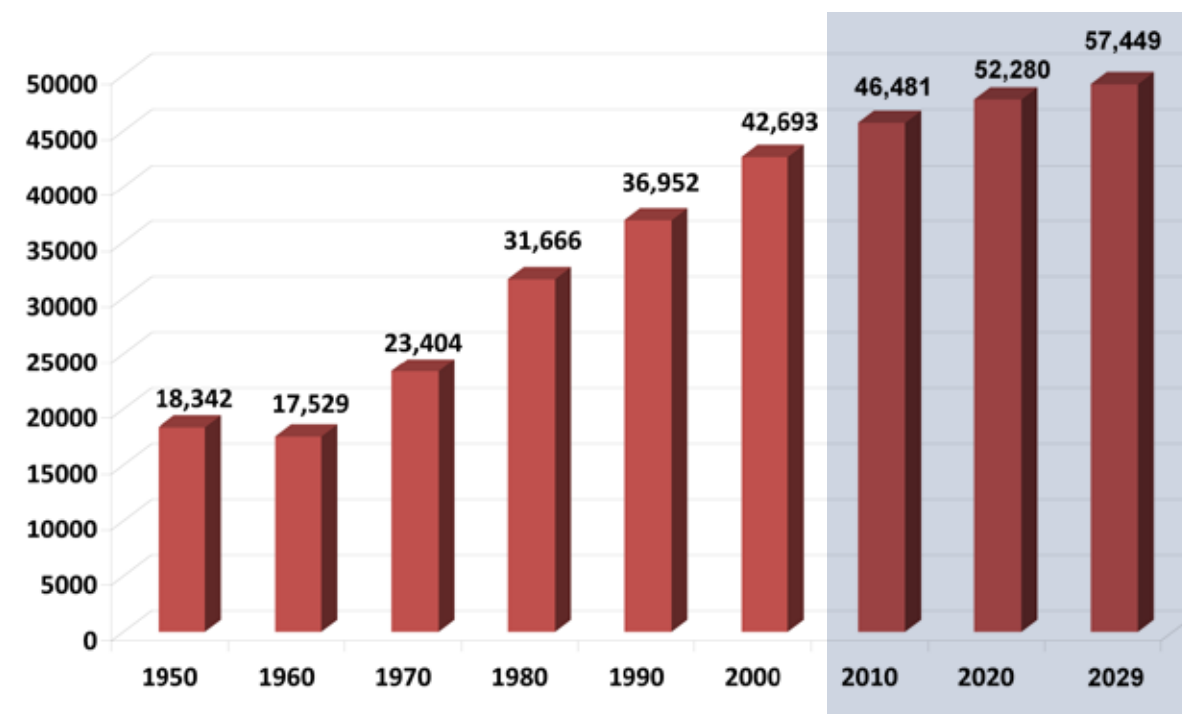
Section 1

Demographics



Population Trends

TABLE 1
Watauga County Actual
& OSBM Population Projections



Source: U.S. Census Bureau & N.C. Office of State Budget and Management
(April 24, 2009)

Watauga County has experienced growth during every decade since 1960. Between 1960 and 2000, the population more than doubled from 17,529 to 42,693 according to the U.S. Census Bureau. The increase from 1990 to 2000 was more than 15%, equaling 1.5 people moving into Watauga County every day throughout the ten-year period. From 2010 to 2029, the N.C. Office of State Budget and Management (April 24, 2009) projects an increase of more than 10,968 new residents.

Watauga County remains an increasingly popular location within North Carolina for first and second homebuyers. The projections by the N.C. Office of State Budget and Management do not include the people who are second homeowners. Although these people are not counted in the census as residents of Watauga County, they will nonetheless, directly affect the County's capacity to manage growth and deliver essential services.

The projections for future population (Table 1) do not include planned increases in Appalachian State University's student population.

The population projections may be influenced by the national economic recession that began in 2008.



Photo courtesy Blowing Rock TDA

Population Trends - Appalachian State

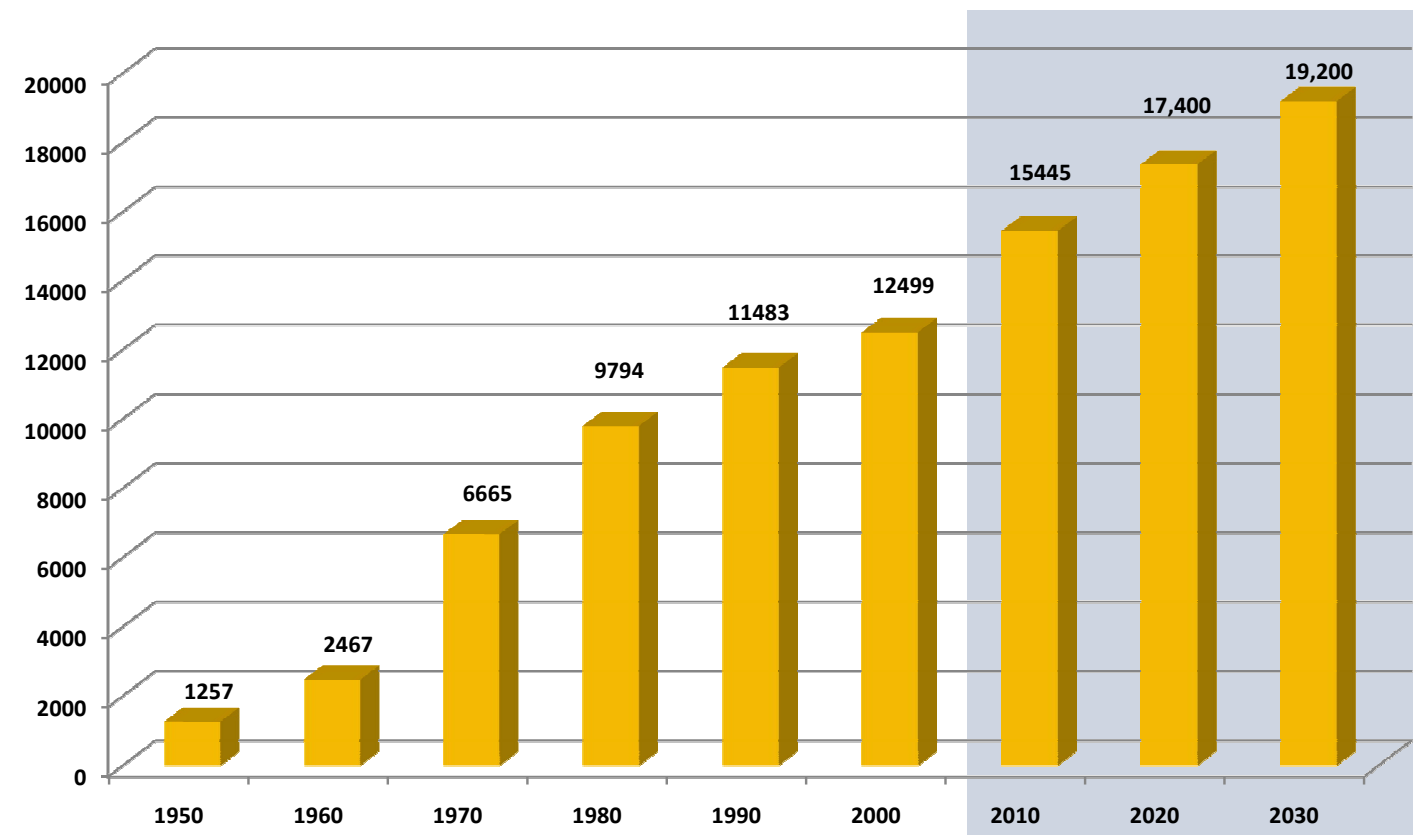
Appalachian State University is a major contributor to Watauga County in many ways, including the ever-increasing population of on-campus students. In 1950, the on-campus student enrollment was 1,257. In 2000, the on-campus student enrollment was recorded at 12,499. During the fall semester of 2007, on-campus enrollment was 14,482. This increase reflects a 15.87% increase from 2000.



Appalachian State University

Projections for future growth at Appalachian State University (Table 2) are more modest. The Master Plan for the University projects an on-campus student enrollment of 17,026 by 2018. Projections for increases from 2019 to 2030 are calculated at 1% per year to arrive at a projected on-campus student enrollment of 19,185 by 2030.

TABLE 2
Appalachian State University - Actual and Projected On-Campus Student Enrollment

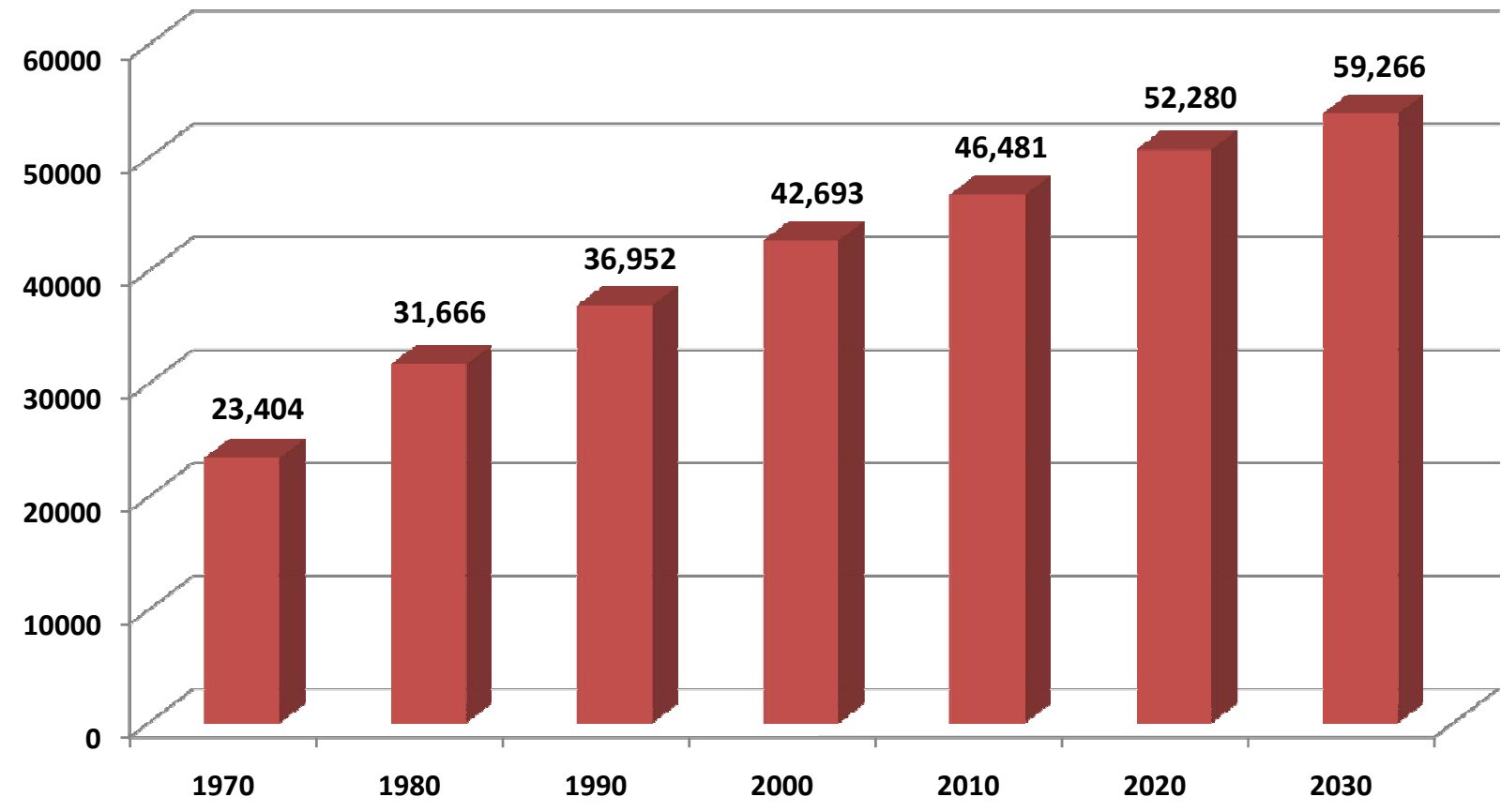


Source: Appalachian State University Master Plan Projections through 2018. Martin-McGill projections calculated in 2008 for years 2019 to 2030.

Population Trends

Table 3 reflects projections by the N.C. Office of State Budget and Management in 2009, plus the projections for Appalachian State University for planned increases in on-campus student enrollment for the period beginning 2008 through 2030.

TABLE 3
Projected Population for Watauga County



Source: U.S. Census Bureau, N.C. Office of State Budget and Management; Appalachian State University Master Plan Projections through 2018. Martin-McGill projections calculated in 2008 for years 2019 to 2030.



Kidd Brewer Stadium, Appalachian State University

Population Trends - Watauga Municipalities

Watauga County has four municipalities: Beech Mountain, Blowing Rock, Boone and Seven Devils. Of these four towns, Boone is the only municipality that lies totally within the Watauga County boundary. Beech Mountain, Blowing Rock and Seven Devils all straddle a county line. Both Beech Mountain and Seven Devils lay partially within Avery County. Blowing Rock lies partially within Caldwell County.

Table 4 provides the populations of each town and their growth from 1990 to 2008. Also listed is the portion of each town's population (in adjoining counties) that lies outside of Watauga County.

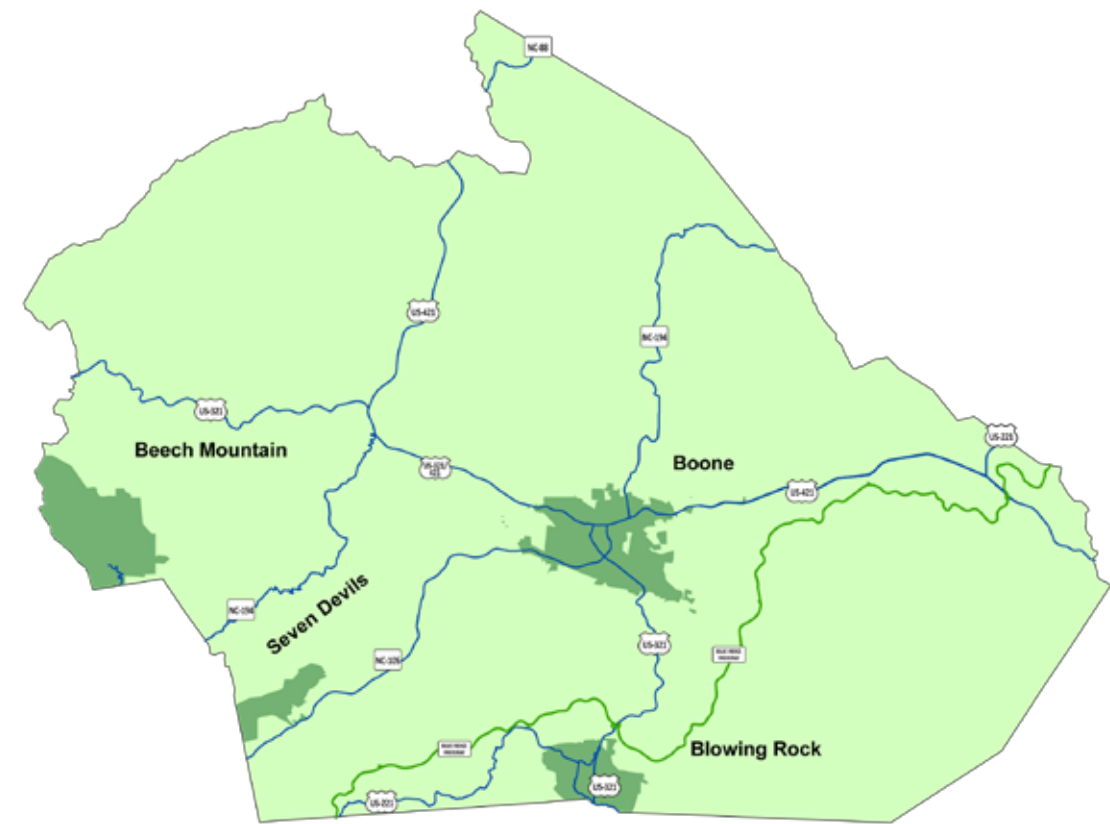
TABLE 4

July 2008 Population Estimates by Municipality
County and State Populations for Reference

County and State Populations for Reference							
County	Geographic Area Municipality	April 1990	April 2000	July 2008	Growth		
					Amount	% 2000-2008	
Watauga		36,952	42,693	45,319	2,626	6.15	
	Beech Mountain(Part)	232	297	335	38	12.79	
	Blowing Rock(Part)	1,219	1,365	1,422	57	4.18	
	Boone	12,949	13,470	14,942	1,472	10.93	
	Seven Devils(Part)	97	112	128	16	14.29	
Avery		14,867	17,167	18,428	1,261	7.35	
	Beech Mountain(Part)	7	13	49	36	276.92	
	Seven Devils(Part)	20	17	18	1	5.88	
Caldwell		70,709	77,386	80,020	2,634	3.40	
	Blowing Rock(Part)	44	53	60	7	13.21	

Source: N.C. Office of State Budget and Management Last updated September 25, 2009

- Boone is the largest of the municipalities by population. It is the county seat of Watauga County. Appalachian State University is located within its boundaries, which adds significantly to Boone's population.
- Blowing Rock is the second largest municipality, with a population of 1,422 in 2008. During the summer, Blowing Rock's population swells to over 8,000.
- Beech Mountain is next largest with 327 Watauga County residents in 2008.
- Seven Devils is the smallest town in Watauga County, with 121 Watauga County residents in 2008.



Population Trends - Watauga Townships

TABLE 5

Average Decennial Population Change 1950-2000

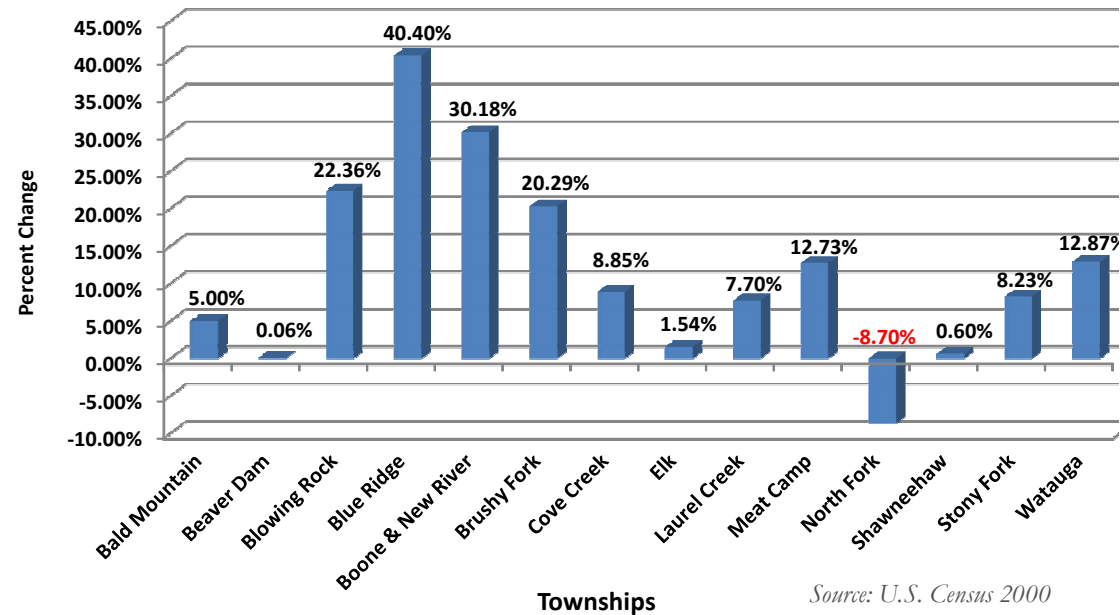


TABLE 6

Actual and Projected Township Populations

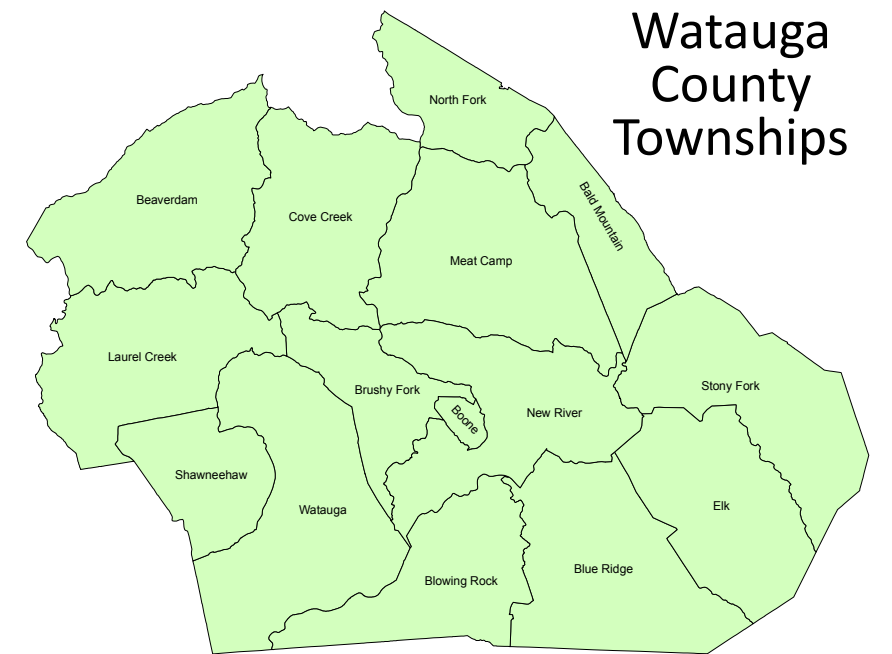
Township	1950	1960	1970	1980	1990	2000	2010	2020	2030
Bald Mountain	380	361	363	280	370	485	514	550	594
Beaver Dam	1,279	944	847	1,030	1,176	1,283	1,321	1,387	1,498
Blowing Rock	1,042	982	1,321	2,295	2,332	2,858	3,029	3,271	3,533
Blue Ridge	665	644	898	1,613	2,204	3,628	4,063	4,769	5,627
Boone	2,973	3,686	8,754	10,191	12,915	8,690	9,733	11,485	13,667
Brushy Fork	1,272	1,642	2,345	2,656	3,368	3,203	3,427	3,667	3,942
Cove Creek	1,921	1,626	1,780	2,141	2,335	2,935	3,066	3,202	3,426
Elk	428	366	274	260	314	462	517	610	720
Laurel Creek	1,212	1,036	1,096	1,332	1,383	1,756	1,861	1,991	2,130
Meat Camp	1,468	1,257	1,275	1,805	2,214	2,673	2,833	3,031	3,243
New River	1,718	1,952	1,499	3,785	3,322	8,848	9,910	11,694	13,799
North Fork	350	261	231	207	232	222	231	243	260
Shawneehaw	655	450	390	544	668	675	702	737	789
Stony Fork	1,388	1,199	1,192	1,476	1,773	2,061	2,185	2,338	2,502
Watauga	1,591	1,123	1,139	2,051	2,346	2,914	3,089	3,305	3,536
	1950	1960	1970	1980	1990	2000	2010	2020	2030
Watauga County	18,342	17,529	23,404	31,666	36,952	42,693	46,481	52,280	59,266
Percent change from previous census	1.26%	-4.43%	33.52%	35.30%	16.69%	15.54%	8.87%	12.48%	13.36%

Source: U.S. Census Bureau (1950-2000) - Martin-McGill projections 2010 to 2030 made August 2009

Table 5 summarizes the average percentage change in population of each township during all decades from 1950 to 2000. The Boone and New River Townships are combined to eliminate skewing of the data for these two townships resulting from corrections to township boundaries. The two townships with the greatest populations are Boone and New River. These two townships had the largest number of new residents moving into the County during the period examined. However, the highest percentage growth rate in the County during the 50-year period occurred in the Blue Ridge Township, which averaged over 40%. The combined growth in the Boone and New River Townships ranked second in percentage of change with an increase of 30.2%. Slightly more than 41% of the total population of the County reside in the Boone and New River Townships.

The projected populations in Table 6 were derived from analysis of the historical trends in each of the townships individually, followed by utilizing regression analysis to project potential population at the 2010, 2020 and 2030 census intervals. Statistical projections consider historical data, but do not account for any potential changes that may alter the data in any significant way. Thus, subjective adjustments are warranted where significant factors are likely to influence future populations. Such is the case with three townships, including Blue Ridge, Elk and Watauga Townships.

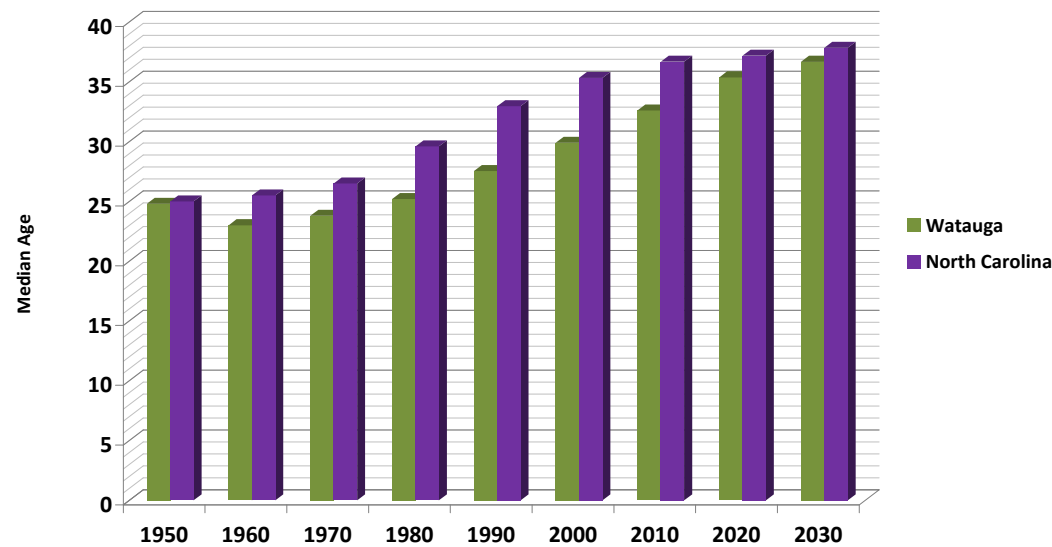
- Noteworthy in Blue Ridge and Elk Townships is the planned Reynolds Blue Ridge Development, which could be a major contributor due to an increase in lots and housing units.
- In the Watauga Township, the Echota Development is adding additional housing units and may contribute to the future population.
- The least populated townships in the County include Bald Mountain, Beaver Dam, Elk, Laurel Creek, North Fork, Shawneehaw and Stony Fork Townships. Each experienced slow growth from 1950 to 2000.
- In the case of North Fork Township, a 36.5% decline in population occurred over the 50-year period.



Watauga
County
Townships

The Changing Face of Demographics in Watauga County

TABLE 7 - Median Age of Population



- The population of the nation and our state is getting older (Table 7). This is revealed in the census data for 2000 and in the annual estimates produced by the Census Bureau in May 2008 for the nation and North Carolina. The median age in the United States increased from 35.3 to 36.6 from 2000 to 2007.
- The age in North Carolina increased from 35.3 to 36.8. This trend toward an older population is also revealed in the number of people with an age of 65 years or older (Table 8).
- Watauga County's median age statistic is greatly influenced by the student population at Appalachian State University. In general, the large number of students in the 18- to 24-year-old cohorts skews the data toward a substantially lower median age.
- The percentage of persons in Watauga County over age 65 is currently less than the state's average (Table 8).
- By 2010, the N.C. Office of State Budget and Management projects that the percentage of persons in Watauga County age 65 and over will slightly surpass the percentage for the same age group for the state.
- By 2030, Watauga County residents who are age 65 or older will represent 20% of inhabitants, while North Carolina's average will be 17.74%.

Watauga County experienced a growth rate of 15.5% from 1990 to 2000. The natural growth during the period was 965 (Table 9), indicating a birth rate that exceeded the death rate during the period. However, 12.9% of the growth in Watauga County resulted from in-migration. The neighboring mountain county of Avery experienced similar growth with slightly more in-migration growth at 14.4%. Ashe County experienced slightly less in-migration at 11.0%. The neighboring foothill counties of Caldwell and Wilkes experienced lower growth rates overall than Watauga County and less in-migration. In comparison, North Carolina's average growth rate from in-migration was 15.0%.

TABLE 8 - Percent of Population 65 and Older

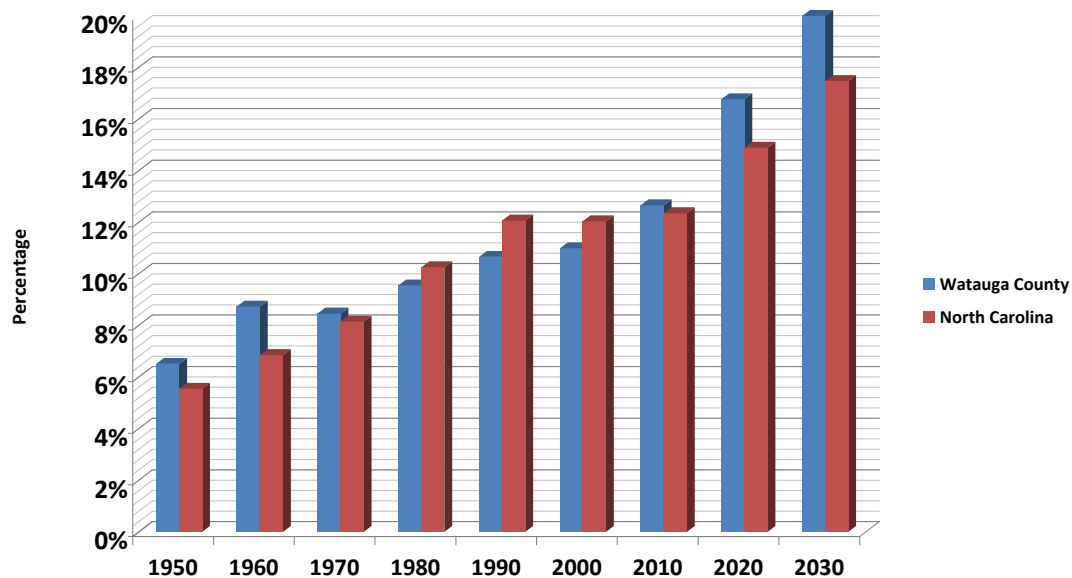


TABLE 9
County Population Growth and Migration 1990-2000

	1990 Population	2000 Population	Growth*	Percent Growth	Births	Deaths	Natural**	Net***	Percent Net Migration
Watauga	36,952	42,693	5,741	15.5	3,523	2,558	965	4,776	12.9
Ashe	22,209	24,384	2,175	9.8	2,415	2,693	-278	2,453	11.0
Avery	14,867	17,167	2,300	15.5	1,834	1,671	163	2,137	14.4
Caldwell	70,709	77,708	6,999	9.9	9,993	6,639	3,354	3,645	5.2
Wilkes	59,393	65,636	6,243	10.5	7,938	5,782	2,156	4,087	6.9
North Carolina	6,632,448	8,046,813	1,414,365	21.32	1,055,655	638,776	416,879	997,486	15.0

Source: N.C. Office of State Budget and Management, N.C. State Demographer (June 18, 2008)

*2000 Population minus 1990 Population = Growth

**Difference in Births and Deaths = Natural Growth

***Growth minus Natural Growth = Net Migration

Watauga Housing

TABLE 10

Counties in North Carolina, Sorted by Percent Change in Housing Units, 4/1/00 Estimate Base to 7/1/07	July 1, 2007	July 1, 2000	Estimates Base	Census	Absolute Change April 1, 2000 Estimates Base to July 1, 2007	Percent Change April 1, 2000 Estimates Base to July 1, 2007	Rank of County in North Carolina
Union County	67,420	46,364	45,723	45,695	21,697	47.45%	1
Brunswick County	73,018	51,850	51,430	51,431	21,588	41.98%	2
Mecklenburg County	390,393	296,332	292,755	292,780	97,638	33.35%	3
Wake County	339,756	261,040	258,954	258,953	80,802	31.20%	4
Currituck County	13,822	10,781	10,687	10,687	3,135	29.33%	5
Camden County	3,841	2,990	2,973	2,973	868	29.20%	6
Iredell County	66,486	52,405	51,917	51,918	14,569	28.06%	7
Cabarrus County	67,387	53,294	52,848	52,848	14,539	27.51%	8
Hoke County	15,876	12,607	12,521	12,518	3,355	26.79%	9
Johnston County	62,198	50,621	50,163	50,196	12,035	23.99%	10
Clay County	6,726	5,467	5,425	5,425	1,301	23.98%	11
Pitt County	71,977	58,706	58,364	58,408	13,613	23.32%	12
Jackson County	23,727	19,492	19,291	19,291	4,436	23.00%	13
New Hanover County	97,664	80,096	79,634	79,616	18,030	22.64%	14
Durham County	115,872	96,129	95,452	95,452	20,420	21.39%	15
Dare County	32,358	26,888	26,671	26,671	5,687	21.32%	16
Cherokee County	16,281	13,580	13,499	13,499	2,782	20.61%	17
Pender County	25,003	20,920	20,798	20,798	4,205	20.22%	18
Lincoln County	30,823	25,951	25,717	25,717	5,106	19.85%	19
Granville County	21,446	18,023	17,896	17,896	3,550	19.84%	20
Chatham County	25,539	21,482	21,357	21,358	4,182	19.58%	21
Onslow County	65,626	56,181	55,726	55,726	9,900	17.77%	22
Lee County	23,446	20,086	19,963	19,909	3,483	17.45%	23
Watauga County	27,096	23,296	23,156	23,155	3,940	17.02%	24
Ashe County	15,243	13,339	13,268	13,268	1,975	14.89%	34
Avery County	13,538	11,962	11,911	11,911	1,627	13.66%	39
Caldwell County	35,918	33,560	33,420	33,430	2,498	7.47%	66
Wilkes County	30,749	29,360	29,263	29,261	1,486	5.08%	77
North Carolina	4,125,308	3,543,084	3,522,334	3,523,944	602,974	17.12%	

Source: U.S. Census Bureau, Population Division

North Carolina has one of the fastest growing populations in the United States. North Carolina's overall percentage increase in housing units between 2000 and 2007 was 17.12%. Table 10 summarizes the housing growth for counties exhibiting the highest rates of change.

Growth in housing units in Watauga County falls just under the state average of 17.12% at 17.02%. Watauga County ranks 24th of North Carolina's 100 counties for growth in housing units, with 3,940 housing units constructed in the 7-year period between 2000 and 2007. The recession that began in 2007 has substantially slowed this rate of residential development.



Seasonal and Absentee Owner Population

The 2000 U.S. Census recognized 23,155 total housing units in Watauga County (Table 11). Census Bureau research reported 5,098 housing units as seasonal, recreational or occasional use. Thus, 22.02% of all housing, or 77.1% of all vacant housing in Watauga County was seasonal in the 2000 U.S. Census.

TABLE 11

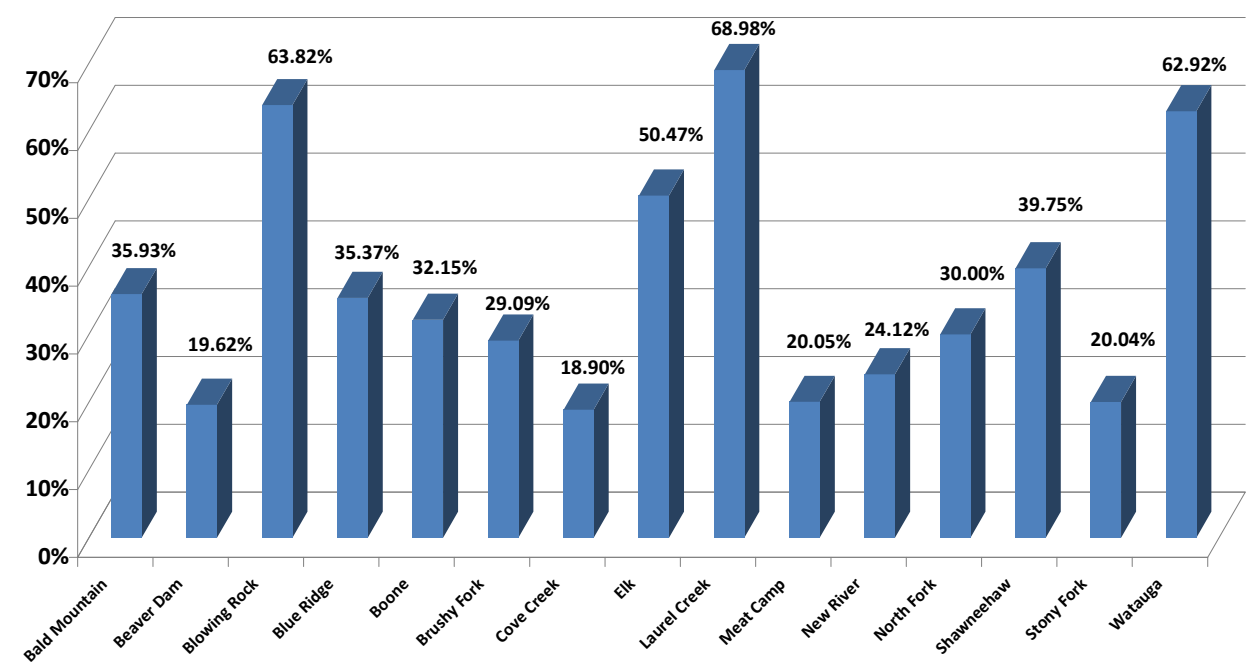
Subject	Number	Percent
Total housing units	23,155	100%
Occupied housing units	16,540	71.4%
Vacant housing units	6,615	28.6%
TENURE		
Occupied housing units	16,540	100%
Owner-occupied housing units	10,406	62.9%
Renter-occupied housing units	6,134	37.1%
VACANCY STATUS		
Vacant housing units	6,615	100%
For rent	511	7.7%
For sale only	170	2.6%
Rented or sold, not occupied	261	3.9%
For seasonal, recreational, or occasional use	5,098	77.1%
For migratory workers	3	0%
Other vacant	572	8.6%

Source: U.S. Census 2000
Definition: Housing unit
 A house, an apartment, a mobile home or trailer, a group of rooms, or a single room occupied as separate living quarters, or if vacant, intended for occupancy as separate living quarters. Separate living quarters are those in which the occupants live separately from any other individuals in the building and which have direct access from outside the building or through a common hall. For vacant units, the criteria of separateness and direct access are applied to the intended occupants whenever possible.

Arriving at a definitive estimate of Watauga County's seasonal population is difficult. Data is incomplete and conflicting. The data produced by the 2000 Census is dated, but it is probably the most realistic indicator available. Based on the Census and tax record indicators, it is estimated that the number of seasonal residents in Watauga County is between 10,700 to 13,000, or 25% to 30% of the County's permanent population.

In 2000, the U.S. Census reported 42,693 people living in Watauga County. If the above estimates of seasonal residents is reasonable, then the population of Watauga County may be as high as 55,000 on a seasonal basis. This increase in population, even if temporary, is certain to place extra demand on essential services including water and sewer, fire and police protection, roads and streets, and emergency services. Table 12 estimates the distribution of this seasonal population among the townships.

TABLE 12 - Absentee Owned, Residential Properties - Percent Per Township in June 2008



Source: Watauga County Tax Administration

Photo courtesy Blowing Rock TDA

Demographic Conclusions

Watauga County has transformed from a rural, agrarian county to a robust and growing transition community with a large tourism industry and growing population. Population growth more than doubled from 1960 to 2000. Predictions by the N.C. Office of State Budget and Management reflect continued growth, although at a slower rate.

Population projections for Watauga County place the population (excluding seasonal residents) in 2030 at approximately 59,000. To fully understand the potential for growth in Watauga County, one must consider two influencing factors, which are student enrollment at ASU and seasonal population.

Analysis indicates that the seasonal population may increase the year-round permanent population by as much as 25-30%. Townships that currently have a very large percentage of seasonal population include Blowing Rock, Laurel Creek and Watauga. Therefore, the effective population could be as high as 72,000 by 2030.

Another noteworthy issue is that these numbers do not include tourists visiting Watauga County. Their numbers are substantial during three seasons of the year and add to the demand for services. The increasing number of seasonal residents and tourists are elements of growth that officials and planners must consider in weighing future growth issues.



Photo courtesy Blowing Rock TDA



Photo courtesy Blowing Rock TDA



Photo by Hugh Morton

Economic Trends

Income Characteristics

Three income characteristics are particularly important in analyzing the economic viability of the Watauga community: Income Per Capita, Median Household Income and Median Family Income. These three income characteristics, when viewed in comparison to one another, help to indicate the strength of the local economy. Table 13 compares these three income indicators for Watauga County, North Carolina and the United States.

- For each of these three income statistics, Watauga County is lower than the average for North Carolina and the United States in each census year.
- The 2000 Census shows that Watauga County's per capita income is 85% of that for North Carolinians and 80% of the per capita income for the nation.
- For median family income, Watauga County families earn 98% of the income of other North Carolina families and 91% of families in the United States.
- Both per capita income and median household income in Watauga County lag significantly behind other North Carolina households at 83%, and behind U.S. households at 78%.
- Much of the difference in these income areas is attributable to the high student population.

TABLE 13

Income Characteristics 1970 - 2008						
Census Year Income					2007 Income	2008 Income
	1969	1979	1989	1999	2007	2008
Watauga: Income Per Capita	1,969	5,097	10,628	17,258	22,924	23,038
Watauga: Median Family Income	6,149	14,532	27,752	45,508	55,634	56,485
Watauga: Median Household Income	No data	11,039	20,252	32,611	40,571	40,995
State						
State Income Per Capita	2,474	6,133	12,885	20,307	32,234	26,823
State: Median Family Income	7,770	16,792	31,548	46,335	55,028	60,446
State: Median Household Income	7,025	14,481	26,647	39,184	42,219	51,411
National						
National: Income Per Capita	3,119	7,298	14,420	21,587	38,611	39,751
National: Median Family Income	9,586	19,917	35,225	50,046	61,173	N/A as of Aug. 09
National: Median Household Income	8,486	16,841	30,056	41,994	50,233	N/A as of Aug. 09

Source: 1970, 1980, 1990, and 2000 Censuses of Population, NC Economic Development Intelligence System (2008, 2nd Quarter)
 Income Surveys Branch, HHES Division
 U.S. Census Bureau, U.S. Department of Commerce

Employment/Wages by Industry

At the end of the fourth quarter in 2008, the number of employed persons in Watauga County was approximately 21,672, according to the U.S. Bureau of Labor Statistics (Table 14).

- Private industry employed 16,665 individuals.
- Federal, state and local governments employed 5,017 people.
- Specific areas that stand out as employers of a large percentage of workers include state government, educational services, the accommodations and food services sector, and retail trade.
- State government and educational services numbers are high, mainly due to the large number of employees in administration and teaching at Appalachian State University.
- Large numbers of workers in the accommodation and food services sector and retail trade are explained by the area's popularity as a tourist destination.
- The weekly wages for Watauga County workers are lower than the average wages in North Carolina in all categories of industry except two – state government and education services.
- Based on information in the report, employees of North Carolina state government in Watauga County fare better than average North Carolina state employees by approximately 15%.
- Workers employed in education services also fare better than the average in North Carolina and earn 19% more than other North Carolina education service workers.

TABLE 14

Employment/Wages by Industry - Watauga County with North Carolina for Comparison (4th Quarter, 2008)			
Government Industry	Watauga County - Average Employment	Watauga County - Average Weekly Wage	North Carolina - Average Weekly Wage
Total Federal Government	102	\$961	\$1,170
Total State Government	3,084	\$951	\$830
Total Local Government	1,831	\$701	\$767
Private Industry			
Total Private Industry	16,655	\$535	\$787
Agriculture, Forestry, Fishing & Hunting	37	\$408	\$559
Mining	37	\$496	\$1,035
Utilities	74	\$885	\$1,412
Construction	1,537	\$691	\$836
Manufacturing	643	\$671	\$927
Wholesale Trade	750	\$1,053	\$1,146
Retail Trade	3,629	\$399	\$472
Transportation and Warehousing	318	\$699	\$837
Information	310	\$608	\$1,124
Finance and Insurance	546	\$902	\$1,261
Real Estate and Rental and Leasing	400	\$531	\$738
Professional and Technical Services	623	\$847	\$1,303
Management of Companies and Enterprises	95	\$935	\$1,448
Administrative and Waste Services	530	\$432	\$574
Educational Services	3,828	\$909	\$765
Health Care and Social Assistance	2,318	\$797	\$836
Arts, Entertainment, and Recreation	670	\$397	\$689
Accommodation and Food Services	3,894	\$251	\$274
Other Services, Ex. Public Admin	445	\$435	\$521
Public Administration	911	\$677	\$825
Unclassified	77	\$643	\$1,077
Total All Industries	21,672	\$610	\$793

Source: US Bureau of Labor Statistics for wages and establishments by industry. www.bls.gov

Economic Trends

Tourism Statistics - 2007

- Domestic tourism in Watauga County generated an economic impact of \$189.8 million in 2008.
- In 2008, Watauga County ranked 18th in travel impact among North Carolina's 100 counties.
- More than 2,510 jobs in Watauga County were directly attributable to travel and tourism.
- Travel generated a \$43.84 million payroll in 2008.
- State and local tax revenues from travel to Watauga County amounted to \$17.25 million. This represents a \$397.00 tax saving to each County resident.
- Area attractions include the Blue Ridge Parkway, Horn in the West outdoor drama, Hickory Ridge Homestead, Mast General Store, Beech Mountain Resort, Mystery Hill, museums devoted to Appalachian culture and heritage, Blowing Rock, Tweetsie Railroad and Appalachian Ski Mountain.
- There are several attractions in adjoining counties that contribute to Watauga County tourism for basic services, such as restaurants and lodging.



Photo courtesy Blowing Rock TDA

TABLE 15

Year	Revenues \$(millions)	Change from previous year
2008	\$189.76	-0.7 %
2007	\$191.15	6.70 %
2006	\$179.14	9.18 %
2005	\$164.08	3.10 %
2004	\$159.14	4.95 %
2003	\$151.64	-2.78 %
2002	\$155.98	6.17 %
2001	\$146.92	-2.89 %
2000	\$151.29	5.33 %
1999	\$143.64	10.30 %
1998	\$130.23	7.92 %
1997	\$120.67	1.79 %
1996	\$118.55	5.12 %
1995	\$112.78	8.79 %
1994	\$103.67	6.42 %
1993	\$97.42	6.53 %
1992	\$91.45	8.87 %
1991	\$84.00	2.46 %

Source: N.C. Department of Commerce

Principal Employers

TABLE 16

Twelve Largest Employers - Watauga County			
Watauga County - As of September 1, 2008			
Rank	Company Name	Industry	Employment Range
1	Appalachian State University	Education	*3,000
2	Appalachian Regional Healthcare	Health Services	1,600
3	Watauga County Board Of Education	Education	650
4	Samaritans Purse Inc	Ministry - Relief Organization	550
5	Watuaga County	Government-Public Administration	*290
6	Wal-Mart Associates Inc	Retail	254
7	Boone Drug, Inc.	Retail	232
8	Lowes Home Centers Inc	Retail	171
9	Town Of Boone	Government-Public Administration	163
10	Chetola Mountain Resort	Leisure & Hospitality	160
11	Hospitality Mints	Manufacturing	135
12	IRC	Manufacturing	150
*Appalachian State University has 5,000 employees including part-time and temporary			
*Watauga County has an additional 170 employees who are classified as seasonal or non-regular			
Source: Martin-McGill, Inc. research (August 2009)			

Watauga County's largest employer is Appalachian State University (ASU).

- On September 1, 2008, ASU had 3,000 full-time employees.
- The total employment is more than 5,000 with part-time and temporary employees.
- Considering full-time employees, ASU employs 13% of the County's entire workforce.
- The employment of Appalachian Regional Healthcare System was 1,600 on September 1, 2008.
- The next largest employer is the Watauga County Board of Education with 650 employees.
- Samaritan's Purse, Incorporated, an international Christian relief organization, has 550 employees in Watauga County.
- Other major contributors to the labor force include Watauga County, the Town of Boone and Chetola Resort.



Appalachian State University

Employment Trends

The 2000 U.S. Census defines labor force as “all people classified in the civilian labor force (i.e., “employed” and “unemployed” people), plus members of the U.S. Armed Forces.” Tables 17 and 18 summarize key employment and economic sector statistics for Watauga County.

TABLE 17

Watauga County Employment Characteristics 1990-2009				
Watauga County	Labor Force	Employed	Unemployed	Unemployment Rate
June 2009 (partial)	24,094	22,154	1,940	8.1
2008	23,614	22,518	1,096	4.6
2007	25,637	24,814	823	3.20
2006	23,921	23,036	885	3.70
2005	23,293	22,371	922	4.00
2004	22,729	21,800	929	4.10
2003	22,647	21,646	1,001	4.40
2002	22,326	21,324	1,002	4.50
2001	23,511	22,649	862	3.70
2000	23,232	22,554	678	2.90
1999	23,956	23,608	348	1.50
1998	23,455	23,011	444	1.90
1997	23,228	22,703	525	2.30
1996	22,769	22,107	662	2.90
1995	22,539	21,784	755	3.30
1994	21,923	21,417	506	2.30
1993	21,098	20,474	624	3.00
1992	20,763	20,002	761	3.70
1991	20,123	19,223	900	4.50
1990	19,904	19,007	897	4.50

Source: Employment Security Commission of North Carolina

TABLE 18

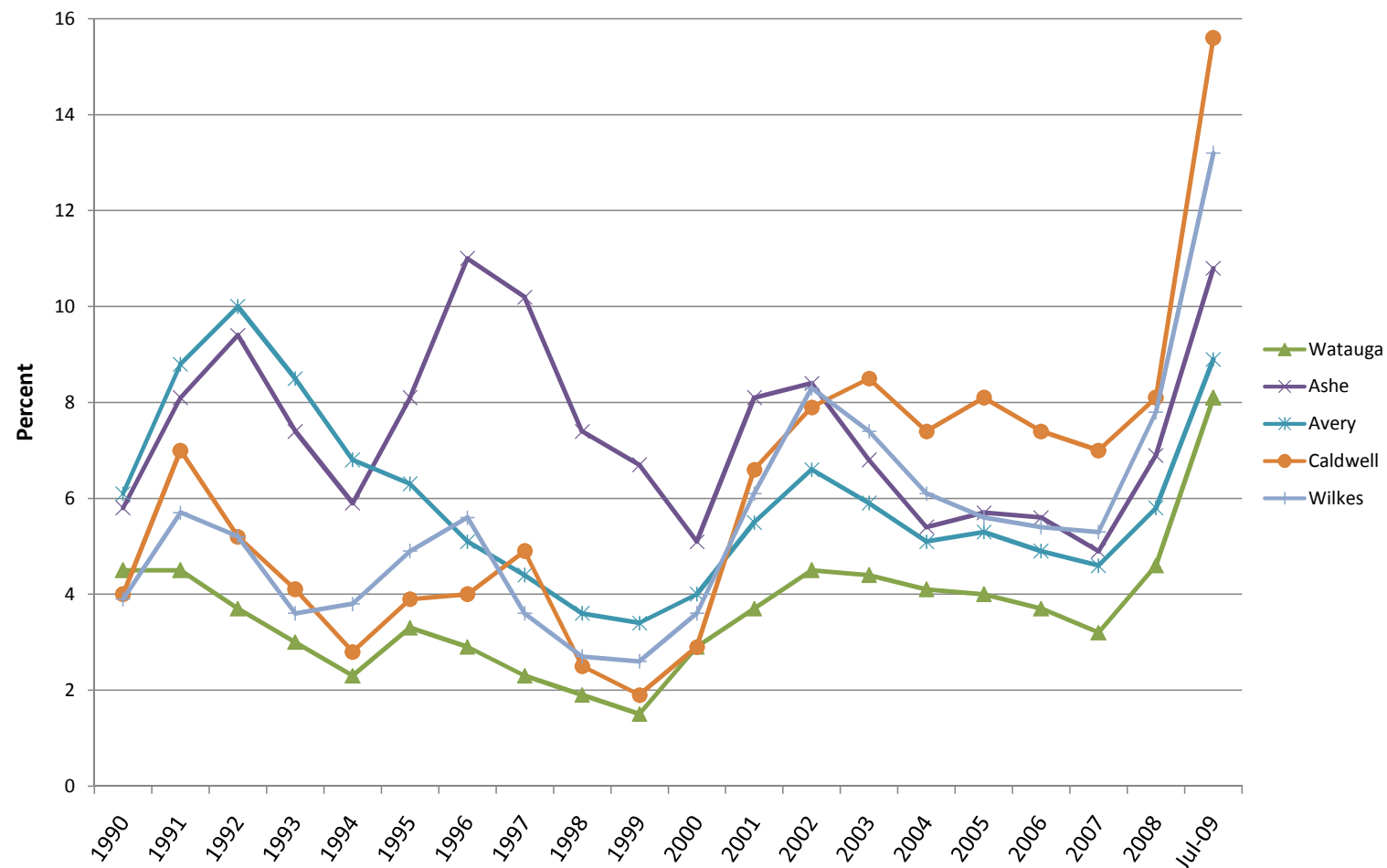
Current Industry Structure (updated 7/2008)				
Watauga County	Quarter Ending December 31, 2007			
	Number of Business Units	Average Employees	Percent of NC Average	Percent of Watauga Avg
Total, All Industries	1,814	23,109	0.56%	100.00%
Natural Resources and Mining	11	67	0.00%	0.29%
Construction	308	1,742	0.04%	7.54%
Manufacturing	52	889	0.02%	3.85%
Trade, Transportation, and Utilities	416	4,794	0.12%	20.75%
Information	31	312	0.01%	1.35%
Financial Activities	176	1,001	0.02%	4.33%
Professional and Business Services	243	1,359	0.03%	5.88%
Education and Health Services	164	6,984	0.17%	30.22%
Leisure and Hospitality	192	4,496	0.11%	19.46%
Other Services	99	466	0.01%	2.02%
Public Administration	26	887	0.02%	3.84%
Unclassified	96	112	0.00%	0.48%

Source: NAICS Employment and Wages, Quarterly Census of Employment and Wages (QCEW) Unit, ESC/LMI Division

Unemployment Rate

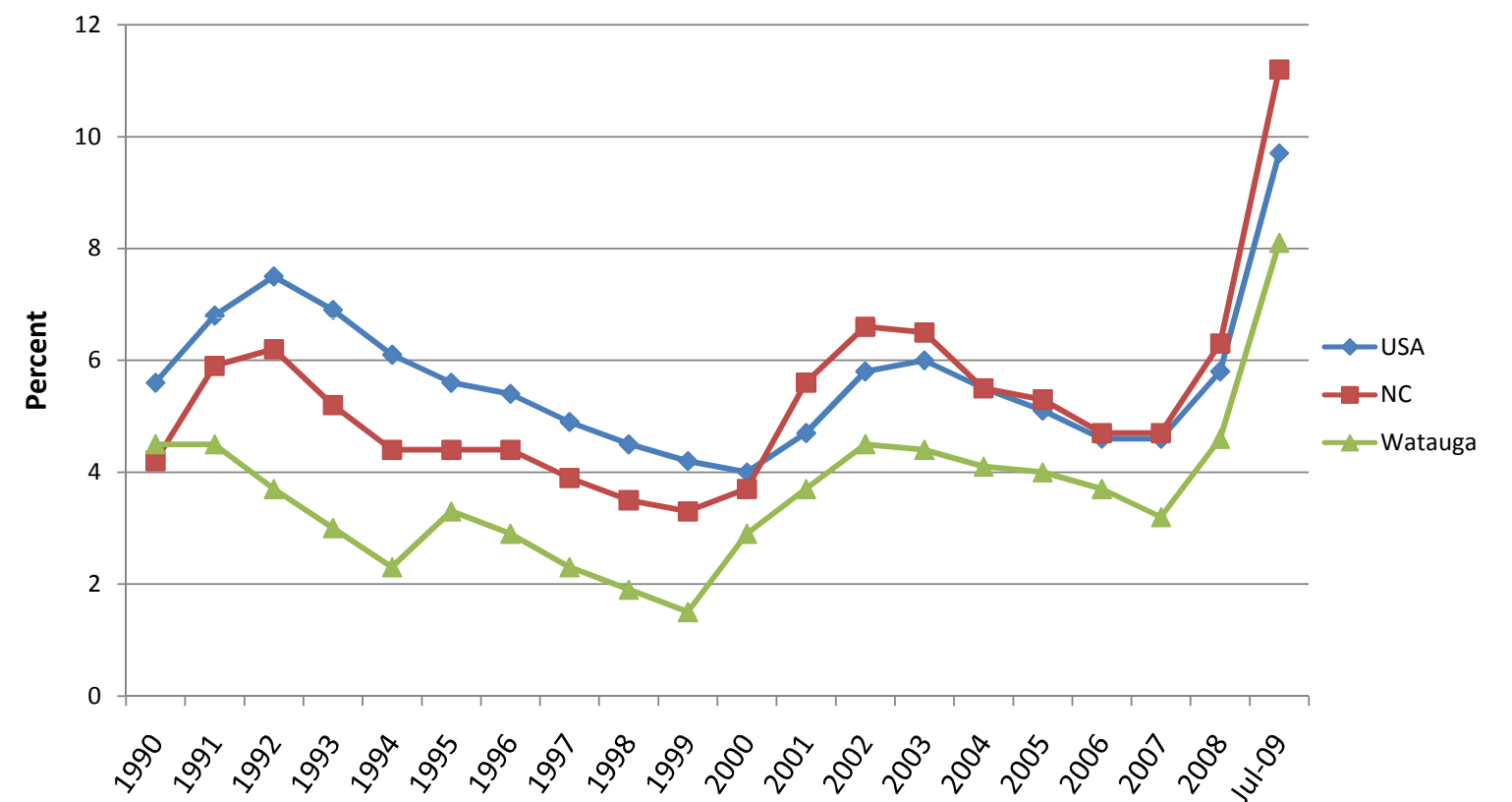
Since 1991, the average annual unemployment rate in Watauga County has been lower than North Carolina's average annual rate and lower than the national average rate. The unemployment rate in Watauga County has also been very favorable compared to adjoining counties. Many individuals commute from other counties in North Carolina and Tennessee to work in Watauga County.

TABLE 19
Average Annual Unemployment Rate - Counties



Source: Employment Security Commission of North Carolina

TABLE 20
Average Annual Unemployment Rate - Comparison



Source: Employment Security Commission of North Carolina

Working Commuters

- In 2000, 2,964 individuals, or 12.4% of the labor force in Watauga County, lived in North Carolina counties other than Watauga County.
- Over half of these people lived in the adjoining counties of Ashe (1,350) and Avery (557). The adjoining counties of Caldwell (271) and Wilkes (244) accounted for another 515 workers.
- 4.7% of the workers commuting to Watauga County lived in Tennessee and 85.2% of these came from Johnson County.



Photo courtesy Blowing Rock TDA

TABLE 21

Workers Commuting to Work in Watauga County, Living In:		
NC Counties	1990	2000
Ashe County	713	1,350
Avery County	296	557
Caldwell County	143	271
Wilkes County	147	244
Mecklenburg County	73	69
Forsyth County	20	61
Catawba County	76	55
Wake County	40	43
Buncombe County	10	40
Mitchell County	37	27
Other Counties	453	247
Total	2,008	2,964
<hr/>		
Tennessee	581	1,114
Virginia	15	90
South Carolina	20	6
Other States	674	1,273
Total	1,290	2,483

Source: U.S. Census 2000

TABLE 22

Workers Living in Watauga County Commuting to Work in:		
NC Counties	1990	2000
Avery County	615	777
Caldwell County	521	364
Wilkes County	160	259
Ashe County	133	248
Catawba County	178	175
Mecklenburg County	37	95
Forsyth County	30	89
Iredell County	33	74
Cabarrus County	6	56
Mitchell County	31	51
Other Counties	360	403
Total	2,104	2,591
<hr/>		
Tennessee	101	151
Virginia	42	10
South Carolina	32	32
Other States	169	121
Total	344	314

Source: U.S. Census 2000

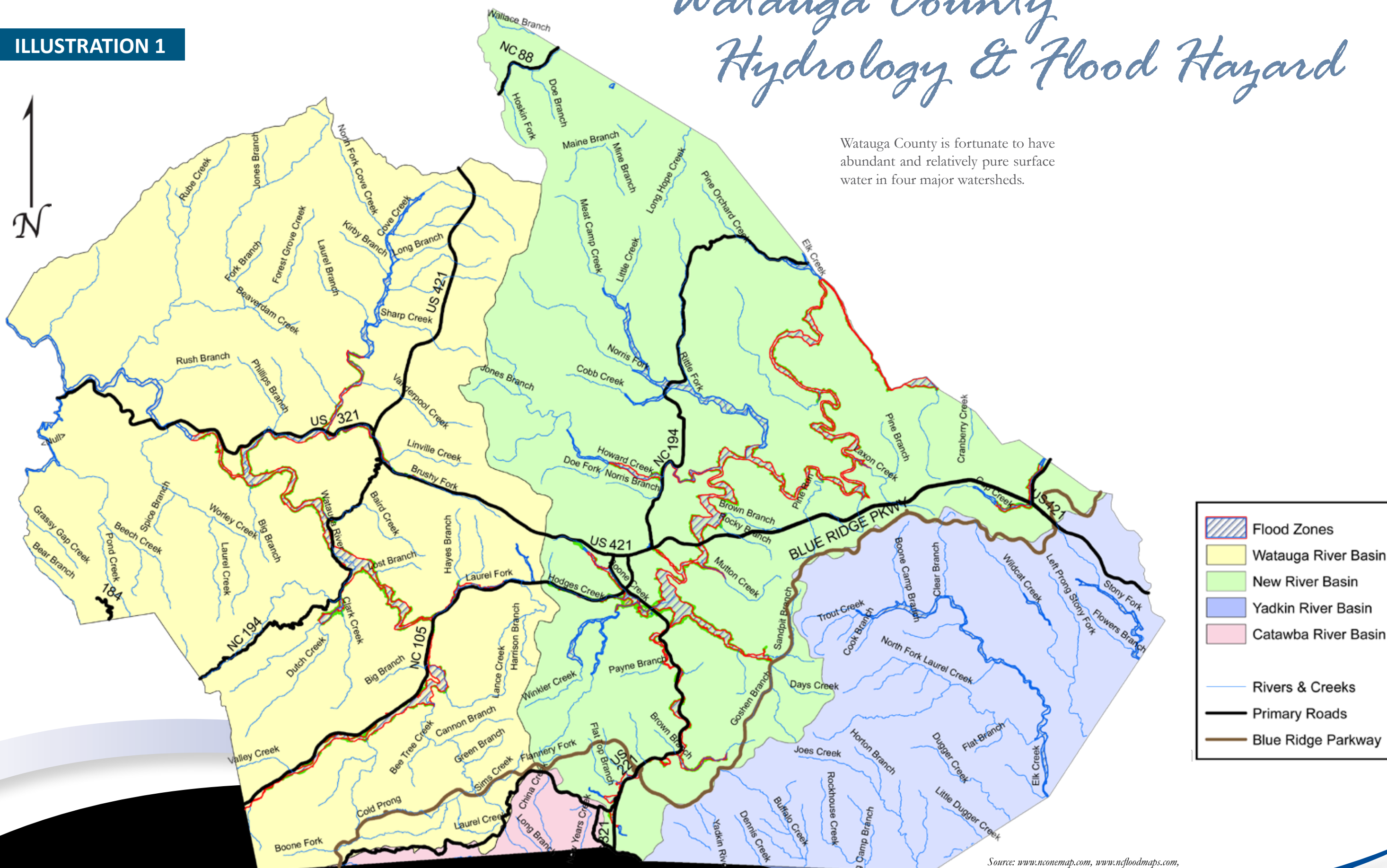
Section 2

Physiographic Features

The overall suitability of land to accommodate development is generally viewed as the cumulative constraint imposed by the natural features of slope, hydrology, soils, flooding and other sensitive environmental characteristics of the geographic area under consideration. For the purposes of this assessment, the additional factors of protected mountain ridges and certain publicly-owned lands have been added to this collective categorization. This assessment is made on the basis of natural constraints. Other limitations, such as the availability of water and sewer services and transportation capacities, are not considered.

Watauga County Hydrology & Flood Hazard

Watauga County is fortunate to have abundant and relatively pure surface water in four major watersheds.



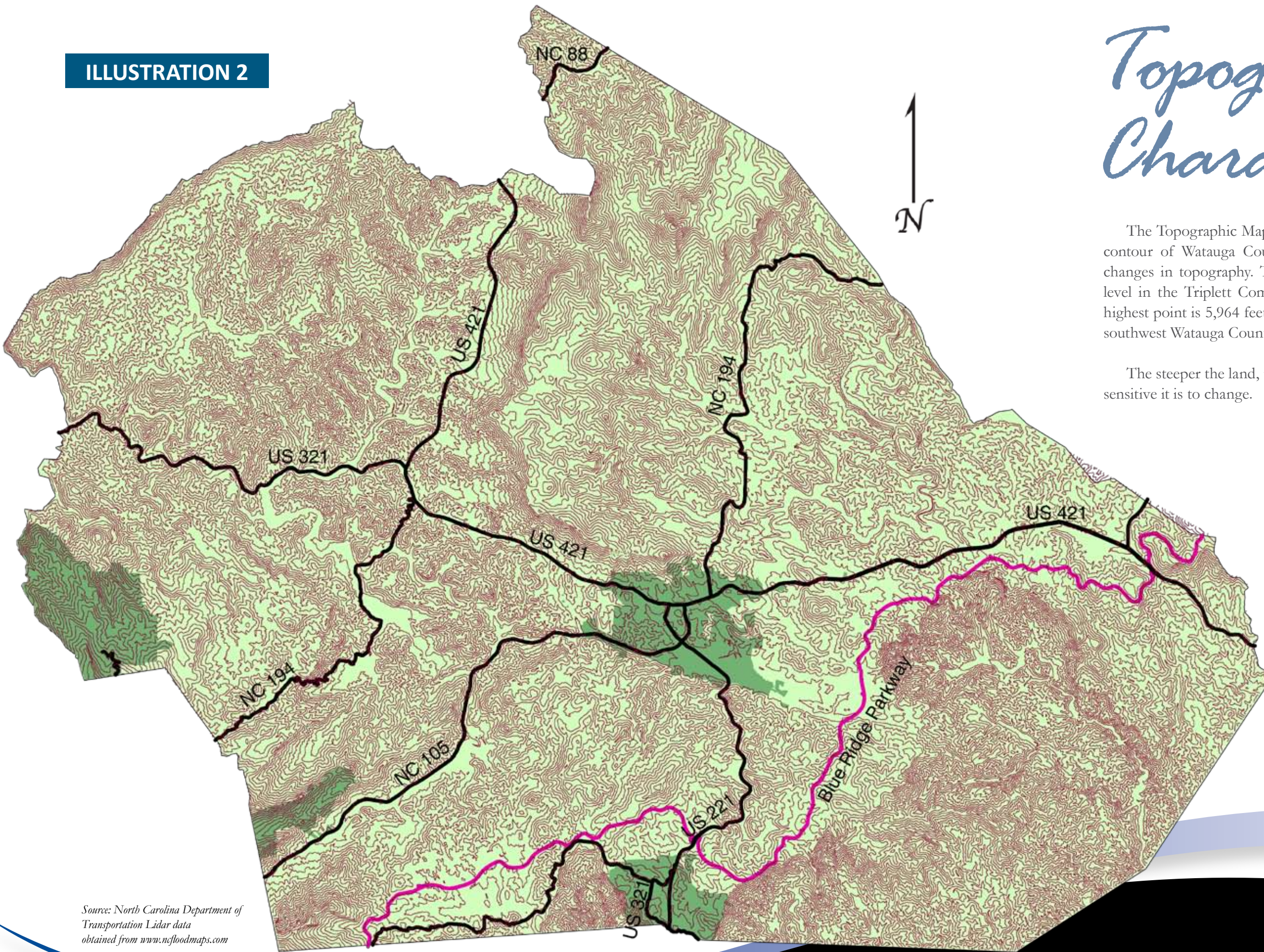
	Flood Zones
	Watauga River Basin
	New River Basin
	Yadkin River Basin
	Catawba River Basin
	Rivers & Creeks
	Primary Roads
	Blue Ridge Parkway

Source: www.nconemap.com, www.ncfloodmaps.com, North Carolina Department of Transportation






Topographic Characteristics

The Topographic Map shown in Illustration 2 displays the natural contour of Watauga County. The contour lines represent 100-foot changes in topography. The lowest elevation is 1,350 feet above sea level in the Triplett Community in southeast Watauga County. The highest point is 5,964 feet above sea level at Grandfather Mountain in southwest Watauga County.

The steeper the land, the more difficult it is to utilize and the more sensitive it is to change.



Contour Lines

-  100 ft Contours
-  Primary Roads
-  Blue Ridge Parkway
-  Municipalities
-  Watauga County

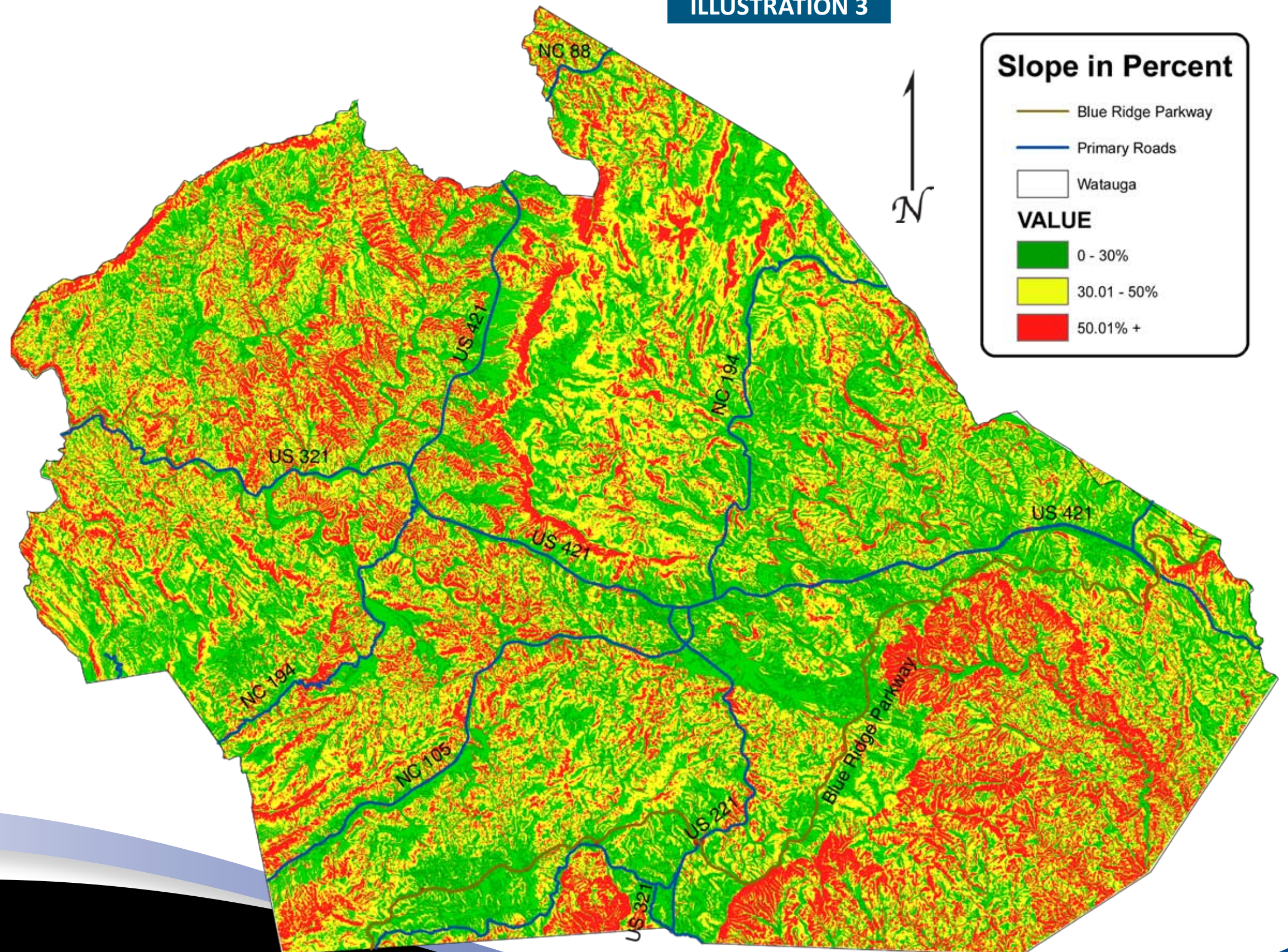
Source: North Carolina Department of Transportation Lidar data obtained from www.ncfloodmaps.com

Slope Characteristics

Watauga County has very diverse topographic features. Elevations range from as low as 1,350 feet above sea level to 5,964 feet above sea level.

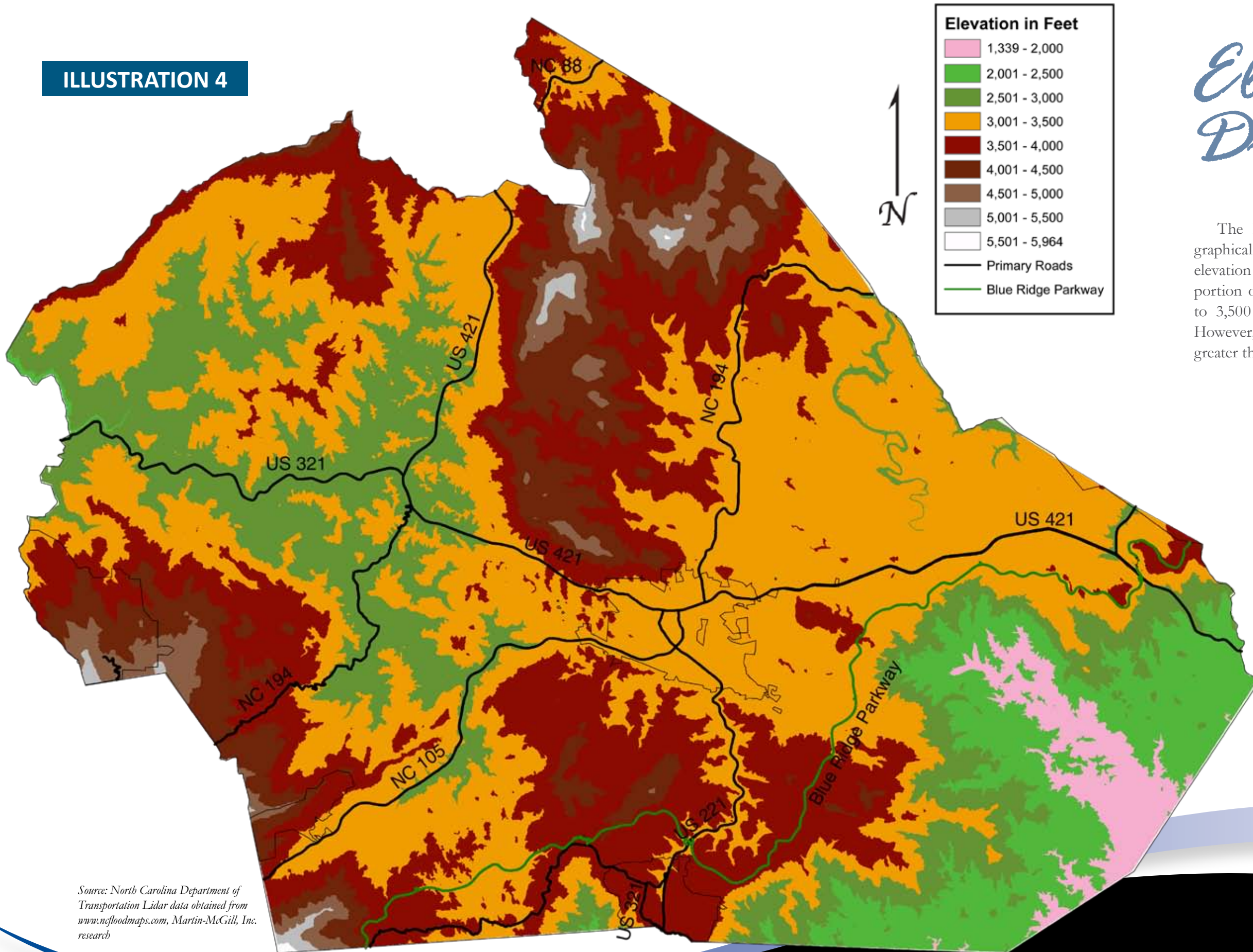
- The Slope Map (Illustration 3) shows topographic characteristics in 3 categories.
- Green areas are slope percentages between 0% and 30% and are most amenable to change.
- Red areas have very steep slope percentages of 50% or greater and are most sensitive to change.
- The slope of the land has a direct bearing on the stability of the land and suitability for development. Areas of steep slope are often associated with earth slides, increased fire hazards, increased potential for damage to the natural environment, and greater economic issues.
- The Watauga County subdivision ordinance notes that a slope of 50% or greater is generally “considered too steep for subdivision development.”
- This does not prevent construction of improvements on steep slopes. It merely restricts subdivision development.
- All the flood-prone areas shown in Illustration 3 are located in areas exhibiting average slopes of 0-30%.












ILLUSTRATION 3



Source: North Carolina Department of Transportation
Lidar data obtained from www.nsfloodmaps.com, Martin-McGill, Inc. research

ILLUSTRATION 4



Elevation in Feet	
	1,339 - 2,000
	2,001 - 2,500
	2,501 - 3,000
	3,001 - 3,500
	3,501 - 4,000
	4,001 - 4,500
	4,501 - 5,000
	5,001 - 5,500
	5,501 - 5,964
	Primary Roads
	Blue Ridge Parkway

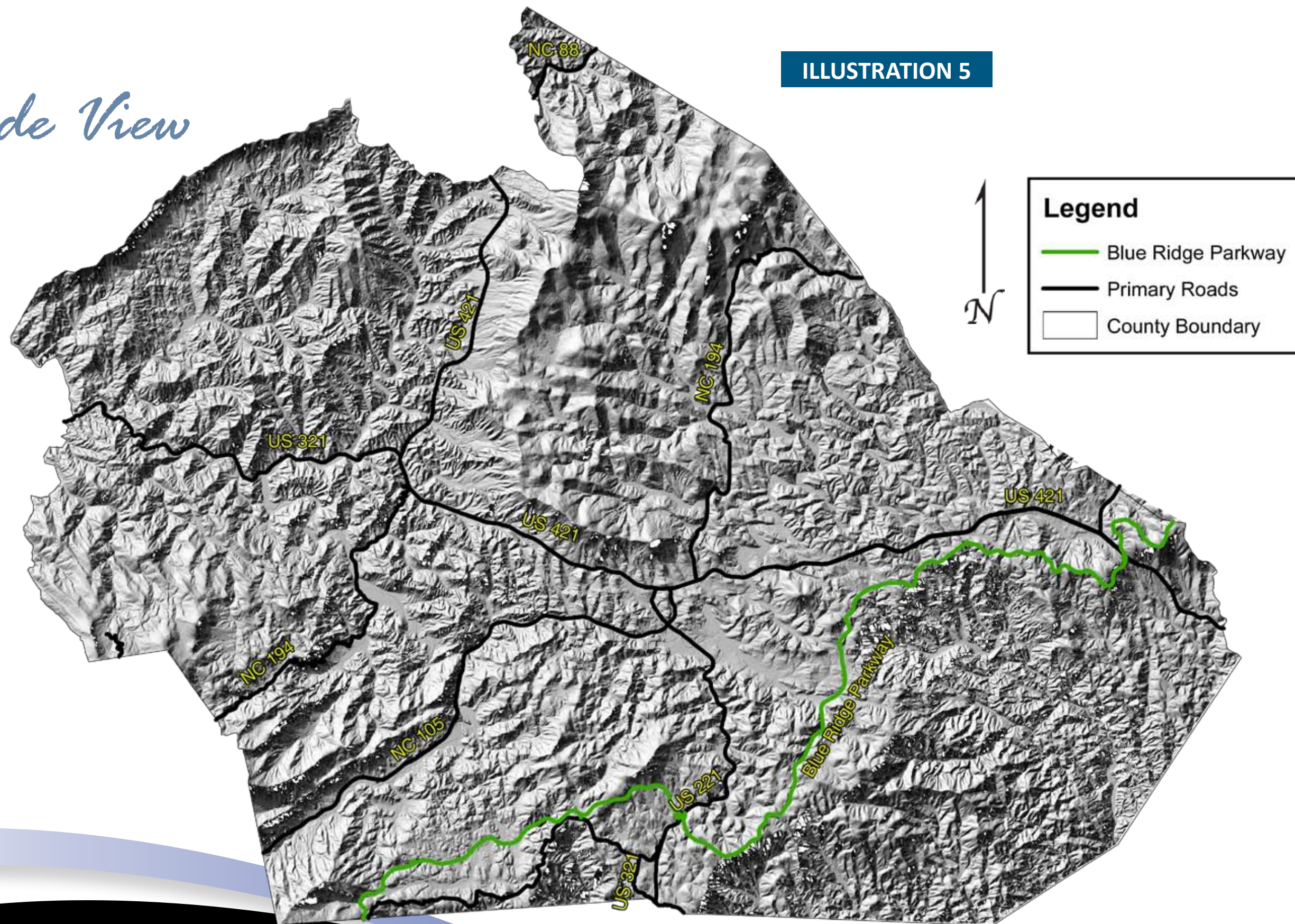
Elevation Diversity

The Elevation Map (Illustration 4) graphically displays the wide variation in elevation in Watauga County. The largest portion of the County falls in the 3,001 to 3,500 feet above sea level category. However, about 25% of the County is greater than 3,501 feet and above.

Source: North Carolina Department of Transportation Lidar data obtained from www.ncfloodmaps.com, Martin-McGill, Inc. research

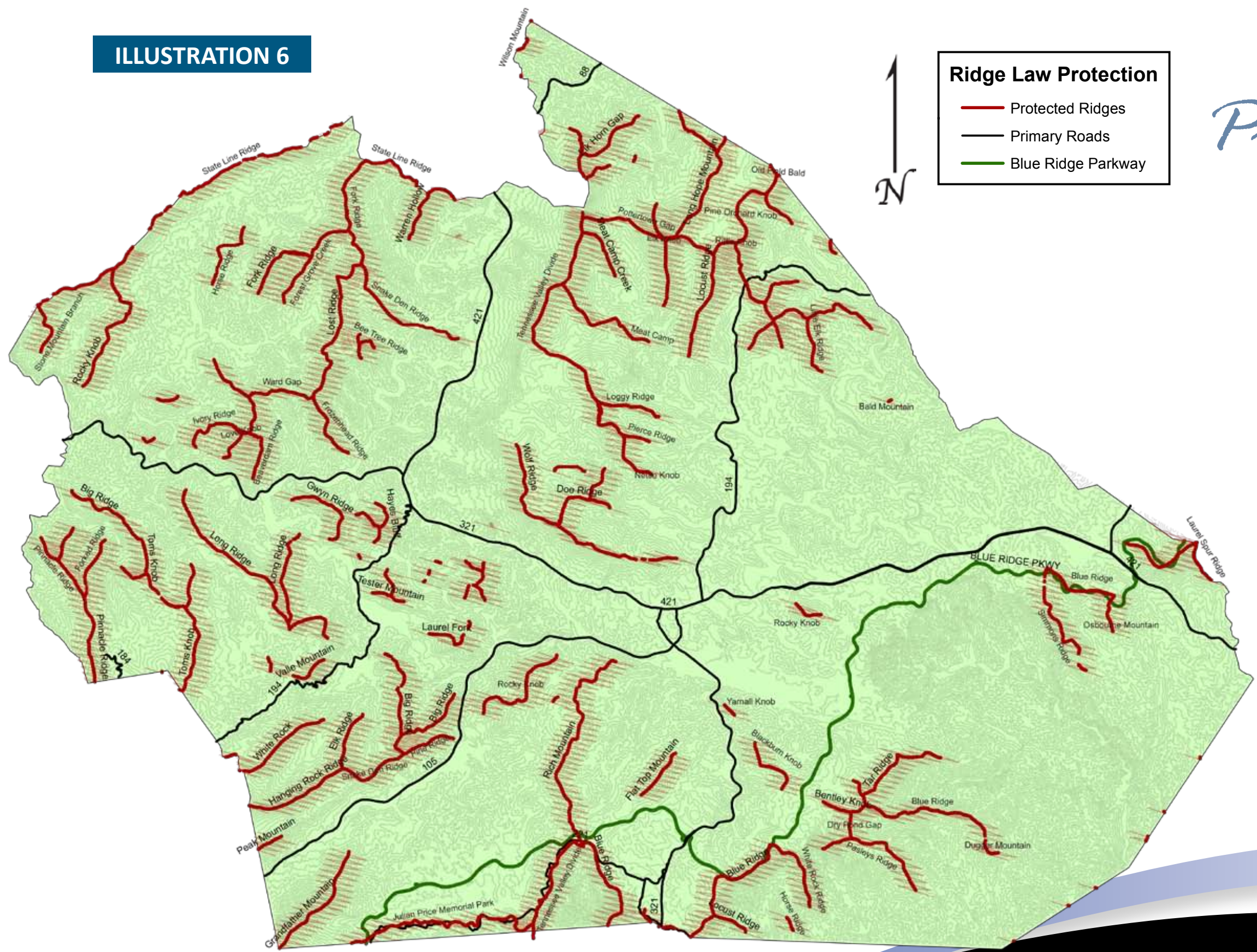
Hill Shade View

The Hill Shade View Map (Illustration 5) provides an alternate view of the topographic features of Watauga County. This map, along with the Topographic, Elevation and Slope Maps, provides a picture of the rugged and diverse landscape of the County. This graphic representation presents the relief of the landscape as viewed from the west quadrant of the map.



Source: North Carolina Department of Transportation Lidar data obtained from www.ncfloodmaps.com

ILLUSTRATION 6



Protected Ridges

- In 1983, The General Assembly adopted North Carolina General Statute 113A-205-448, known as the “Mountain Ridge Protection Act.” The regulations contained therein apply to mountain ridges with an elevation of 500 feet or more above the valley floor. The regulated portion of the ridge is the area within 100 feet below the elevation of the crest of the mountain.
- The Act prohibits “tall buildings or structures” on protected mountain ridges.
- A “tall building or structure” has a vertical height of more than 40 feet measured from the top of the foundation to its highest point.
- Tall buildings or structures may not protrude above the crest of the ridge by more than 35 feet.
- Certain structures and building projections are not regulated under the Act, including towers for communications, electricity, telephone, television and radio, structures such as chimneys, spires, steeples, antennas, windmills, etc., and structures designated as National Historic Sites.

Source: North Carolina Department of Environment and Natural Resources, United States Geological Survey, Martin-McGill, Inc. research

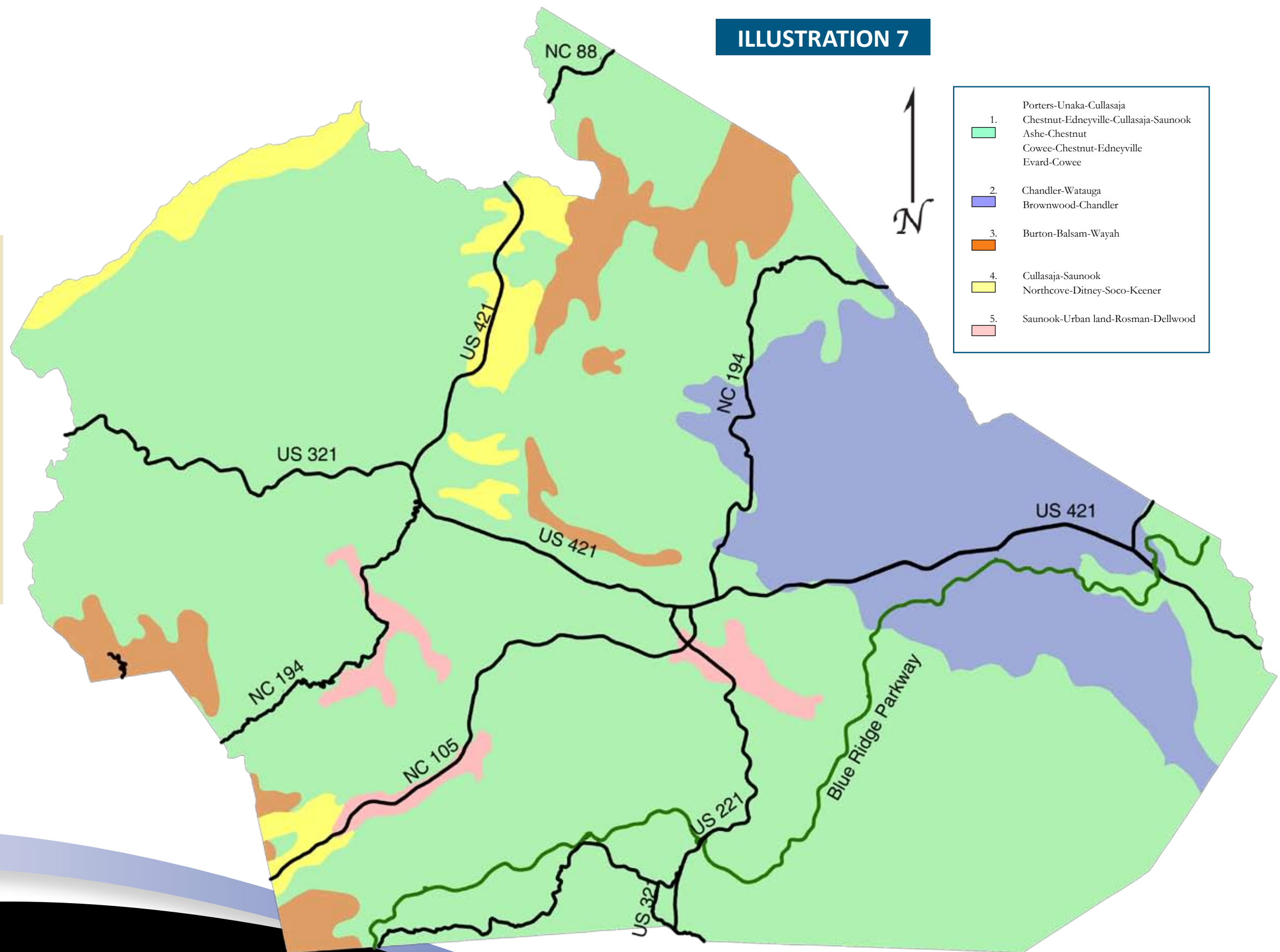
Soil Types

The Soil Map shown in Illustration 7 combines 11 different series of soil types within the Soil Orders of Ultisols and Inceptisols into smaller groups that have similar characteristics.

- Group 1 soils are soils with bedrock issues, rocky soils and are typically high in Mica content.
- Group 2 soils are also high in Mica content and as a result are highly erosive and not easily compacted.
- Group 3 soils are high elevation soils usually having rocky, steep slopes.
- Group 4 soils are typically found in coves. They are colluvium soils that are loose and have been transported by gravity.
- Group 5 soils include soils having characteristics of cove type soils and urban soils. A portion of this group contains floodplain soils, which are frequently wet and often contain springs and seeps.

The type of soil can have a direct bearing on the suitability of that land for different uses. Thus, soil type may be a limiting factor for some applications.

The Natural Resources Conservation Service maintains maps and publications delineating all the different soils in Watauga County. Included are nearly 80 different series.

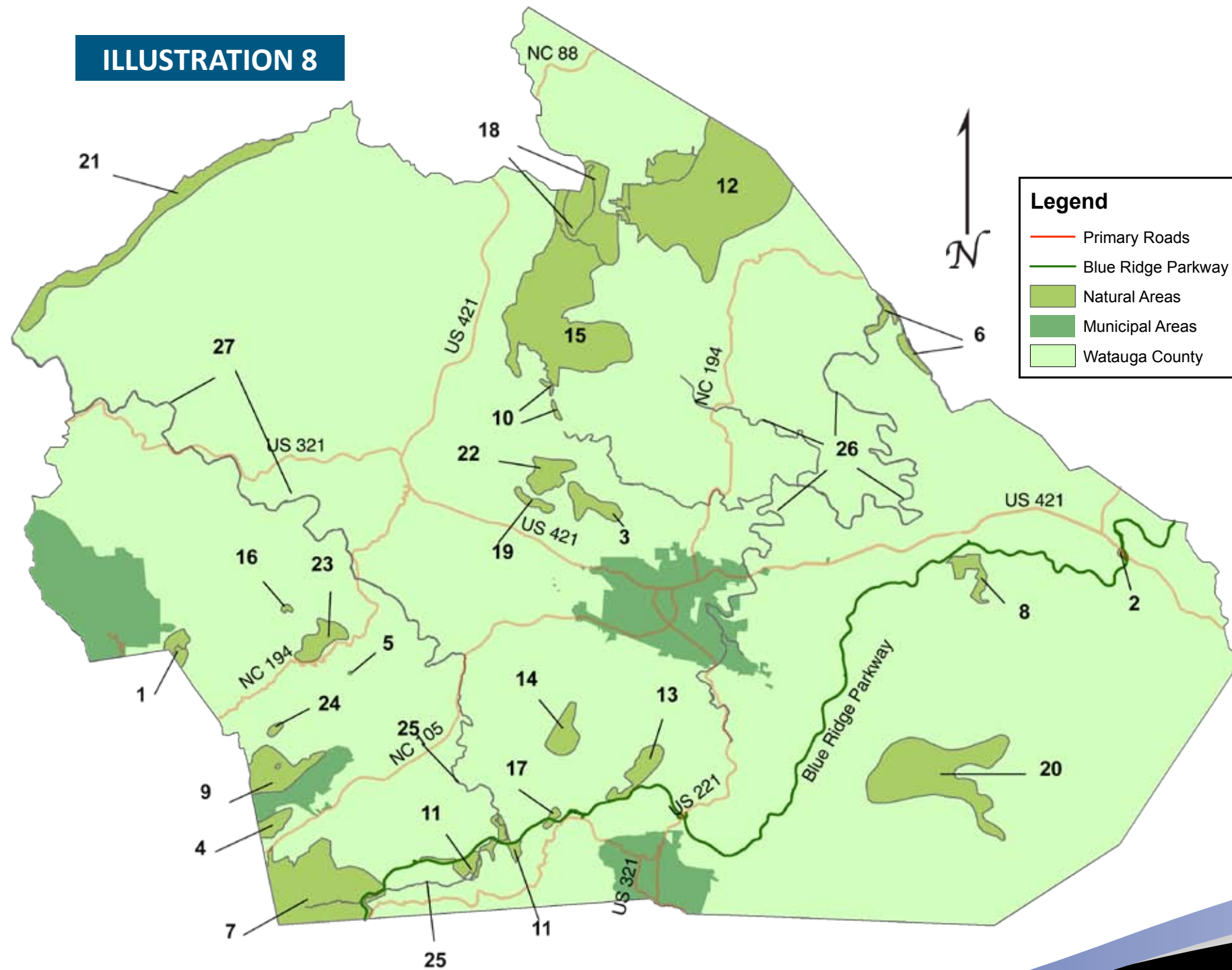


Source: Natural Resources Conservation Service, Martin-McGill, Inc., research

Watauga County Significant Natural Areas

Watauga County has several sites designated as natural heritage areas or significant natural areas in the report, "An Inventory of the Significant Natural Areas of Watauga County, North Carolina," produced in 2000 by the North Carolina Natural Heritage Program. It names many sites in the County as significant. It breaks them into Terrestrial Sites and Aquatic Habitats. All of the sites, according to the North Carolina Natural Heritage Program, have one of the following designations: national, state, regional or county significance. The following is a list of the sites with matching numbers for reference to the Watauga County: Significant Natural Areas Map shown in Illustration 8, along with acreages as recorded by the North Carolina Department of Environment and Natural Resources, Division of Parks and Recreation, Natural Heritage Program*. Some of the sites enjoy protection through ownership by federal or state entities. Others are in private ownership.

ILLUSTRATION 8



1. Beech Creek Bog – 121.88 acres and 79.19 acres
2. Deep Gap Bog – 11.08 acres
3. Doe Fork Seeps and Forests – 269.88 acres
4. Dun Vegan Mountain – 320.0 acres
5. Dutch Creek Falls – 2.19 acres
6. Gilley Field Station Forests – 95.11 acres and 103.89 acres
7. Grandfather Mountain – 6367.35 acres
8. Grandview Overlook Slopes – 224.06 acres
9. Hanging Rock Mountain – 700.23 acres and 5.04 acres
10. Howards Creek Floodplain – 23.92 acres and 22.12 acres
11. Julian Price Park Wetlands – 129.75 acres and 170.72 acres
12. Long Hope Knob/Elk Knob/The Peak – 7208.61 acres and 86.54 acres and 324.18 acres
13. Moses Cone Park – Flat Top Mountain – 298.17 acres
14. Moses Cone Park – Rich Mountain – 290.78 acres
15. Potato Hill Bog and Seeps – 2992.1 acres
16. Rocky Face – 18.07 acres
17. Sims Creek Old Growth Forest – 47.32 acres
18. Snake Mountain – 377.68 acres and 716.6 acres
19. Snakeden Mountain – 97.24 acres
20. South Fork Laurel Creek – Dugger Mountain – 1854.68 acres
21. Stone Mountain (Locust Gap) – 1148.85 acres
22. Trivette Branch Forests and Seeps – 310.21 acres
23. Valle Mountain – 308.09 acres
24. White Rock – 37.14 acres
25. Boone Fork Aquatic Habitat – 71.36 acres
26. South Fork New River Aquatic Habitat – 1399.6 acres
27. Watauga River Aquatic Habitat – 169.3 acres

*Source: NC DENR, Div. of Parks and Recreation, *Natura*, 20080606, Significant Natural Heritage Areas: NC DENR, Div. of Parks and Recreation, Natural Heritage Program, Raleigh, North Carolina.

Significant Natural Areas (continued)

Terrestrial Sites

1. Beech Creek Bog Natural Area

Portion owned by North Carolina Department of Parks and Recreation as a State Natural Area and the remainder is privately-owned located near Beech Mountain.

2. Deep Gap Bog

Site owned partly by the National Park Service Blue Ridge Parkway and is a Registered Heritage Area and the remainder is privately-owned located near Deep Gap.

3. Doe Fork Seeps and Forests

Privately-owned site located north-northwest of Boone near Rich Mountain.

4. Dun Vegan Mountain

Privately-owned site near the Town of Seven Devils.

5. Dutch Creek Falls

Privately-owned site located near the Valle Crucis Community.

6. Gilley Field Station Forests – Robert Gilley Field Station

Currently being used by the Anthropology and Biology Departments at Appalachian State University for faculty and student research projects and owned by ASU Endowment Fund located in the Todd Community.

7. Grandfather Mountain

A high, rugged mountain located on the Blue Ridge Escarpment. Ownership of Grandfather Mountain is by the U.S. Forest Service, the National Park Service Blue Ridge Parkway, The Nature Conservancy, and private ownership. An agreement (September 29, 2008) to purchase a large portion of Grandfather Mountain by the State of North Carolina became the State's 34th State Park.



Photo by Hugh Morton

8. Grandview Overlook Slopes

Located on the Blue Ridge Escarpment between Boone and Deep Gap, near the Blue Ridge Parkway and privately owned.

9. Hanging Rock Mountain

A rugged mountain located near the Town of Seven Devils under private ownership.

10. Howards Creek Floodplain

Privately-owned site located near the headwaters of Howards Creek and Tater Hill.

11. Julian Price Park Wetlands Natural Area

Located in the Julian Price Memorial Park on the Blue Ridge Parkway and owned by the National Park Service Blue Ridge Parkway.

12. Long Hope Valley/Elk Knob/The Peak

An Amphibolite mountain owned in part by the North Carolina Department of Parks and Recreation and The Nature Conservancy with the remaining portion under private ownership.

13. Moses Cone Park—Flat Top Mountain

This site is owned by the National Park Service Blue Ridge Parkway.

14. Moses Cone Park – Rich Mountain

Site ownership is by the National Park Service.

15. Potato Hill/Rich Mountain Knob/Harmon Bald

This site owned in part by the North Carolina Plant Conservation Program, with the remainder under private ownership.

16. Rocky Face

Privately-owned mountain located in the Valle Crucis Community.

17. Sims Creek Old Growth

This site is owned by the National Park Service Blue Ridge Parkway.

18. Snake Mountain

A high mountain top ridge located in northern Watauga County and under private ownership.

19. Snakeden Mountain

This site is part of the Rich Mountain Ridge and privately-owned.

20. South Fork Laurel Creek—Dugger Mountain

Located on the eastern escarpment of the Blue Ridge and privately owned.

21. Stone Mountain (Locust Gap)

An elevated ridge on the North Carolina-Tennessee state line under private ownership.

22. Trivett Branch Forests and Seeps

Privately-owned site.

23. Valle Mountain

Site is a small mountain with steep slopes located in the Valle Crucis Community and privately-owned by the Valle Crucis Mission School.

24. White Rock

Site is a small privately-owned mountain northwest of the Town of Seven Devils.

Aquatic Habitats

25. Boone Fork Aquatic Habitat

26. South Fork New River Aquatic Habitat

27. Watauga River Aquatic Habitat

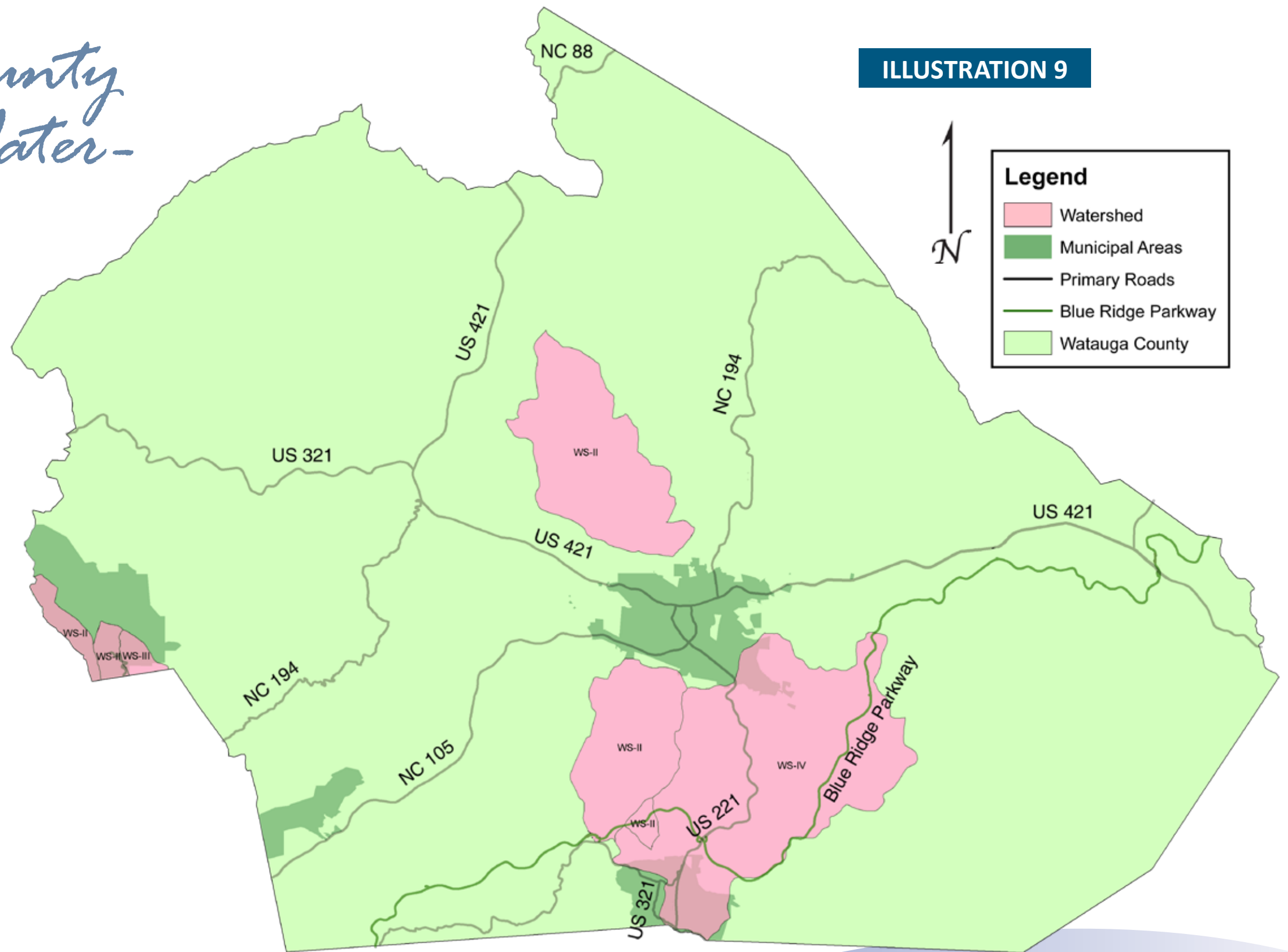
Watauga County Drinking Water Watersheds

Watershed Protection

The Legislature of the state of North Carolina delegates the responsibility to Watauga County to adopt regulations that provide protection for watersheds. New development is subject to the restrictions of the watershed ordinance.

Protected watersheds include:

- Winklers Creek
- Howards Creek
- Norris Branch
- Flat Top Branch
- Pond Creek
- South Fork New River



Public Lands in Watauga County

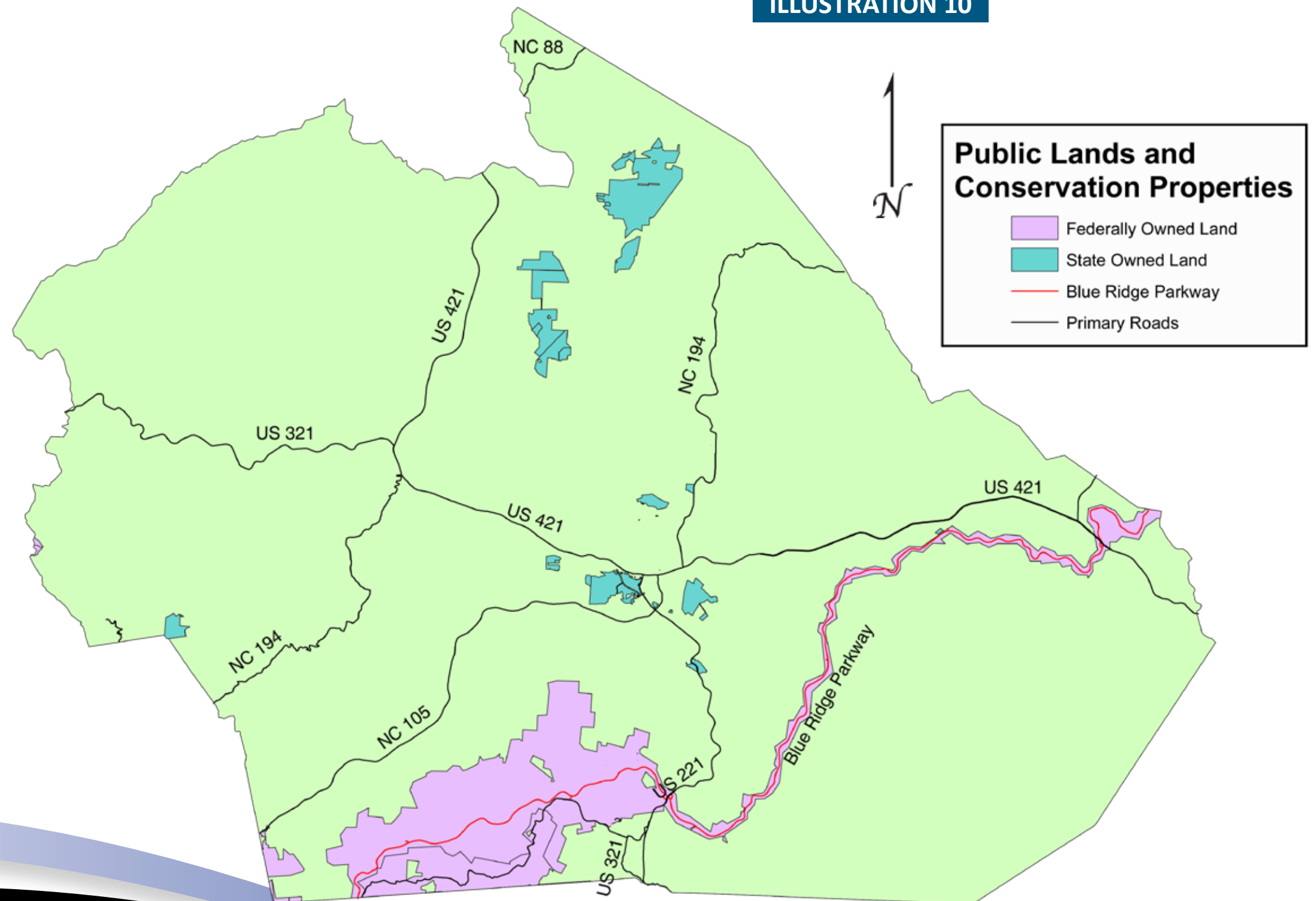
Watauga County enjoys a large amount of public land owned by the federal government. It is mostly located in the southern portion of Watauga County and is part of the Blue Ridge Parkway and properties accessed from the Parkway.

Properties owned by the state of North Carolina include Elk Knob State Park in northern Watauga County, which has the second highest peak in Watauga County, and the property around Grandfather Mountain. The state of North Carolina also owns much property in and around Boone occupied by Appalachian State University.

Watauga County owns properties that include government buildings, schools, recreation fields, gyms, swimming pools and others. A partial list of the principal County operated and/or owned properties follows:

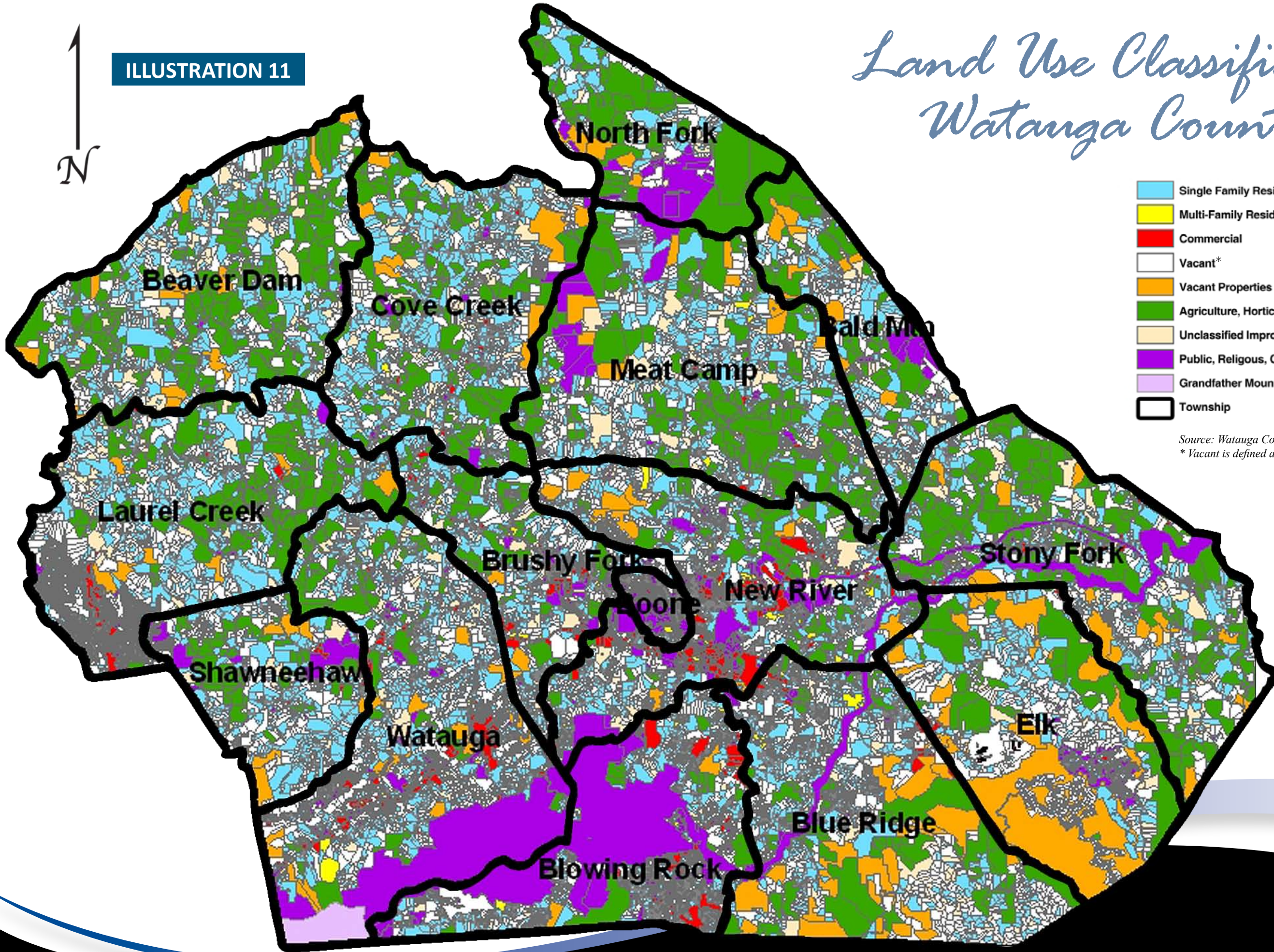
- Watauga County Government Buildings
- Watauga County Schools
- Anne Marie Softball Fields
- Complex Field
- Brookshire Park
- Howards Knob County Park
- Industrial Fields
- Optimist Park
- Watauga County Swimming Complex
- Watauga County Tennis Complex
- Watauga County Tot Lot

ILLUSTRATION 10



Land Use Classification Watauga County

ILLUSTRATION 11



- Single Family Residential
- Multi-Family Residential
- Commercial
- Vacant*
- Vacant Properties more than 50 acres*
- Agriculture, Horticulture, Forestry
- Unclassified Improvements
- Public, Religious, Conservation Properties
- Grandfather Mountain
- Township

Source: Watauga County Tax Records
* Vacant is defined as having no structure

Section 3

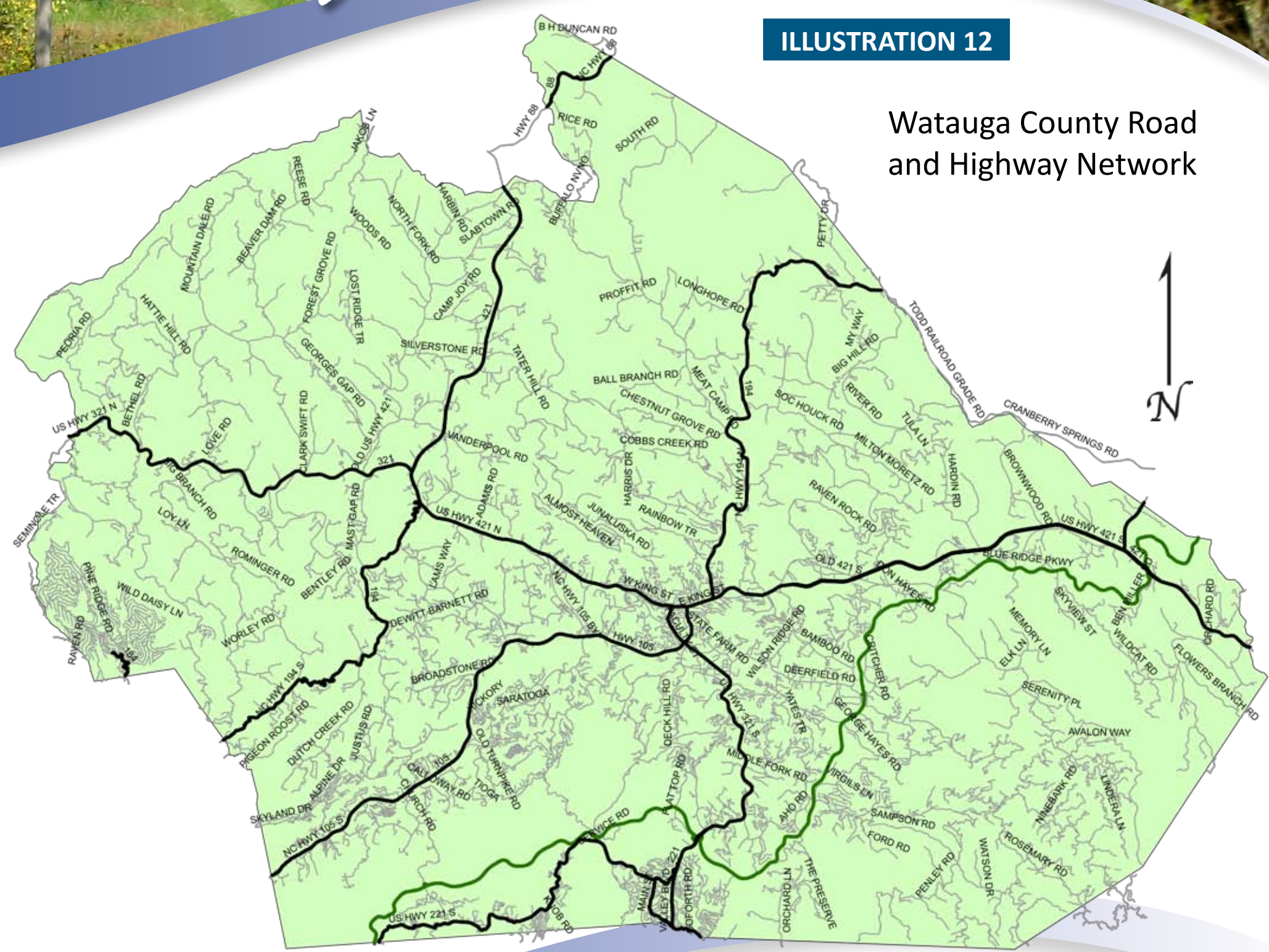
Transportation



Transportation Planning

ILLUSTRATION 12

Watauga County Road and Highway Network



Preface

Watauga County's goal is to achieve an efficient and balanced transportation system that combines motorized and non-motorized modes of transportation. Specific objectives include:

- An efficient and integrated multi-modal transportation system.
- A transportation system that is affordable and accessible to all users.
- A multi-modal transportation system that supports future development and preserves community character.
- A regionally integrated transportation planning process.

The principal highways in Watauga County are U.S. 321, U.S. 221, U.S. 421, N.C. 105, N.C. 194 and N.C. 88. These roads form the backbone of the County's transportation network (Illustration 12). In Watauga County, current transportation modes are limited to surface transportation, including vehicles, bicycles and pedestrians. The County does not have a public airport or any navigable waters. Public perceptions about transportation are summarized as follows:

- In a survey conducted by Professors Dragan Stefanovic and Marvin Hoffman of Appalachian State University in 2007, the need for "improved roads and traffic flow" was a primary finding, with 72% of respondents favoring a bypass around Boone.
- In a survey related to recreation management conducted by Dr. Eric Frauman and Dr. Sarah Banks of Appalachian State University in 2006-2007, respondents named traffic as a primary concern.
- In a survey administered by Watauga County and Martin-McGill, Inc. in 2008, respondents named traffic congestion second in a list of top ten issues. The respondents' suggestions included:
 - The desire for a Boone bypass, also called the Daniel Boone Parkway.
 - The desire for continued improvements to U.S. 421 and U.S. 321, and the development of those roads as commercial corridors.
 - Improvement of the Highway 105/Broadstone Road intersection.

Transportation Planning

Transportation Findings

In 2002, the North Carolina Department of Transportation's Small Urban Planning Unit developed the current Thoroughfare Plan for Watauga County. "The primary objective of this plan is to reduce traffic congestion and improve safety by eliminating existing and projected deficiencies in the transportation system." Twelve (12) highway recommendations were made in the plan, grouped as principal and minor arterials and major and minor collectors. Other plan recommendations dealt with replacing several functionally obsolete bridges and fifteen (15) structurally deficient bridges.

ILLUSTRATION 13

Proposed Widening Projects

- Principal Arterials (See Transportation Map)**
- US 421: four-lane divided facility on new location from NC 194 to 2 miles east of US 221 for 11.9 miles. (Project is complete)
 - NC 105: widen roadway from western Boone Urban Planning Boundary to the Avery County line.
 - US 321 (South of Boone): widen roadway to a four-lane facility from just north of US 221 interchange to the Caldwell County Line. (project to begin in 2010)
 - US 321 (West of Boone): widen from 10-foot lanes to 12-foot lanes from Cove Creek Bridge to Avery County.
- Minor Arterials**
- US 421 (North of Boone): widen roadway to a multi-lane facility from US 321 in Boone to the Tennessee state line.
 - US 221: widen roadway to a four-lane divided facility from US 421 to the Ashe County Line. (This project is funded in the TIP)
- Major Collectors**
- NC 194 (North of Boone): widen roadway to a four-lane divided facility from US 421 to SR 1306 (Howards Creek Road), and widen the roadway from SR 1306 to SR 1327 (Jack Hayes Road) to a three-lane.
 - NC 194 (South of Boone): widen existing 9- or 10-foot lanes to 10- and 11-foot lanes from US 421 to Avery County. (This project is funded in the TIP)
 - NC 88: widen from 9-foot lanes to 10-foot lanes from Ashe County line to Tennessee line.
- Minor Collectors**
- SR 1557/1552 (Shulls Mill Road): improve from 8- and 10-foot lanes to 11-foot lanes from SR 1568 (Old Shulls Mill Road) to US 221.
 - SR 1112 (Broadstone Road): install a right turning lane in front of the Valle Crucis Elementary School.
 - SR 1508 (Elk Creek Road): improve from 9-foot lanes to 11-foot lanes from SR 1583 (Wes Randall Road) to US 421.

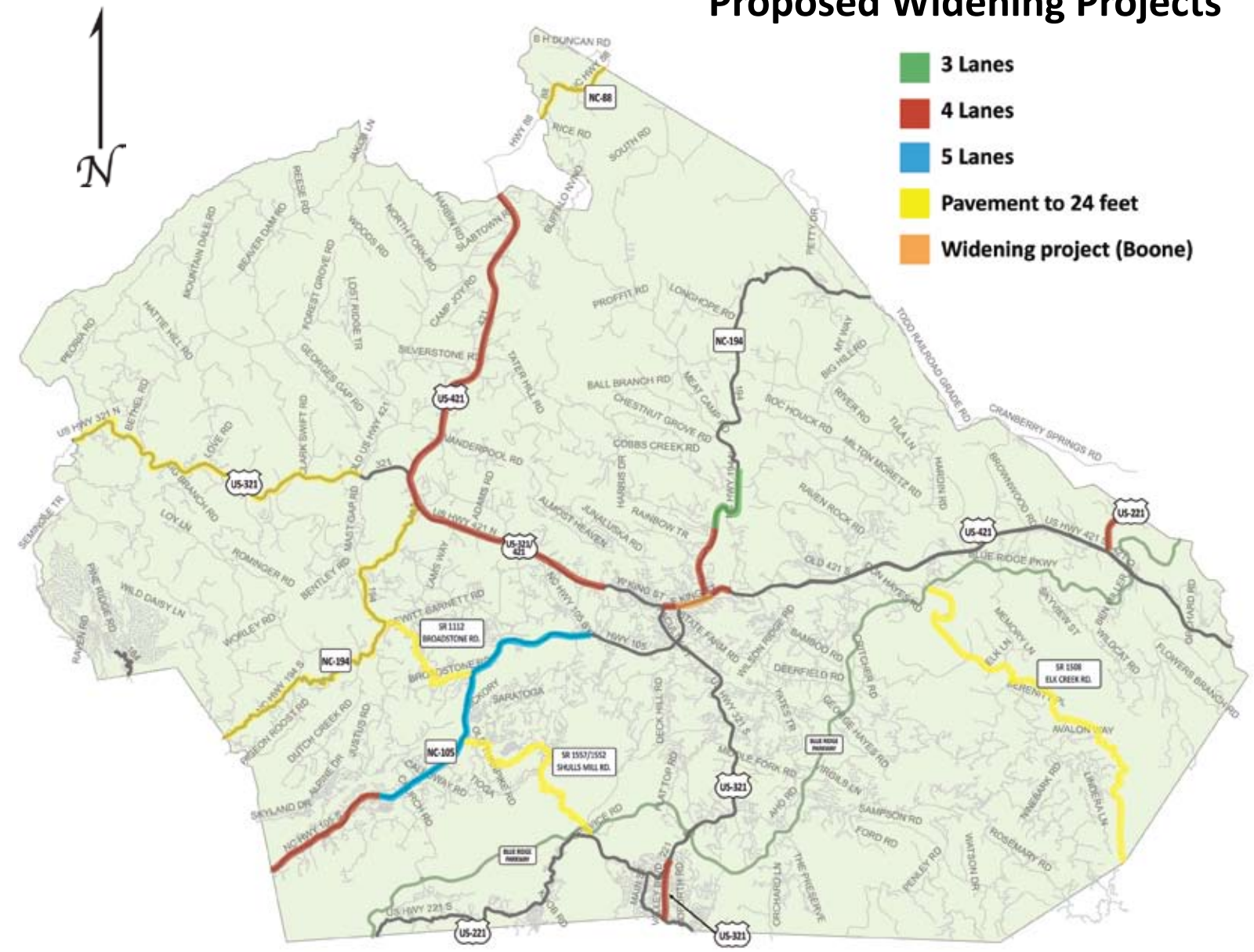
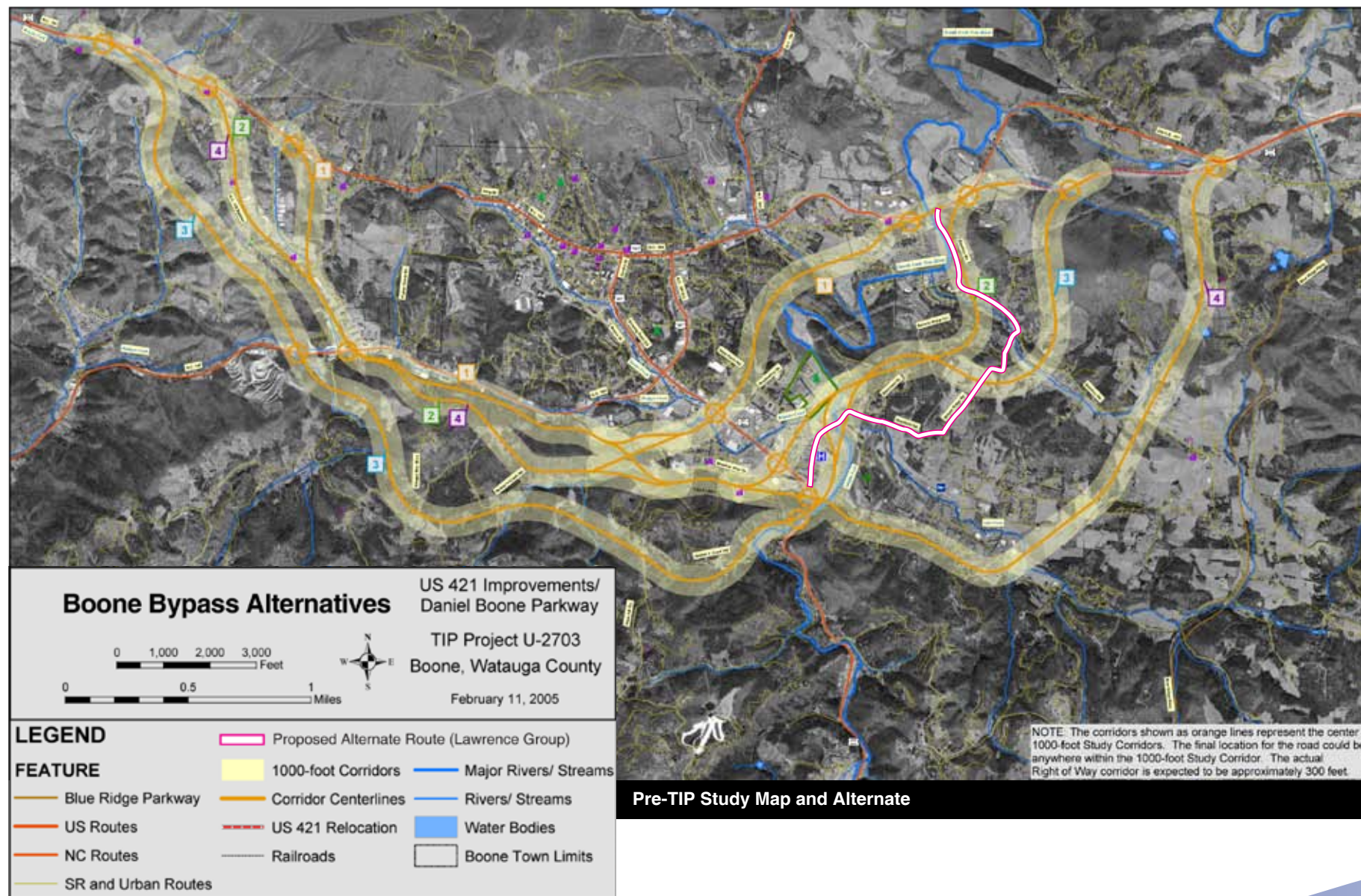


ILLUSTRATION 14

The Boone Bypass



- Many of the issues related to transportation planning in Watauga County deal with traffic congestion, and particularly traffic congestion in Boone. Survey respondents believe a bypass around Boone is the answer to the problem. An alternate route around Boone will need to provide easy access points for those whose end destination is Boone.
- Boone also has a Thoroughfare Plan. The first plan was completed in 1964, the second in 1976, and the most recent in 1992. A major element in each of the plans was the construction of a route to bypass Boone. The NCDOT outlined possible routes in the 1992 plan. Some of these routes are similar to the Pre-TIP Study Plan developed and released in 2008 that contains several potential routes.
- Several routes for a Boone bypass have been proposed (Illustration 14). Most routes require new road construction. The Lawrence Group, in their development of a Land Use Master Plan for Boone, has proposed yet another route. It utilizes a combination of existing roads and new segments to create an alternate route.
- Regardless of which route is eventually agreed upon, the public believes that the Boone bypass is the most important road project in the County.

Transportation Planning

- Watauga County's public transportation authority is the AppalCART. It serves all of Watauga County and operates as a coordinated effort between local, state and federal governments, human service agencies and Appalachian State University. AppalCART provides numerous Boone routes free of charge and provides rural routes via van to destinations such as Zionville, Foscoe, Matney, Meat Camp, Blowing Rock, Deep Gap and Cove Creek for a route fee. All routes are open to the public. Out-of-county routes to Winston-Salem, Hickory and Charlotte are available for residents to attend medical appointments.
- The County does not have a public airport, but there is a short, private airstrip in the Kellwood/Bamboo area. The nearest airports providing commercial passenger service are in Charlotte, Greensboro, Asheville, North Carolina, and Blountville, Tennessee. General aviation airports with runways over 5,500 feet are located in North Wilkesboro, Morganton/Lenoir and Hickory.
- The Piedmont Authority of Regional Transportation also provides two round trips per day to Boone from Greensboro with service to certain towns and hospitals in between.
- The Hickory "Hop" currently provides a shuttle service between Watauga County and the Charlotte airport at four scheduled times daily, seven days each week.

Recommendations

Highways

- Town of Boone, County, High Country Council of Governments (RPO), NCDOT, ASU and citizens groups should work together to resolve the issue of routing for a Boone Bypass, which is considered to be the top transportation priority by the public. A group representing these interests is urgently needed to work toward resolution of this important issue.
- Watauga County should work with NCDOT officials to promote, establish priorities, and facilitate progress toward completing projects identified in the Watauga County and Boone Thoroughfare Plans.
- Priority should be given to the following Projects:
 - Hwy. 194 to four-lane from U.S. 421 to Howard's Creek Road, and multi-lane from Howard's Creek Road to Jack Hayes Road.
 - U.S. 421 N to multi-lane from Boone to the intersection of U.S. 421/U.S. 321 in Vilas.
 - N.C. Hwy 105 S to multi-lane from the Boone municipal limits to Avery County.
 - Multi-lane U.S. 421 S (King Street) from Hardin Street to N.C. Hwy 194.
 - Multi-lane Old U.S. 421 from U.S. 421 S to the high school.
- NCDOT should schedule paving of all public gravel roads to NCDOT standards as feasible.

Multimodal

- Town, County, High Country Council of Governments, and NCDOT officials should place strong emphasis on creating roadways that are safe for all modes of transportation, including bicycles and pedestrians.
- Expand AppalCART rural routes and decrease the service intervals between existing stops so that more people have the opportunity to ride and waiting times are shorter.
- Expanded corridors for AppalCART should include U.S 421 in both directions in the County, U.S. 321 toward Blowing Rock, and N.C. Hwy 194 to Green Valley School. Assess the heaviest population areas of the County and provide service as practical to those areas.
- Expand AppalCART service to affordable housing projects as feasible.
- Create Park-n-Ride lots outside of Boone and provide AppalCART service to these lots in order to capitalize on the use of mass-transit and reduce downtown congestion.
- Boone and ASU should work together to:
Promote and provide more environmentally friendly, greener, safer and sustainable transportation modes, especially pedestrian and bicycles.



- Provide more parking areas for bicycles at ASU and in business areas.
- Encourage ASU to consider further limiting the number of students who can bring their vehicles to the University campus. Removing freshman and sophomore students' vehicles from the campus would remove them from the roadways in the busiest times of day. A balanced approach incorporating both new parking areas and limiting students having vehicles on campus would help alleviate traffic congestion.

Transportation Planning

- Local government should show solidarity in their desires to encourage the NCDOT to proceed with improvements already identified as needed in the County and the Town of Boone. The working association among Appalachian State University, Watauga County, Boone, Blowing Rock, High Country Council of Government, High Country Rural Planning Organization, and the NCDOT should be strengthened.
- Adopt minimum standards for new and redesigned roads that specify the creation of bicycle lanes and sidewalks that promote safe alternatives.
- Encourage a study by NCDOT to ascertain where and if roundabouts might be utilized to enhance traffic flow and reduce congestion.

Section 4 Economic Development



Photo courtesy Blowing Rock TDA

Economic Development

Preface

The economy in Watauga County is diverse. The principal economic segments that drive the County's economy include education, tourism, healthcare, finance, construction, services and agriculture. In 2008, Policom Corporation ranked Boone 96th among 577 micropolitan areas in the U.S. for economic strength.

Findings

- **Quality of Life** - The concern for preserving and improving "quality of life" is a theme that permeates all aspects of Watauga County's future. All efforts to promote economic development should focus on "better rather than bigger" and enhancing "quality of life."
- **Gateways** - Watauga County's principal transportation corridors are also its major economic corridors. They are "economic gateways" into the community. These corridors offer visitors their first perception of Watauga and they are therefore an essential element of planning for the future. The primary corridors include US 421, US 321 and NC Hwy 105.

- The Deep Gap area is of particular importance since it contains much of the most desirable land for development and has good transportation accessibility.

Economic Development Infrastructure

- The economic development related organizations are charged with various aspects of economic promotion and support in Watauga County. While each is important, there is a growing need to achieve a higher degree of cooperation and ensure that the array of activities collectively promote established core objectives.
- Critical Economic Sectors – Watauga County's key economic sectors are education and research, tourism and recreation, the medical services field, construction, and existing business and industry.

Education/Research

- Appalachian State University is the largest employer in Watauga County. In September 2008, it had over 5,000 total full-time and temporary employees.

In 2008, the Center for Economic Research & Policy Analysis at ASU released the report Economic and Tax Revenue Impacts, which found that:

- (1) ASU contributed \$125 million to the region in earnings and had a \$506 million total impact on the regional economy.
 - (2) ASU brought \$185 million in state appropriations, tuition and fees, grants, contracts and gifts to the region.
 - (3) A 10% increase in enrollment (1,500 students) will generate an additional \$56 million in economic activity and will create an additional 572 jobs on campus and throughout the region.
- Planning among ASU, Boone and Watauga County is very important. A heightened degree of cooperation and coordination at the highest levels is warranted and finding ways to enhance this essential partnering is a strategic challenge for the community.
 - Caldwell Community College & Technical Institute (CC&TI), Watauga Campus is a valuable resource for Watauga County. It can provide the education essential for the technological jobs needed in today's workplace.

Medical/Research

- The second largest employer in the County is Appalachian Regional Healthcare System. In 2008, it had 1,600 employees.
- Appalachian Regional Healthcare System has become the predominant regional medical center.

Tourism and Recreation

- Tourism has a profound effect on the economy in Watauga County. It is the largest driver of the economy apart from ASU. The study, "The Economic Impact of Travel on North Carolina Counties", states that in 2007, Watauga tourism generated \$191.5 million in expenditures and a tourism payroll of \$43.56 million for 2,580 jobholders.
- Ample recreational opportunities, including fishing, hiking, biking, skiing, rafting, canoeing, kayaking, rock climbing and ASU athletic events, also add to the appeal of the County and contribute to the economy.
- Watauga County is a hub for many tourism activities that take place throughout the region. Visitors to adjoining counties make Boone the base of their activities for lodging, dining, medical services and other services.
- Watauga County's recreational opportunities are enhanced by its unique and diverse environment, which includes assets such as the Blue Ridge Parkway, Mountain to Sea Trail, Elk Knob State Park, Grandfather Mountain State Park, New River, Watauga River and many pristine streams.

Economic Development

Industry and Business

- Retaining and enhancing existing industry and business is fundamental to the County's economic future. Local officials actively sought to promote economic development in the County with the creation of the Watauga County Industrial Park. The Park, now filled to capacity, provides many jobs to County residents.
- A proposal to create another industrial/multi-use park is under consideration.
- Approximately 35 manufacturing firms conduct business in Watauga County. Most are small "home grown" businesses. The two largest manufacturing businesses in Watauga County are Hospitality Mints and TT Electronics/IRC.
- A major factor in attracting industry and business is the provision of the services they need to thrive. Services such as the provision of water, sewer, electricity and communications are very important to almost any kind of business.



Agriculture

- Watauga County residents have considerable interest in local farming practices and the availability of local foods.
- Over 100 growers produce Fraser Firs in Watauga County.
- Local vegetables and other crops represent an important economic segment.

Recommendations:

Strengthening Organization

- Strengthen the focus of Economic Development by making the County the core agency for economic planning, policy interpretation and coordination. Adding resources to this ongoing program would enable the County to assume a more assertive role in economic development. This enhanced program would foster communication, "sustainability" and innovation among existing economic programs and facilitate new initiatives that either strengthen existing programs or create new initiatives designed to generate new economic investments and employment.
- Invest in the creation of a dynamic and comprehensive economic development strategy to better explore and capitalize on potential economic opportunities.
- Encourage and facilitate the provision of essential infrastructure, such as transportation, water, sewer and natural gas, to provide an attractive business climate for potential economic development.
- Work with and coordinate the wide range of economic development resources available to the County, including Advantage West, Appalachian Regional Commission, ASU Center for Entrepreneurship, Committee of 100, Future Forward, High Country Business Network, Service Corps of Retired Executives, Tourism Development Authority, Watauga County Economic Development Commission, and others to explore innovative and fresh concepts. Organize annual or semi-

annual workshops with these entities to create a spirit of cooperation and focus resources.

- Where appropriate, promote regional economic development strategies beyond Watauga County that provide employment opportunities for Watauga County residents.
- Increase promotion of the Watauga Green Business Plan and the concepts it embraces regarding business operations by encouraging participation in the Plan, focusing on "green" or "sustainable" practices.
- Promote the development of renewable energy concepts and participation in renewable energy initiatives.

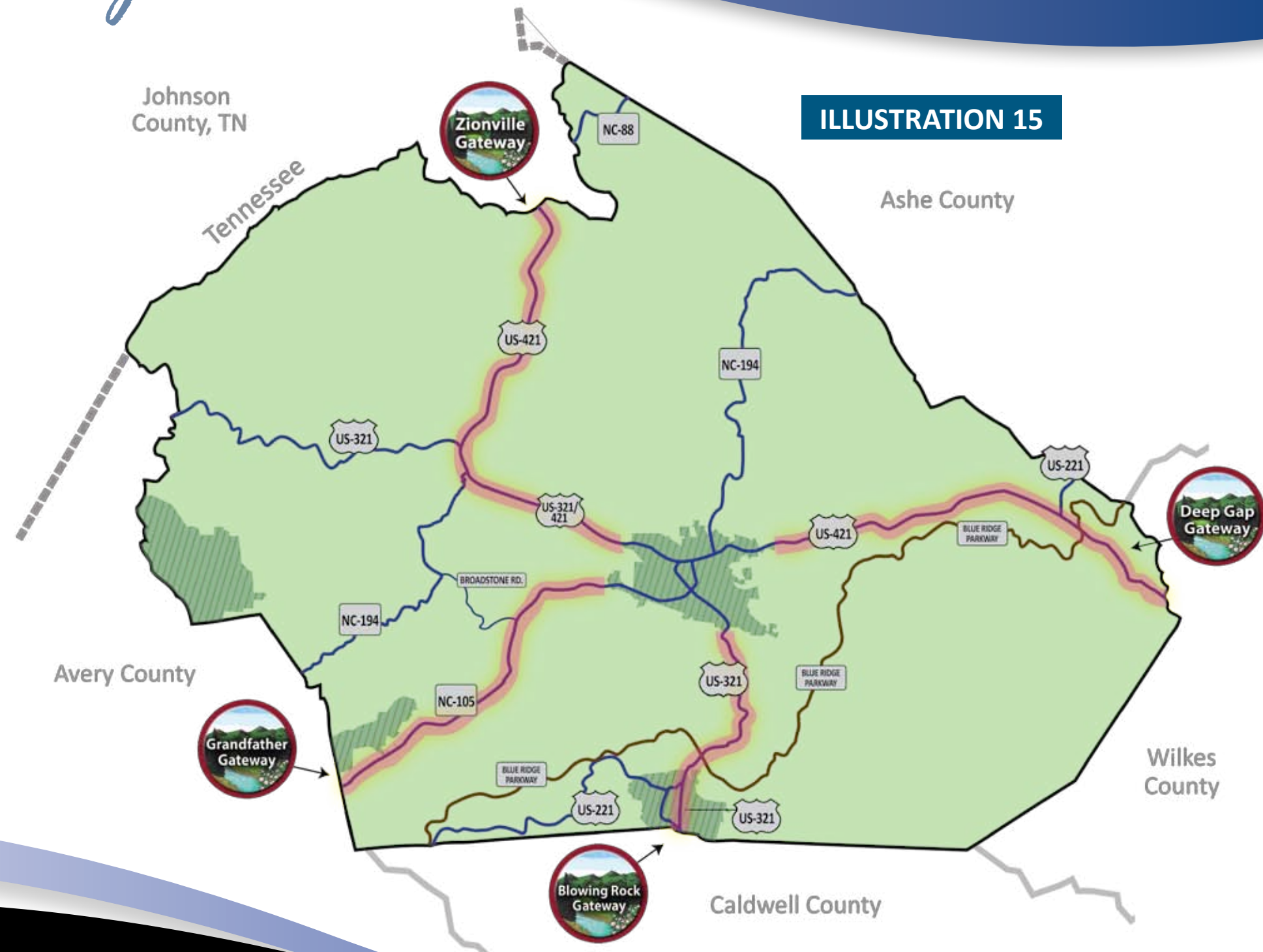
Economic Gateways

- Watauga transportation corridors are also economic "Gateways" (Illustration 15) into the County and are critical to the County's economic future. Watauga County should guide development and protect the integrity and potential of these key strategic economic corridors.
- "Gateways" are defined as the entrances or means of access to Watauga County and are identified as the primary arterial highways (US 321, US 421, and NC Hwy 105). Providing attractive as well as functional "Gateways" into Watauga County facilitates both the positive image and economy of the community.
- The economic future of the community is linked to the vitality and appearance of these "Gateways."

Economic Gateways



- The quality of life enjoyed by Watauga County citizens and visitors is directly related to the natural environment. The “Gateways” are inextricably linked to the perception of this unique environment and the rich quality of life.
- The aesthetic quality of the “Gateways” concept is vitally important to the economic future of the community. Incentives for property owners and the community should be developed to maintain attractive and compatible development that will enhance the total economic value of the “Gateways” to the community.
- Formulate an individual “Gateway Corridor” strategy for each of the four (4) designated “Gateways.”





Key Economic Sectors

Emphasis on Successful Economic Sectors

- **Education/Research**
 - o Work with Appalachian State University to capitalize on University research opportunities.
 - o Promote the development of a research park to bring highly skilled employment into the community.
 - o Support the University of North Carolina Tomorrow goals mandating that ASU “increase its capacity and commitment to respond to and lead economic transformation and community development.”
 - o Strengthen the alliance with Appalachian State University and Caldwell Community College & Technical Institute to understand and attain education and skill levels needed by Watauga residents.
- **Medical/Research**
 - o Watauga County should work with medical professionals and the Appalachian Regional Healthcare System to facilitate a “medical cluster” concept

to further develop the groundwork that has been laid in making Watauga County a regional medical center.

- o Encourage Appalachian State University and Caldwell Community College & Technical Institute to explore new healthcare ventures related to the nursing programs at each institution.
- o Focus on and promote activities and businesses that are involved in technology, research, education and medicine.
- **Tourism and Recreation**
 - o Capitalize on existing tourism by encouraging the Tourism Development Authorities to enhance and increase strategic marketing of Watauga County.
 - o Fully develop and promote the greenways concept such as the new greenway connector near the new high school, trails, parks and other eco-tourism assets. These assets are especially important in promoting a healthy life style and quality of life themes.
 - o Promote eco-tourism, defined as “environmentally responsible travel and visitation to natural areas,” in order to

enjoy and appreciate nature (and any accompanying cultural features).

- **Industry and Business**
 - o Develop a commerce/business park site in Watauga County and explore opportunities for a joint venture with Appalachian State University, Caldwell Community College & Technical Institute, and the medical cluster
 - o Plan for a flex or shell building in a commerce/business park to meet the demands of potential new businesses.
 - o Expand and strengthen support between the community and existing businesses and industry to reassure businesses that their presence is appreciated and their needs are considered.
- **Agriculture**
 - o Promote the production of agricultural products, especially those produced organically, to capitalize on the growing demand for local food products. Conduct relevant market research to support a marketing strategy for such products.
 - o Find effective ways to facilitate the local farmers markets, and related efforts of

the Watauga County Cooperative Extension. The Farmers Market has grown beyond the capacity of the initial site and a new location is warranted to enable the market to re-consolidate and continue to grow. A strategy is proposed that addresses a new location with expanded hours of operation and greater diversity of products.

- o Promote a grower’s cooperative.
- o Promote and explore opportunities in niche markets of food production, such as herbs and spices, grapes (vineyards), strawberries, blueberries, raspberries, and local vegetables, and promote as local foods.
- o Work with local agricultural interests to create an interest group committee to promote agri-tourism and sponsor demonstration projects, such as organic gardening with a living historic farm.

Section 5
Water and
Sewer

Photo by Hugh Morton

Water and Sewer

Preface

Water is a valuable and precious resource. Stress caused by increasing population and dwindling resources due to drought, pollution and misuse should cause us to look closer at how we use and protect our water resources.

- In a survey conducted by ASU Professors Dragan Stefanovic and Marvin Hoffman in 2007, a primary public response was to “secure the water supply.”
- Another survey conducted by Martin-McGill in 2008 for Phase 1 of the “Citizens’ Plan for Watauga,” identified “water availability” as a top issue for the community.
- Within the County, four municipalities provide water services and three municipalities provide sewer services. Appalachian State University provides its own water supply.
- In 2001, Draper Aden Associates studied and subsequently produced the “Countywide Water and Wastewater Analysis.” W.K. Dickson produced the “Water System Hydraulic Analysis and Master Plan” for the Town of Boone in 2004.

- The adequacy of water and sewer is essential for commercial or residential growth. The provision of water and wastewater to areas outside of municipalities is of strategic interest to the County.

Findings – Water

- The N.C. Public Water Supply Section and the N.C. Division of Water Resources have established a 2008 list that ranks local water systems in three tiers of drought vulnerability. Boone and Blowing Rock are listed as Tier 1, communities having the greatest vulnerability.
- The N.C. Drought Management Advisory Council assigns a drought rating of D-2 and D-3 for Watauga County in 2008, meaning the County had severe to extreme drought conditions.
- The Town of Boone provides water to all residents within the city limits. Water supply lines extend beyond the Town boundary in several areas and serve small numbers of customers outside of the city.
- The W.K. Dickson study revealed that Boone is expected to reach 90% of the maximum capacity of existing water sources by 2009. Based on late 2008 economic trends, Boone Public Utilities

believes that the date may be delayed until 2010 or 2011.

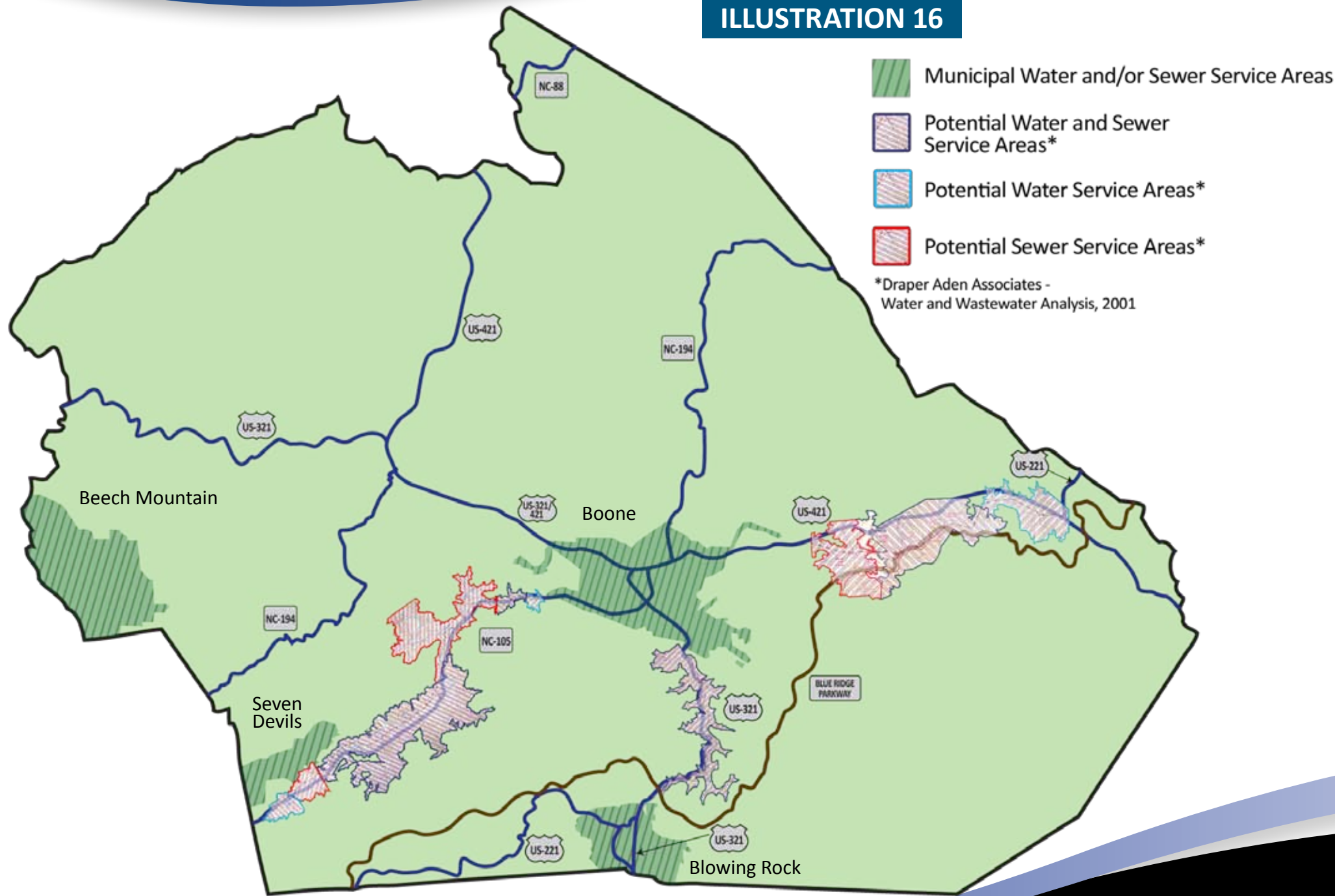
- A new water source called “The New River Project” was proposed to meet Boone’s water needs, and a bond referendum on the issue passed in 2008.
- This project would provide an additional supply of 4 million gallons of water per day from the South Fork New River.
- Boone and Watauga County are presently considering the development of water supply lines along the U.S. 321 and 421 corridors and the N.C. Hwy 105 corridor.
- Boone, Blowing Rock and ASU are interconnecting their water supply resources.
- The water supply for Beech Mountain comes from Buckeye Lake located some 2,000 feet below the Town and five miles away.
- The water supply for Seven Devils is provided by wells with storage tanks owned by the Town. Seven Devils is currently conducting a study to determine the adequacy of its water supply.
- Several large developments provide water to their residents, including Hound Ears, Echota, Mill Ridge and the Ponds. Reynolds Blue Ridge also plans to have a water and wastewater treatment system.
- Watauga County is currently not a purveyor of water services.
- The availability and adequacy of ground water will be examined in the coming months as the High Country Council of Governments completes a study of the issue.

Findings – Sewer

- The Town of Boone provides wastewater treatment to residents and businesses within the Town’s limits.
- Appalachian State University relies upon the Town of Boone for provision of sewer service.
- Town of Blowing Rock provides sewer services to most residents within the Town’s limits, but none outside of the Town. Blowing Rock is considering the construction of a new wastewater treatment plant south of town in Caldwell County.
- Beech Mountain provides sewer services to most properties in the Town.
- Seven Devils does not provide sewer services. However, there are two private sewer systems serving certain parcels.
- Wastewater treatment systems and service are not available to most residents and businesses outside the municipalities. Private communities providing wastewater treatment include Hound Ears, Echota, Mill Ridge and the Ponds. Reynolds Blue Ridge plans to have a wastewater treatment system.

Water and Sewer

ILLUSTRATION 16



- Municipal Water and/or Sewer Service Areas
 - Potential Water and Sewer Service Areas*
 - Potential Water Service Areas*
 - Potential Sewer Service Areas*
- *Draper Aden Associates - Water and Wastewater Analysis, 2001

Findings - 2001 Study Committee

- The Draper Aden study recommends that the County form a study committee regarding water and sewer. The 2001 findings of that committee are as follows:
 1. Identify, designate and protect drinking water supply watersheds.
 2. Have serious conversations between the County and the Town of Boone, as well as other towns, to discuss water and sewer issues.
 3. Consider financially supporting activities, such as surveys, additional technical expertise and financial analysis.

Recommendations

Potential roles for Watauga County regarding water and/or sewer include:

1. Continue in an undefined role.
2. Assume the role of a purveyor of water and sewer services for unserved areas of the community.
3. Assume a role as planner and facilitator of water and sewer services in the community.

Water and Sewer

(Recommendations continued)

The most appropriate alternative role for Watauga County is the role of planner and facilitator of water and sewer services.

- The County should promote sound water and sewer intergovernmental cooperation, facilitating needed and feasible development of infrastructure and services in areas not currently served, and assume a leadership role by participating in planning, policy making and strategic capital investments.
- The County should plan and implement measures that would improve existing public and private services. Water and wastewater systems and services should continue to be operated by municipalities or other existing purveyors of such services.
- County officials should assign leadership roles at policy and staff levels that would be consistent with the County's assumed role as facilitator.
- County officials should assume a leadership role in identifying and protecting future water sources.

- Watauga County should expect and plan for future strategic investments in the planning and the development of water and sewer infrastructure and services for areas of the County not presently served (where feasibility can be demonstrated).
- The ownership of resulting infrastructure should be assumed by existing service providers.
- Watauga County should reevaluate and update the recommendations (Illustration 16) made by Draper Aden in 2001 that included planning for the provision of water and sewer service to the Foscoe area, and water service to the Tweetsie/321 corridor region and the Deep Gap region.
- Watauga County should work with municipalities to help guide water and sewer to areas targeted for economic development and affordable housing.
- Watauga County should make conservation and protection of water resources a principal goal.
- Watauga County should provide for the proper disposal of chemicals and substances likely to end up in the water supply by making disposal of such items easier and more convenient, and

by increasing the frequency with which toxic substances can be disposed at the landfill and convenience sites.

- Watauga County should encourage the use of indigenous vegetation for landscaping. Planting vegetation that is not indigenous to the area may require more water.
- Watauga County should seek grants and other funding resources to help with the expansion of municipal service to unserved areas.
- Watauga County should work with and support the High Country Council of Governments in reference to a study of ground water resources. Watauga County has requested a comprehensive report regarding water, including surface and ground water, from the High Country Council of Governments.
- Watauga County should lead in an intergovernmental endeavor to develop a 10-year Capital Improvement Plan for water and sewer projects in the interest of economic development and public health.



Section 6 Key Community Services

Photo courtesy Blowing Rock TDA





Key Community Services

Preface

Key community services provided by Watauga County include schools, law enforcement (Sheriff's Office), emergency services and community centers.

Findings - Schools

- Watauga County elementary schools have 3,028 students in grades kindergarten through eight. The high school enrollment includes 1,445 students in grades nine through twelve (October 2008). Pre-kindergarten students also attend the elementary schools.
- A new high school on the east side of Boone is scheduled to be operational by the 2010-11 academic school year, to replace the existing high school.



Watauga High School under construction, March 2009

- Enrollment in Watauga County schools is projected to be relatively stable over the next few years, indicating no need for additional schools in the short-term.
- The eight elementary schools are located throughout the County (Illustration 17) and conveniently serve most communities.
- The Watauga County School system has a Facilities Improvement Plan outlining capital improvement needs for facilities through 2018.
- In the 2008-09 academic school year, 77.8% of the schools in Watauga County were recognized as "Schools of Distinction" as compared to only 10% for North Carolina schools overall.
- Based on "End-of-Course" test results, Watauga County students scored higher in grade levels three through eight in reading and math, and scored high on computer skills testing. Watauga students scored higher on 4th, 7th and 10th grade writing tests than the average of students in all North Carolina schools. Similarly, Watauga students scored higher on 5th and 8th grade science tests.
- High school students scored an average of 1,102 on SAT exams, which combine math and critical reading. This is compared to SAT scores averaging 1,007 for all North Carolina students.

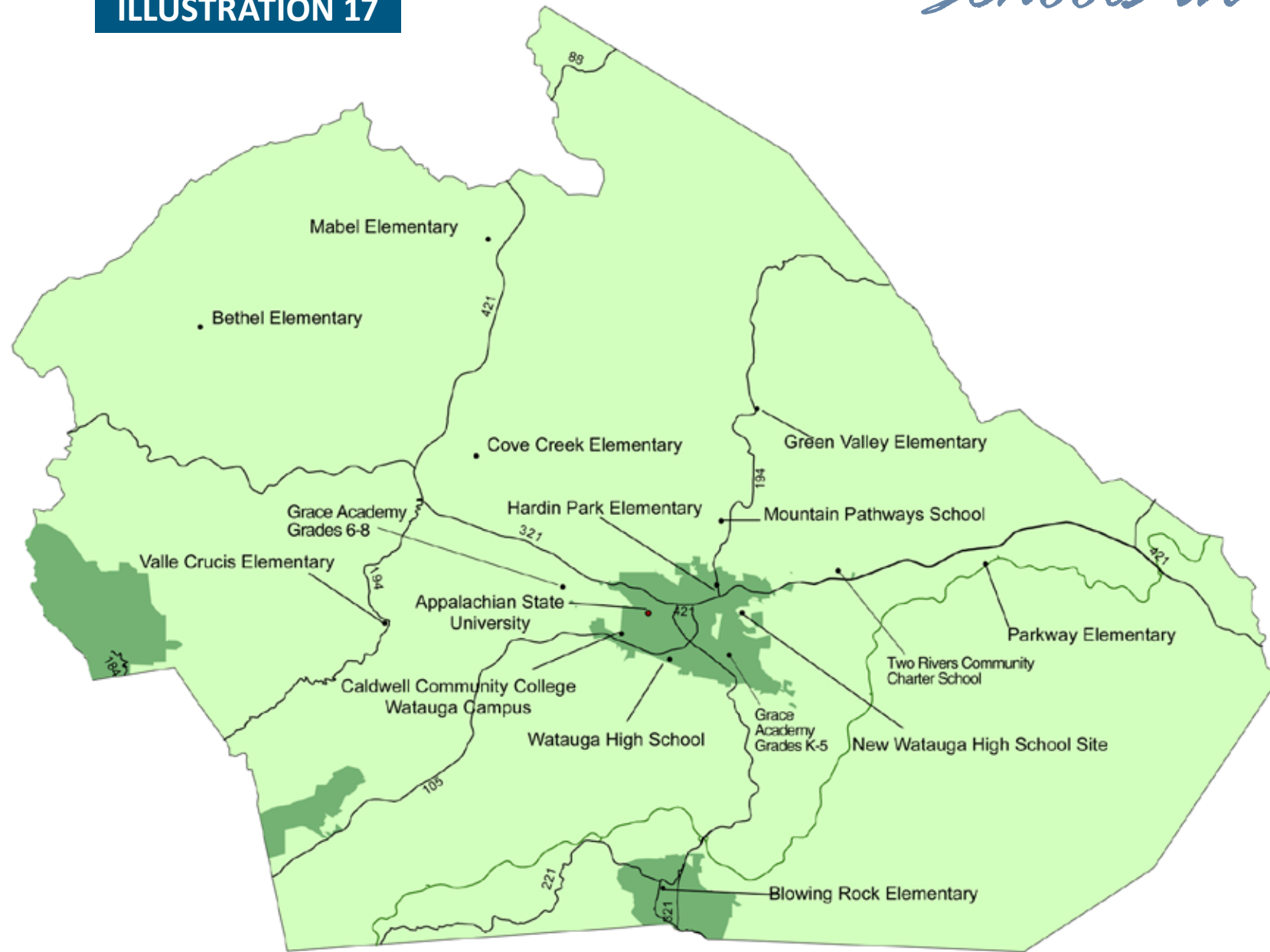
- The Watauga County graduation rate was 68.5% in 2008-09 compared to 71.7% for North Carolina.

Recommendations - Schools

- Implement the following capital improvement projects listed in the Watauga County Schools Facilities Improvement Plan 2008-2018:
 - Provide air conditioning in all schools.
 - Update the media retrieval system in all schools.
 - Construct a new four classroom building for Valle Crucis School and demolish the existing building prone to flooding.
 - Add office space and parking area at the Central Office.
 - Resurface parking areas at several schools.
 - Provide new roofing at most schools.
- Evaluate the prevailing dropout rate and implement a plan to address retention of students.

Key Community Services Schools in Watauga County

ILLUSTRATION 17



Elementary Schools:		Enrollment (October 2008)	
<i>Kindergarten through Eighth Grade</i>			
Bethel Elementary	Sugar Grove, NC	K-8	134
Blowing Rock Elementary	Blowing Rock, NC	K-8	341
Cove Creek Elementary	Vilas, NC	K-8	282
Green Valley Elementary	Boone, NC	K-8	388
Hardin Park Elementary	Boone, NC	K-8	773
Mabel Elementary	Zionville, NC	K-8	188
Parkway Elementary	Boone, NC	K-8	543
Valle Crucis Elementary	Sugar Grove, NC	K-8	379
High School			
Watauga High School	Boone, NC	9-12	1,445
Public Charter Schools			
Two Rivers Community School	Boone, NC	K-12	260
Private Schools			
Mountain Pathways Montessori	Boone, NC	K-12	75
Grace Academy	Boone, NC	K-12	35



Valle Crucis Elementary

Key Community Services

Law Enforcement

Findings - Law Enforcement

- In 2008, the Watauga County Sheriff's Office had 39 sworn officers, including one sheriff, four captains, 18 detectives and civil officers, and 16 shift deputies.
- The civilian labor force at the Sheriff's Office includes nine dispatchers and three administrative officers.
- The Detention Center employs 28 jailors.
- In the Sheriffs' Offices 2003 report (adjusted to 2009) produced by the U.S. Department of Justice, the average number of sworn officers for counties with a population between 25,000 – 49,999 is 31 and the average number of civilians is 26.
- Watauga County has a large number of seasonal residents and tourists that are not included in the population numbers, which should be considered in determining the adequacy of services.
- The Watauga County Detention Center has a maximum capacity of 106 prisoners and the average number of detentions is 86, or 81% (March 2009).
- Workspace for deputies and other staff is marginally adequate, indicating a probable need for expansion of the existing building/facility in the future.
- Sheriff's deputies spend a large part of their work hours transporting detainees and mental health patients.
- The narcotics division is experiencing the greatest increases in calls, resulting in high-risk arrests and greater demands for special task forces.
- All municipalities in Watauga County have police forces.

Recommendations

- Periodic evaluations should take place to monitor the resources of the Sheriff's Department to insure these are adequate to meet the law enforcement needs and demands of Watauga County.
- New policy decisions regarding transport of detainees and mental health patients are desirable to enhance the efficiency of deputies.
- A Capital Improvement Plan should be prepared to address current and future capital needs of the Sheriff's program.
- The Detention Center should be expanded in the near-term to accommodate anticipated increased peak capacity demands.

Key Community Services

Emergency Services

Emergency Services - Findings

- Watauga County has 12 fire districts with fire departments. Ten are primarily rural areas and include Beaver Dam, Cove Creek, Deep Gap, Foscoe, Meat Camp, Shawneehaw, Stewart Simmons, Todd and Zionville. (Illustration 18)
- The Boone, Blowing Rock, Foscoe and Stewart Simmons Fire Departments have some paid staff who work with volunteer firefighters.
- All fire districts outside of municipalities in Watauga County are fire tax supported districts.
- The Watauga County ambulance and rescue service is a paid, contracted service. In addition, there are two volunteer (Medics) rescue squads in the County.
- The large amount of training required to become a volunteer firefighter, the time required away from primary jobs to fight fires, and the expense of travel to and from emergency calls often hurts retention of volunteer firefighters.
- Emergency communications personnel believe certain enhancements to existing communications equipment will improve efficiency for emergency communications.
- Survey respondents and community meeting participants expressed opinions that each of the fire stations should have a full-time firefighter. Others expressed a desire to have fire and rescue personnel located in western and eastern locations in the County.
- Community meeting participants and survey responders want assurance that emergency services will keep pace with growth.

Watauga Fire Districts and Stations

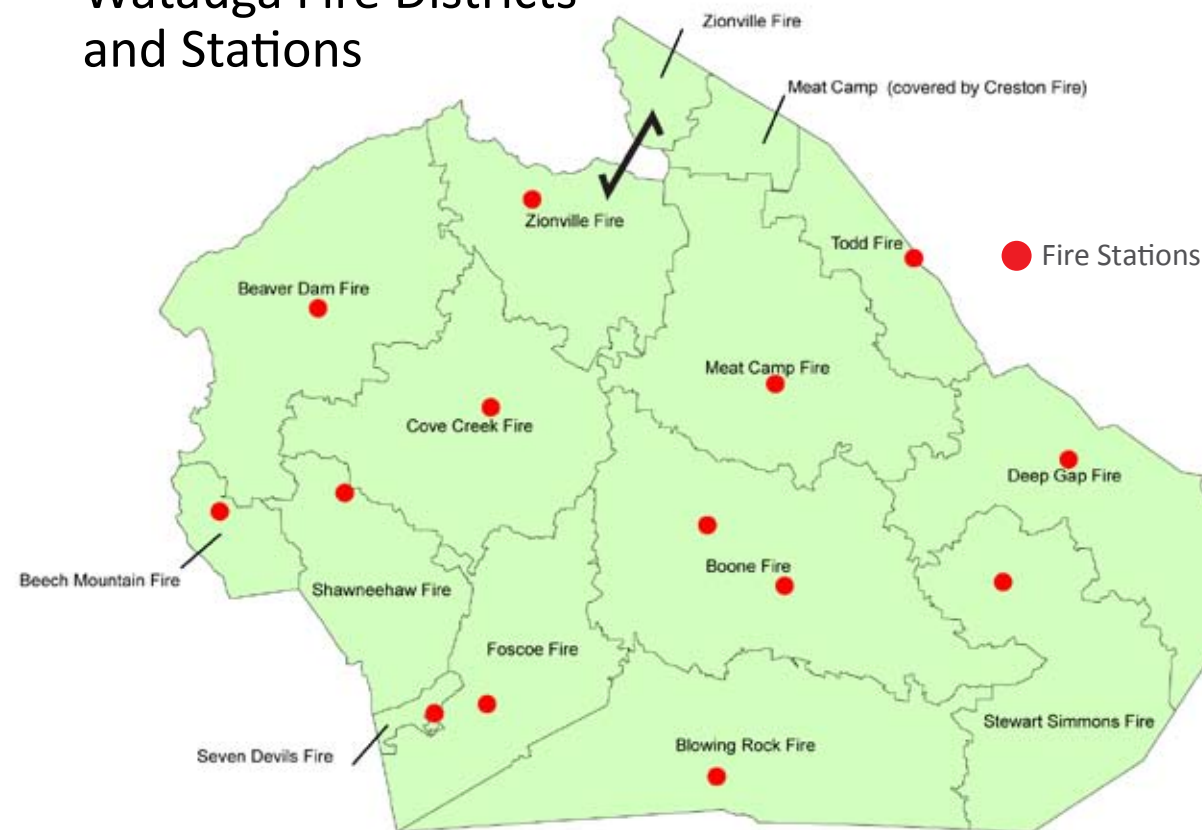


ILLUSTRATION 18

Recommendations

- Perform periodic evaluations to assess the ratio of population to emergency services personnel, taking into consideration the rural character of Watauga County and the number of miles that must be traveled from emergency service centers to all areas of the County.
- Develop strategies to improve cooperation and coordination between the County and each of the fire departments.
- Create an Emergency Services Master Plan for the County to address current and future needs including:
 - Evaluate the need for paid personnel in fire stations.
 - Assess the need for central dispatch of emergency services personnel.
 - Assess how alternative approaches to communications to enhance efficiency and effectiveness.
 - Evaluate methods to improve cooperation between the County and fire departments.
 - Establish additional water points for retrieving water to fight rural fires.



Key Community Services

Community Centers - Findings

- Community centers help to promote community identity.
- Community centers may provide certain benefits such as, but not limited to, a library, meeting space, media center, childcare, senior programs, urgent care and recreation.
- The Western Watauga Center serves citizens in the Cove Creek Community.
- Community centers play an important role in the development of shared community identity, community pride, community preservation and community growth.
- In surveys and community meetings, citizens expressed a desire to have a community center in eastern Watauga County.
- Schools are the main focal point and center for social activities in most Watauga communities.

Recommendations

- Assess the need and financial viability for a community center in eastern Watauga County similar to the Western Watauga Center.
- Establish a plan for greater cooperation between schools and communities for use of County school facilities.
- Facilitate community centers that are attractive, functional, visible, safe and accessible to their communities and reflective of each community's unique identity.

Other Human Services

- Although beyond the scope of the Plan, maintaining the "quality of life" in Watauga County must consider other human social needs, such as care for children and the elderly, health care and other fundamental human needs.
- An in-depth assessment of such needs and a plan for addressing the most pressing humanistic issues should be undertaken in the future.



Section 7
Affordable (Workforce)
Housing



Photo courtesy Blowing Rock TDA



Affordable (Workforce) Housing

Preface

The rich heritage of Watauga County coupled with its physical beauty, easy lifestyle and vast number of cultural and recreational opportunities make it an inviting place to live. As the popularity of mountain properties grows, and student and seasonal populations increase, so do the prices for purchasing or renting housing. A common complaint in the County is that affordable (or workforce) housing is difficult or impossible to find.

Findings

- Making affordable housing a priority in Watauga County is not an easy task. It involves many governmental entities, regulations, competing land uses, and the developers who seek the highest return for their investments.
- Planning for affordable housing for future residents will require a proactive approach.
- In Phase 1 of the “Citizens’ Plan for Watauga,” survey responses confirm that Watauga County citizens agree that the County needs affordable-housing, and that it is one of the top concerns for the future.
- Housing is the greatest single expense for most residents in Watauga County and is often a major consideration among people who want to relocate to the area.
- The Watauga Housing Opportunities Group, Watauga Planning & Inspections, and the Boone Area Planning Commission have addressed the lack of affordable housing, as have other interested groups and individuals.
- Ideal sites for affordable housing would be near towns to eliminate travel time to and from employment, merchants and services.
- The County Commission has agreed to explore a public-private partnership by allocating funds toward engineering for a package sewer plant for affordable-housing projects.
- Rural areas may provide the most potential for affordable housing ventures.
- Emphasis should be given to both renters and owners of affordable housing.

Recommendations

1. Ensure that subdivision regulations and other land use ordinances do not serve as barriers to the construction of affordable-housing. Rather, craft regulations and ordinances to favor affordable-housing.
2. Promote mixed-land uses that incorporate housing with other uses that can be blended without sacrificing safety, health and welfare of citizens.
3. Allow a broad range of housing choices in Watauga County ordinances. Encourage duplex, triplex and quadraplex development. Encourage higher density multi-family housing to reduce the cost of land per unit.
4. Ensure that current and future regulations provide sufficient opportunities for nursing homes and other similar care facilities.
5. Consider the use of land use policies that accommodate manufactured housing and mixed-use housing.
6. Develop a countywide affordable housing plan in cooperation with municipalities.
7. Investigate state and federally funded programs that assist in housing rehabilitation.
8. Lead in establishing an affordable housing trust fund in cooperation with municipalities and the County and seek external funding from other sources.
9. Preserve existing housing stock and address substandard housing wherever possible.

Section 8

*Preservation
of Community*

Preservation of Unique Community Identities and Heritage

Preface

Community identity is defined as the collection of attributes that makes a community unique and separates it from other places. In Phase 1 of “Citizens’ Plan for Watauga,” citizens expressed their interest in preserving the unique community identities and heritage of the County. Phase 1 community meetings revealed that citizens take great pride in their communities and believe, regardless of which neighborhood they live in, that theirs is the best part of Watauga County.

Citizen participants in surveys and community meetings expressed a desire to preserve rural areas, to be a destination remembered for its culture and history, to retain its natural beauty, and to preserve its Appalachian roots. It is important that communities preserve their culture and history for future generations.

Findings - Community Identities

- According to the North Carolina State Historic Preservation Office, the National Register is an official listing of “buildings, structures, objects, sites and districts worthy of preservation for their

significance in American history, architecture, archaeology and culture.”

- The Valle Crucis community took steps toward preservation by creating the Valle Crucis Historic District – the first rural historic district in North Carolina. The entire community is listed on the National Register of Historic Places.
- Valle Crucis adopted a “Historic District Ordinance” on September 1, 1990, which provides for preservation and protection of the heritage of the community, protection of properties, conservation of the district for education, pleasure and enrichment, fostering civic beauty, and improvement of the general health and welfare of the residents.
- The Todd community has also been designated a Historic District.
- Watauga County has “Community Planning Guidelines” for developing a system of community planning. These guidelines were adopted in 1986.
- Several unincorporated communities in Watauga County have cultural, historical or architectural significance and contribute to the quality of life for residents and tourists. Such communities include: Beaver Dam-Bethel, Cove Creek, Deep Gap, Elk, Foscoe-Grandfather, Mabel, Matney, Rutherfordwood, Stony Fork, Sugar Grove, Todd, Triplett, Valle Crucis, Vilas, Zionville and others.

- In many communities, schools are the main focal point and center for social activities.
- Residents feel strongly that newcomers to the area would benefit from education about mountain traditions and attitudes.
- Some communities want to take advantage of local community councils, but lack the knowledge to proceed with such an initiative.
- Community planning districts (Illustration 19) have been established in Foscoe, Cove Creek and Valle Crucis.



The Miller House - Boone

MOSES H. CONE
MEMORIAL PARK

Recommendations

- Create a strategy for preservation of unique communities that identifies and promotes preservation of significant historic, scenic and cultural features. Encourage restoration and use of historic sites and community landmarks to foster community identity.
- Develop uniform and pleasing community identification signage along roadways to identify designated unique communities.
- Review the Community Planning Guidelines to determine if the guidelines are still appropriate for current needs in the County.
- Develop Small Area Planning guidelines and initiatives to guide land use, open space, transportation improvements, capital improvements and identify opportunities for preservation and revitalization.
- Where appropriate, develop Small Area Plans.
- Enhance community-gathering points at convenient locations.
- Explore whether some school sites could be utilized to accommodate facilities necessary for other community programs, such as community center facilities, park/school combinations, libraries and daycare.
- Design and locate public spaces and buildings to reinforce and express the community’s unique character.
- Implement programs for removing unattractive elements, such as illegal signs, graffiti, litter, utility poles and billboards, as feasible.
- Promote art and cultural opportunities at appropriate public and private locations in unique communities.

National Historic Sites and Districts

ILLUSTRATION 19

The map (Illustration 19) depicts districts and individual properties listed on the National Register of Historic Places (hereinafter, the "National Register").



Bethel

- Wilson - Vines House (Roby Vines House)

Sugar Grove

- Cove Creek High School
- Ben Farthing Farm
- Ward Family House

Boone

- The Miller House
- U.S. Post Office
- Jones House

Valle Crucis

- Valle Crucis Historic District
- Mast Farm
- Mast General Store
- Valle Crucis Episcopal Mission

Blowing Rock

- Randall Memorial Building (Village Cafe)
- Bollinger-Hartley House
- Green Park Historic District
- Green Park Inn
- Gragg House
- Vardell Family Cottages District
- East Tennessee and Western North Carolina Railroad Locomotive #12
- Westglow

Todd

- Todd Historic District

Source: North Carolina State Historic Preservation Office.

Preservation of Farmland

Preface

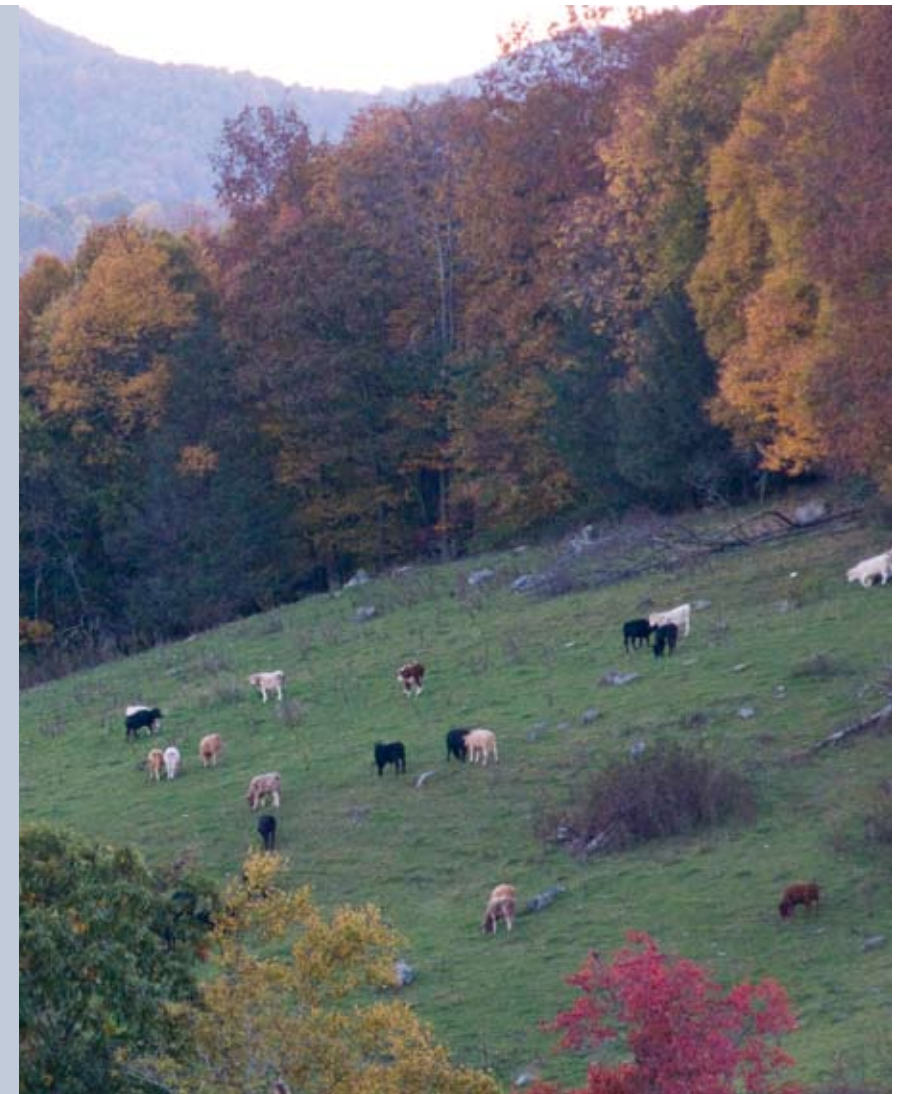
Preserving community identity and the County's unique heritage is a worthy endeavor.

Findings

- The Voluntary Farmland Preservation Program is an instrument designed "to encourage the voluntary preservation and protection of farmland from non-farm development."
- The Watauga County Board of Commissioners adopted the Farmland Preservation Program in October 2000.
- Participants in the Voluntary Farmland Preservation Program must also be participants in the Present Use-Value taxation program.
- An Agricultural Advisory Board reviews and approves applications for qualifying farmland and the establishment of voluntary agricultural districts, which consist of at least 25 acres of qualifying farmland located within one mile of each other.
- Participating landowners sign agreements to sustain, encourage and promote agriculture.
- The land must be certified by the Natural Resources Conservation Service as appropriate for inclusion in the Voluntary Farmland Preservation Program.
- The Voluntary Farmland Preservation Program members are subject to a conservation agreement between the County and the landowner that prohibits non-farm use or development of that land for a period of at least 10 years.

Recommendations

- Promote the Voluntary Farm Preservation Program and work to ensure the Soil and Water Conservation office continues to provide education and opportunities for persons interested in the program.
- Support the Soil and Water Conservation office in its efforts to provide information about the Agriculture Cost Share Program (ACSP). This program is voluntary and is designed to protect water quality by installing best management practices on agricultural lands.
- Promote and educate citizens on the benefits of establishing conservation easements by involving local land conservancies and Soil and Water Conservation personnel.
- Promote the use of the Present-Use-Value taxation program.



Section 9 Parks and Recreation



Photo courtesy Blowing Rock TDA

Parks and Recreation

Preface

Watauga County is a wonderful place for those seeking outdoor recreational activities. Preservation and promotion of recreational endeavors is of great importance to sustaining the quality of life theme. Recreational activities are also vital to the economic well-being of Watauga County. Most of these activities relate to the natural environment. They include opportunities such as hiking, biking, fishing, rock climbing, canoeing, rafting, kayaking, hunting, skiing, sledding, snow boarding and others.

Findings

The Parks and Recreation Department, which was formed in 1973, is advised by an 18-member Recreation Commission, and appointed by the Watauga County Board of Commissioners.

The commission's role is to guide and advise the Parks and Recreation Department in its mission to provide for adequate recreational opportunities for all citizens of the County.

Table 23 provides a summary of the recreation facilities that are presently operated by the County and other public organizations.

- In Phase 1 of the "Citizens' Plan for Watauga," survey responses indicated that the public wants "widespread recreational opportunities."
- The Parks and Recreation staff offers both adult and youth team sports and programs and special events.
- The athletic opportunities for adults include softball, basketball, soccer and co-ed volleyball.
- Youth athletics include softball, baseball, basketball and soccer.

Illustration 20 shows the distribution of parks and recreation sites in Watauga County that are owned and managed by federal, state and conservation organizations.

The mission statement of Watauga County Parks and Recreation is:

"The Watauga County Parks and Recreation Department strives to provide a wide variety of quality recreational programming opportunities in the areas of arts, youth and adult athletics, special programs, special events, special populations including Special Olympics, aquatics, and summer youth camps. The department's mission is for these programs to be enjoyable, fun, fulfilling, safe and rewarding for all Watauga County citizens."



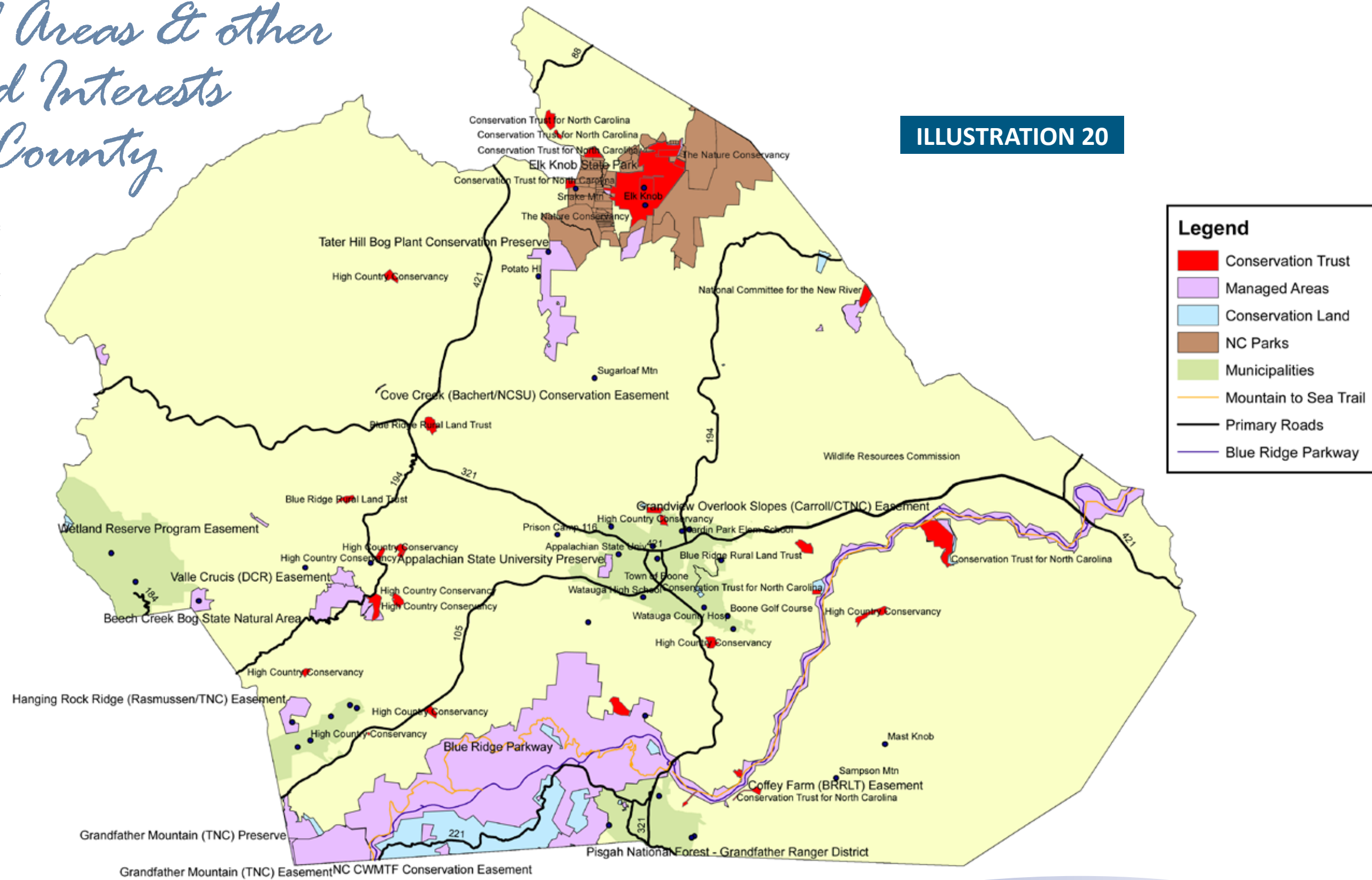
Recommendations

- An important step toward meeting the community's recreational needs is the development of a countywide recreation master plan.
- The plan should be regional in scope, developed with the cooperation and coordination of all municipalities, the Watauga County Board of Education, ASU, Watauga Parks and Recreation, and the public.
- A Recreation Capital Improvement Plan should be incorporated into the master plan and routinely updated.
- Subdivision planning and development plans of various types for medium and high density developments should include provisions for open space and provide for the improvement of recreational space by seeking higher quality standards for the spaces created.
- Because County schools are uniquely situated, they are logical and natural locations for public recreation. Cooperation and coordination between Watauga Parks and Recreation and Watauga County Schools may provide some additional ways to provide for public recreation, and make it available to a wider number of residents who can participate in their own local communities.
- The plan should address present/future needs with an emphasis on:
 - Organized sports
 - Greenways
 - Blueways
 - Walking and bicycling

Recreational Areas & other Public Owned Interests in Watauga County

The map (Illustration 20) shows the distribution of parks and recreation sites in Watauga County that are owned and managed by federal, state and conservation organizations.

ILLUSTRATION 20



Source: www.nconemap.com, Martin-McGill, Inc. research

An aerial photograph of a vast, forested mountain range. The terrain is covered in dense green and brown trees, with a winding road and a river visible. The sky is hazy, and the overall scene is a natural, scenic landscape.

Section 10
Managing Change in
Watanga County

Preparing for Change

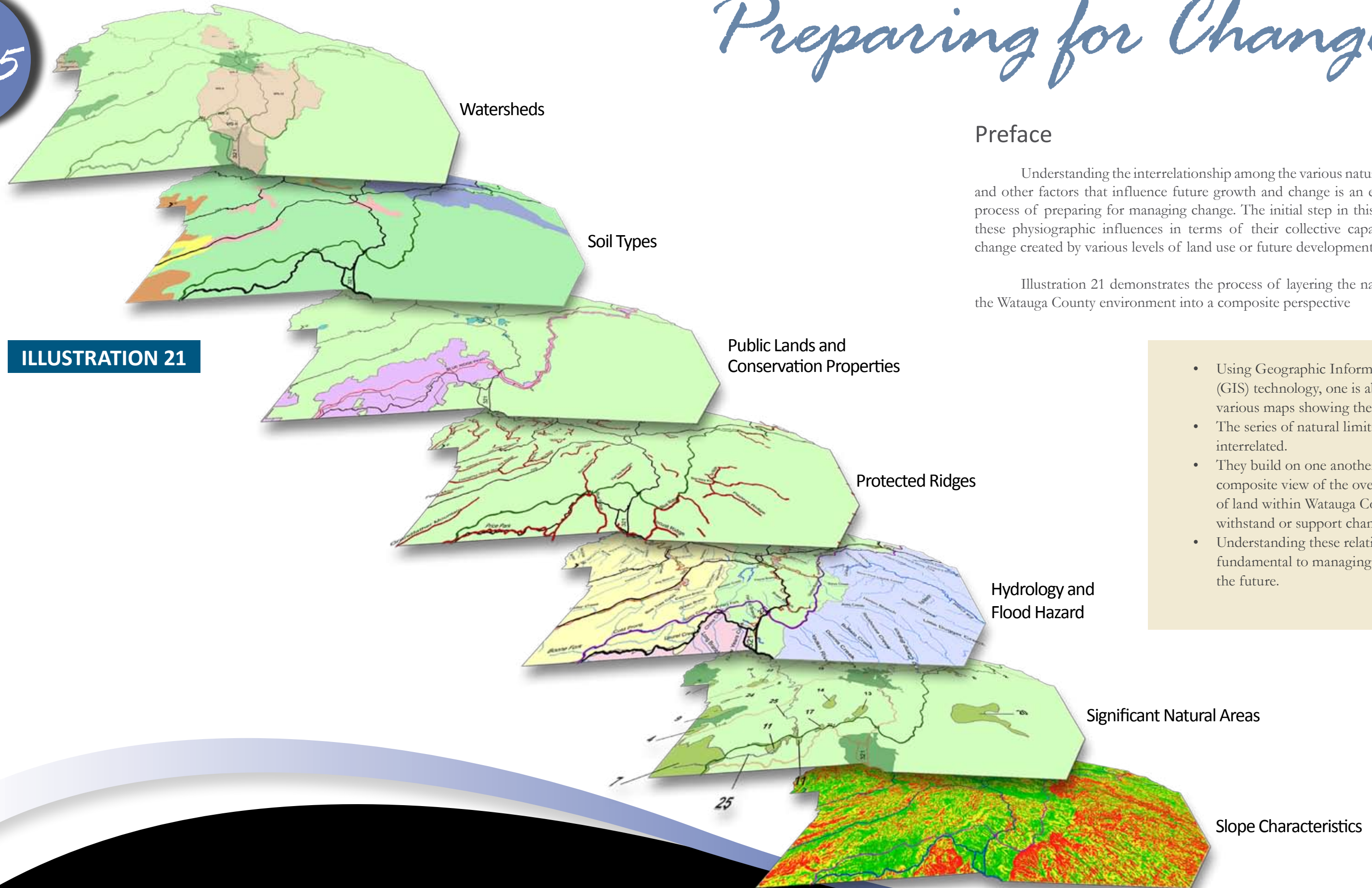


ILLUSTRATION 21

Preface

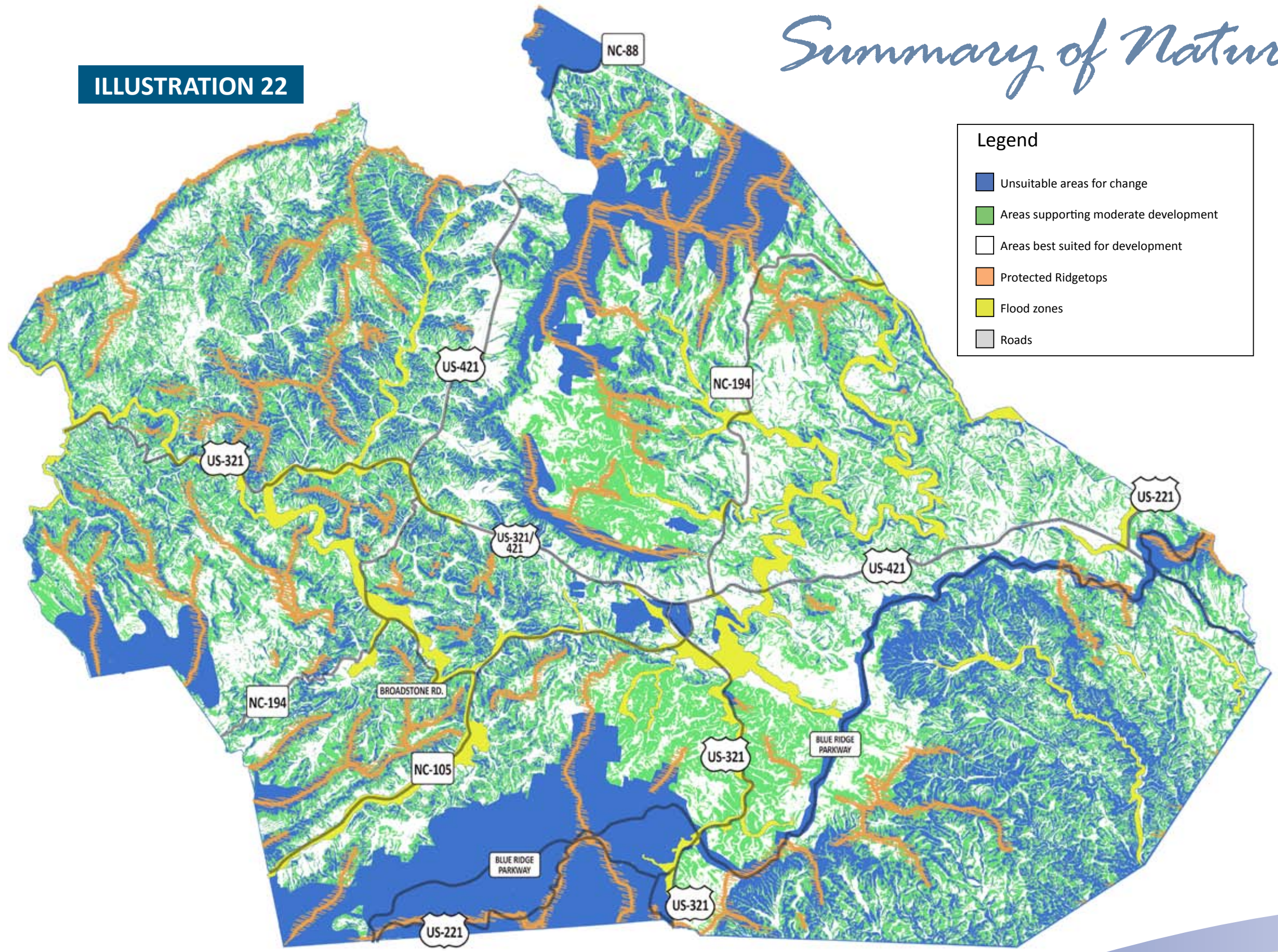
Understanding the interrelationship among the various natural or physiographic and other factors that influence future growth and change is an essential step in the process of preparing for managing change. The initial step in this process is to view these physiographic influences in terms of their collective capability to withstand change created by various levels of land use or future development

Illustration 21 demonstrates the process of layering the natural limitations of the Watauga County environment into a composite perspective

- Using Geographic Information System (GIS) technology, one is able to layer the various maps showing the components.
- The series of natural limitations are interrelated.
- They build on one another to present a composite view of the overall capacity of land within Watauga County to withstand or support changes.
- Understanding these relationships is fundamental to managing such change in the future.

Summary of Natural Limitations

ILLUSTRATION 22



Legend

- Unsuitable areas for change
- Areas supporting moderate development
- Areas best suited for development
- Protected Ridgetops
- Flood zones
- Roads

The categories of suitability of land for development for Watauga County may be explained as follows:

- **Areas Best Suited for Development**

Land areas that have few constraints for development activity. With appropriate services, such land could best accommodate future change (Illustration 22).
- **Areas Supporting Moderate Development**

Land areas that exhibit certain constraints for development in that they may exhibit one or more significant limitation, such as a less than ideal slope characteristic, or location within a protected watershed.
- **Areas Least Suited for Development**

Land that has limited or no development potential because of severe physiographic challenges or other impeding limitation, such as land under public ownership. These areas also encompass protected ridge tops and flood zones.

Managing Change in Watauga County

Preface

Change is inevitable in Watauga County; however, future change can be influenced by many factors, which may be altered or utilized to direct or mitigate such change. This fundamental assumption is the basis for managing change. The principal factors that influence change include:

- Transportation Routes
- Physiographic Constraints
- Public Policy
- Water and Wastewater Infrastructure
- Centers of Employment
- Proximity to Urban Centers
- Community Facilities (including schools)
- Land Use Regulations
- Public Health Regulations

The planning, placement, modification or enforcement of such influences become primary tools that are available to the community in managing change. It is therefore incumbent upon Watauga

County to recognize the importance of acknowledging and managing these factors of change and deliberately planning for their impacts.

Growth Objectives for the Community

Achieving balance between fostering change and protecting community values and important economic, environmental and cultural resources is the foundation of change management.

The following objectives are intended to guide the County:

- Population growth should be concentrated in areas of Watauga County where essential services and infrastructure are adequate to meet the needs of future populations. Population and development densities should vary in accordance with the availability of such services and infrastructure, with more dense concentrations of development being directed to locations where essential services and infrastructure may be provided most efficiently.

- Extension of essential services and infrastructure should be planned to support future growth within these designated concentrations of development, with such extensions being guided by deliberate policies that acknowledge efficiency and change management strategies.
- Priority should be given to achieving development and managing growth that is sustainable and emphasizes efficiency in the consumption of resources, including land, energy, water resources and other necessities that consume or degrade the natural environment of Watauga County.
- Growth in rural areas of the community, outside of planned concentrations of development, should be managed to occur at densities that do not require inefficient investments in essential services and infrastructure.

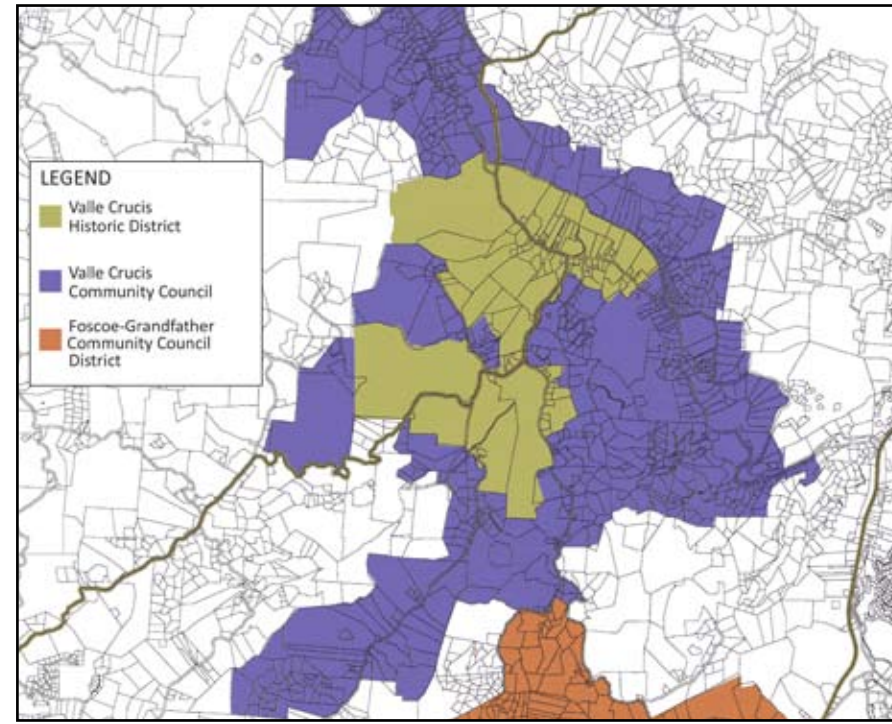
- Growth outside of planned concentrations of development should not infringe on prevailing agricultural or rural land use patterns in such rural areas.
- Growth management in both urban and rural areas of the community should be sensitive to valuable environmental, cultural, or historic resources and assets.
- Existing unique rural communities, outside of urban concentrations, should be protected. New communities in rural regions, which may require essential urban services, should be discouraged by the County's policies, unless such services are provided by the developers and are self-sustaining services.



A. Cove Creek Community Council District



B. Valle Crucis Historic District



C. Foscoe-Grandfather Community Council District

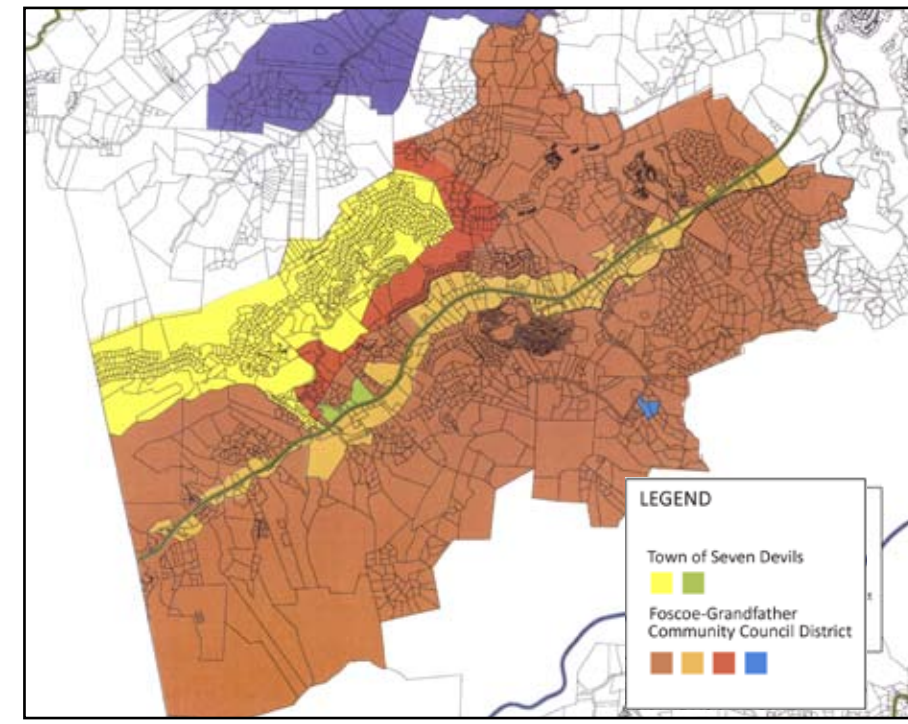


ILLUSTRATION 24

Community Planning Districts

Illustration 24 presents the locations and extent of the three present community planning districts in Watauga:

- No regulations have been adopted for the Cove Creek Community Council District.
- The Valle Crucis Community Council District is primarily dedicated to historic preservation. It contains a designated historic district zone.
- The Foscoe-Grandfather Community Council District is divided into 4 zones, as shown on Map C.

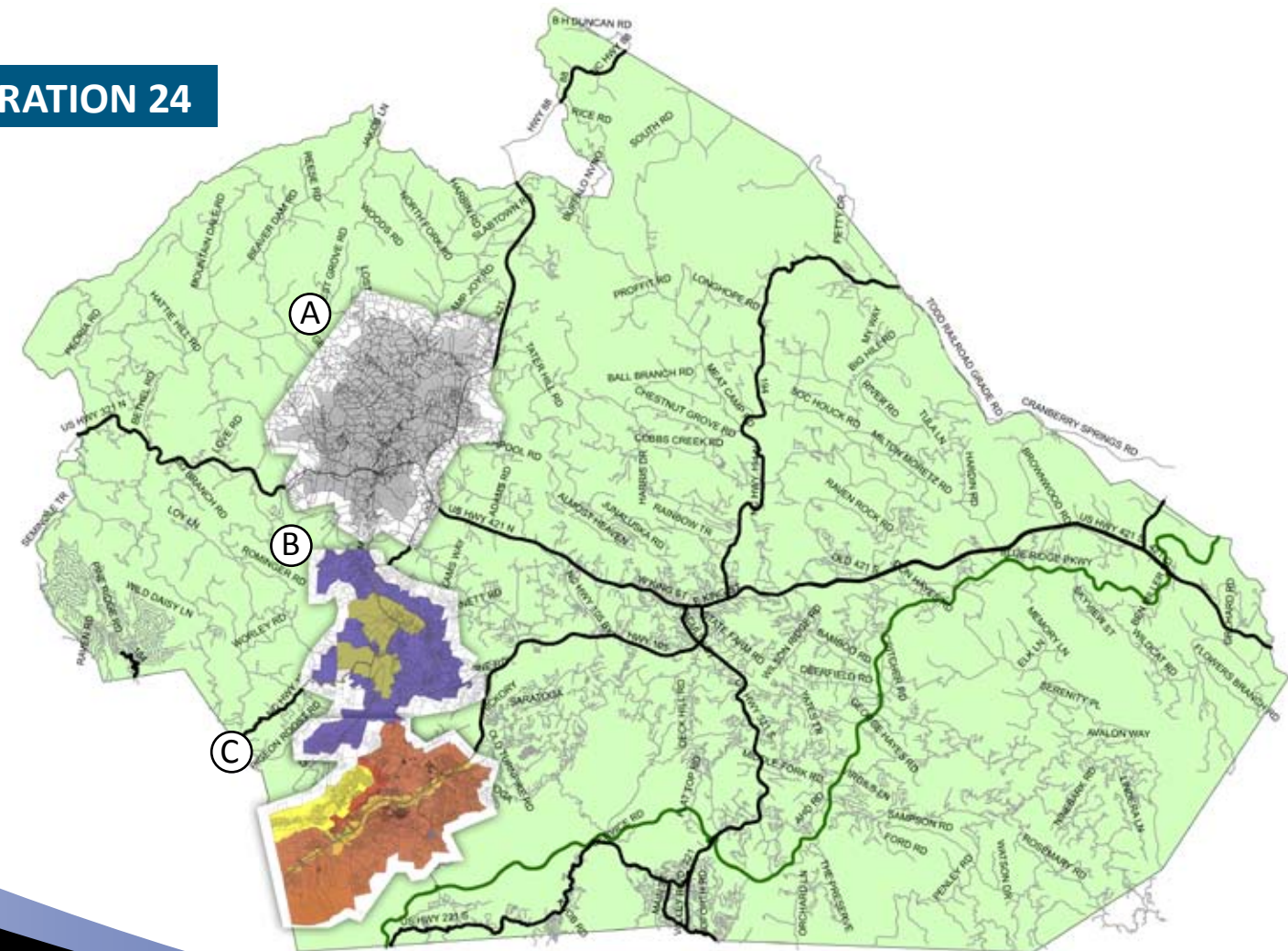


Photo courtesy
Blowing Rock TDA

Managing Future Change in Watauga County

Preface

The County's strategy for managing change is developed to reflect the diversity of the community and to provide for a logical approach to addressing this diversity of needs and the wide range of factors that influence and direct growth under these unique conditions.

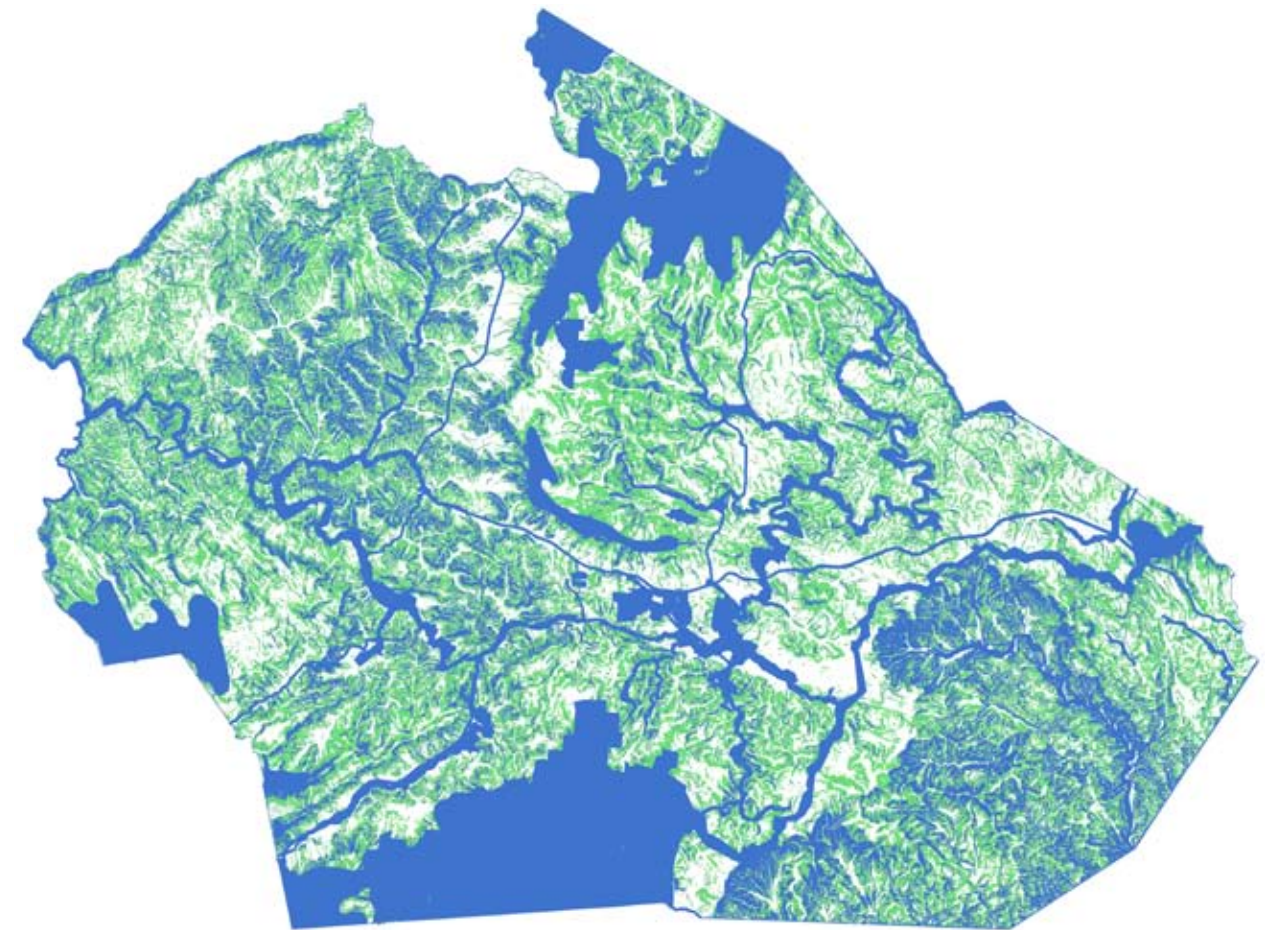
Watauga County is a community in transition. It has evolved from a principally rural environment into a community that is typically urban along its principal highway corridors and progressively more rural and agricultural as distances increase away from those transportation corridors. This urban / rural setting, coupled with its complex physiographic limitations, provides a great challenge.

Growth management issues in the community are complex. A single planning model for the County is probably not adequate to comprehensively address the requirements of this transitional planning environment. Therefore, multiple planning paths may better provide for the flexibility to address the range of factors and issues that are presented to the community.

Emphasis should be directed toward achieving change that reflects sustainability in future development and insures a minimal disruption to the natural environment and maximize use of energy, land resources and other natural and community assets.

The Change Management Strategy for Watauga County divides the County into three Growth Paths, acknowledging the range of planning objectives and developmental environments throughout the community:

- The Watauga "Gateway Corridors"
- Unique Community Areas
- Rural / Agriculture Regions



Watauga Gateway Corridors

Watauga County is characterized by distinct and constantly changing primary transportation corridors, which include key segments of highways 421, 321 and 105. These corridors are considered the strategic or key Gateways to the community and managing change within these so called “Gateway Corridors” should be guided by the following principles:

Population

- The average population densities achieved in these “Gateway Corridors” are, or will in the future, be substantially higher than other regions of the County and generally fall into a range of 500 to 900 persons per square mile.

Land Use Patterns

- Land use patterns will be generally more complex with wide ranges of residential densities, substantial commercial concentrations, as well as industrial and institutional complexes.
- Within these “Gateway Corridors,” the County and its municipalities should aggressively avoid conflicting land uses and maintain minimum standards of quality for development.

Economic Development

- The County’s economic development activities should be aggressively pursued within the Watauga “Gateway Corridors.”
- Care should be taken to protect areas identified as prime industrial land or key economic assets.
- Appropriate infrastructure should be developed to sustain this ongoing and planned economic development program. However, investments in public infrastructure should be cost-effective, with economic benefits to the Community outweighing the costs of new investments in infrastructure.
- A formula should be developed to assess this cost/benefit ratio and the County should utilize a concise policy to guide in its future capital investments in economic development related services and infrastructure.

Essential Services

- Development within these “Gateway Corridors” would be accessible by highways and streets, which are developed to urban standards, having capacities to accommodate increasingly complex volumes of traffic.
- Development within this growth path should be served by water and sewer infrastructure, except for areas that are deemed infeasible to receive such services due to excessive cost, incompatible

slopes, or factors, that serve to isolate certain areas from essential services.

- Transportation, water and sewer planning should be conducted within a regional framework, with active participation by all units of local government. The County should assume a leadership role in such planning activities.

Environmental Considerations

- Managing change initiatives should acknowledge the presence of sensitive natural areas, such as floodplains, wetlands, unique natural assets and areas exhibiting excessively steep topography, and strive to protect these areas from development, which would damage such resources or diminish their integrity.
- Planning initiatives should attempt to incorporate natural assets into future preservation projects, such as greenways, parks, conservation easements and other ventures, that would serve to protect such areas from serious damage or destruction.
- The County’s growth management policies and regulation should be reviewed and revised as required to ensure that new growth is both sustainable and minimizes the consumption of valuable resources and energy.
- The “quality of life” theme should be reflected in all aspects of planning.

Planning and Organizational Structure

- Much of this “Gateway Corridors” growth path would fall within municipal planning jurisdictions

and be managed within the provisions of urban scale guidelines and regulations, including zoning, subdivision regulations, stormwater ordinances, floodplain regulations, local erosion control ordinances, and other such municipal land use standards and guidelines.

- Planning for areas that fall outside of such municipal planning jurisdictions should be coordinated with municipal programs.
- Tools used for managing change for areas falling within the County’s jurisdiction should be comparable and compatible in approach and intensity to planning conducted within the various municipal jurisdictions, except where the County determines that its requirements should vary from those of adjacent municipalities.
- A permanent mechanism for ensuring coordination and consistency in planning in this “Gateway Corridor” setting should be implemented to ensure that planning, growth management activities, transportation, water, sewer, schools, housing and other essential services are conducted within a regional framework. Such a vehicle might be viewed as a Cooperative Planning Council. It would be assigned a formal agenda, by way of an interlocal agreement, for intergovernmental coordination among the local governments that have a direct interest in the “Gateway Corridors.”

The general boundaries of the “Gateway Corridors” are shown on Illustration 25.

Unique Community Areas

Beyond the designated “Gateway Corridors” there are other significant areas of Watauga County that are recognized as established rural communities and which exhibit unique characteristics worthy of preservation. Although these areas may be isolated from the more developed “Gateway Corridors,” their service needs are not typical of the most rural regions of the County, primarily due to the density of development or other unique circumstances. At present, these unique Rural Communities include Deep Gap, Todd, Valle Crucis, Cove Creek, Foscoe, Matney, Bethel, Zionville and Mabel.

Some of these unique places are located within the designated “Gateway Corridors,” including Deep Gap, Foscoe-Grandfather, and portions of Cove Creek and Zionville. Change in these unique communities would be managed within the parameters established for the “Gateway Corridors.”

Managing change within these Unique Community Areas shall be guided by the following principles:

Population

- The average development density may be higher than other typically rural regions of the County, but would be substantially lower than urban concentrations of population within “Gateway Corridors.”

Land Use Patterns

- Land use patterns should be managed with conscious efforts to prevent incompatible land uses, maintain low population densities, and preserve the integrity of the Unique Community Areas.
- The nature of such communities tends to encourage the mixing of land uses, with limited commercial and service activities inter-dispersed among residential land uses. Unique Community Areas should be more tolerant of mixed land uses, as might be seen in more densely developed areas of the County.
- As growth continues in these unique communities, commercial development should be encouraged to concentrate in nodes, becoming more isolated from residential concentrations.
- However, incompatible industrial or other land uses should be avoided in favor of the predominant residential character of these communities.

Economic Development

- New economic development activities should not be encouraged within the boundaries of Unique Community Areas, which would demand levels of urban services that are not currently present in the community.
- The natural evolution of commercial activities in Unique Community Areas should not be prohibited, except where such development is incompatible with the character of the community and would tend to damage property values and disrupt the community.

Essential Services and Infrastructure

- The extent of development in these existing unique communities may dictate certain essential services, including water and sewer, where such services are economically feasible.
- Such infrastructure should be developed as self-sustaining enterprise funds, which can be supported without subsidy by the larger community.

Environmental Considerations

- County regulations should acknowledge the presence of sensitive natural areas, such as floodplains, wetlands, unique natural assets and areas exhibiting excessively steep topography, and strive to protect these areas from development.
- Planning initiatives should attempt to incorporate such natural assets into future preservation projects, such as greenways, parks, conservation easements and other ventures, that would serve to protect such areas from serious damage or destruction.

Planning and Organizational Structure

- The County should endeavor to establish some level of ongoing community planning within these individual areas, which would reflect a degree of self-determination in decisions relating to planning and services.

Such planning structure should be incorporated into the structure of the County’s planning program. This level of autonomy might help to avoid future unnecessary incorporation of new municipal governments.

- The development of new Unique Community Areas should be discouraged by the utilization of planning services and regulations. New Unique Community Areas should be developed only with the provision of essential services and infrastructure by the forces which are responsible for their planning and development.
- The County should review its present community planning guidelines to ensure that the present ordinance is adequate to meet future needs related to establishing the valuable and unique rural communities.

The general boundaries of the Community Areas are shown on Illustration 25 .

Rural/Agriculture Regions

All areas that fall outside of the Watauga Gateway Corridors and designated Unique Community Areas would be contained within the designated Rural / Agriculture Regions (Illustration 25). These areas are predominantly rural and are characterized by low-density residential development with substantial land areas devoted to agriculture and undeveloped forest lands. Growth management within Rural/Agriculture regions is characterized by the following principles:

Population

- The average population densities within these areas would be less than the Gateway Corridors and Rural Communities growth paths.

Land Use Patterns

- Development densities should be substantially lower than those for the Watauga Gateways Corridors, so as to avoid future pressures for extending urban services and infrastructure.
- Development that tends to increase pressure on County government for the provision of essential urban services should be discouraged by policy and by the absence of such urban services and infrastructure.
- Some mixing of residential and non-residential land uses should be encouraged and provided for in future planning and management of growth. Rural service centers providing limited shopping and services should be encouraged within prescribed guidelines.

Economic Development

- Except for agricultural business activity, no new large-scale economic development activities, such as industrial parks or shopping centers, should be encouraged within the boundaries of such regions of the County.
- The natural evolution of economic activity in Rural/Agriculture Regions should not be prohibited, except where such development is incompatible with the character of the area and would tend to damage property values or be incompatible with the predominant agricultural or residential land uses.

Essential Services and Infrastructure

- No water and sewer services would be promoted or provided by local government within these areas, due to the inefficiencies of providing such services and their ultimate impacts on rural areas. However, this does not preclude the provision of water and sewer services by private providers for specific areas of development that are self-sustaining.
- Highway transportation would be accomplished principally by two-lane roads that are typically not consistent with urban design standards, except for state highways, which traverse certain areas of the community.

Environmental Considerations

- Extraordinary care should be taken in these areas to preserve their rural character and to protect valuable farmlands, as well as environmental and cultural resources.



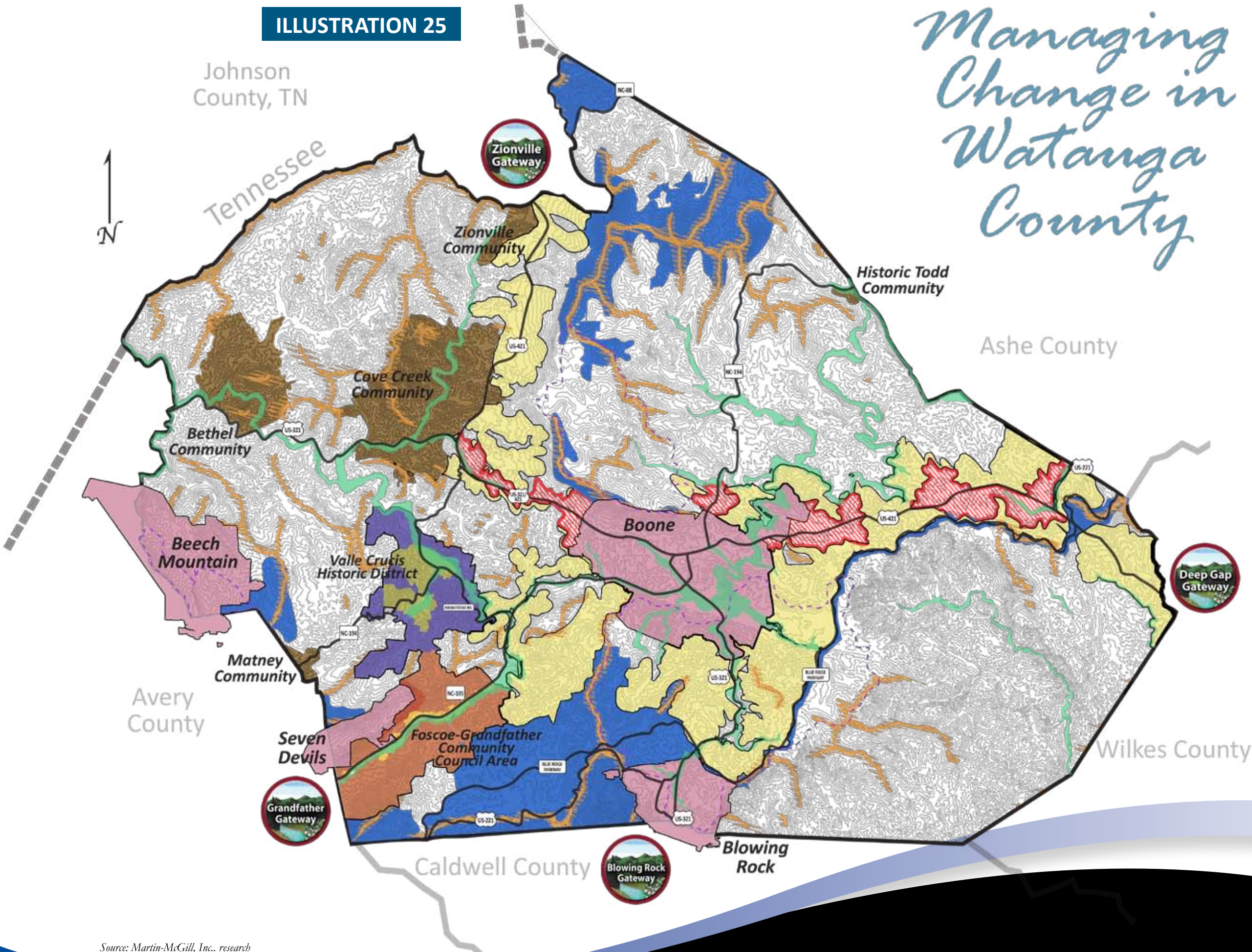
- The suitability of land within these regions of the County should be a principal consideration in determining appropriate developmental densities and segregation of incompatible land uses.

Planning and Organizational Structure

- Planning for these regions of the community should be managed within the structure of the Watauga County Planning Board and the County Board of Commissioners.

The general boundaries of the Rural / Agriculture Regions are shown on Illustration 25 .

Managing Change in Watauga County



MAIN LEGEND

- Topographical Contours
- Municipal Jurisdiction
- Mixed Density
- Low Density Residential
- Unique Community Areas
- Rural Agriculture Regions
- Protected Public Areas
- Protected Ridges
- Watersheds
- Flood Zones
- Roads
- Adjacent County Lines

Source: Martin-McGill, Inc., research

Section 11

*Implementation for the
Citizens' Plan
for Watanga*

Photo by Hugh Morton

Photo courtesy Blowing Rock TDA

Implementation of the Citizens' Plan for Watauga

The "Citizens' Plan for Watauga" should be the beginning point in a process that carries the community forward into a continuum of deliberate strategies and actions designed to understand, anticipate and manage changes that will occur in the future and to ensure that such change is consistent with the will of the Watauga citizenry and compatible with the fragile natural environment that is the essence of Watauga County.

Public Involvement

The public must be involved in this essential process. This element of awareness and participation is fundamental to the successful implementation of this strategy for managing change.

This Citizens' plan must be followed by many subsequent initiatives that are necessary to deal with the multitude of details and actions that are intended to carry out the vision. The public must understand that this process is continual and that its role in this process is the most essential ingredient for its success.

Public involvement began with Phase One of the planning process and continues with a series of community meetings to present the "Citizens Plan for Watauga" to the public.

Intergovernmental Coordination

A key consideration in achieving a successful process for plan implementation is meaningful and deliberate cooperation among the local governments, and their management and planning staffs, within Watauga County. Mistrust and competition must not be permitted to delay the creation of a productive and innovative solution to achieving a desirable level of information sharing and collaboration among the County, the four municipalities and ASU. Suggestions for continuing this important involvement process include:

- Establish a "Citizens' Plan for Watauga" newsletter that would be published quarterly on the County's website and further distributed in the community. The newsletter would post news related to important planning and change management initiatives and summarize information and events that relate to this theme.
- Create a "Citizens' Plan for Watauga" Forum composed of a cross-section of community leaders and citizens in Watauga County, including elected officials, business people, institutional representatives, retirees, youth and others who have a stake in managing change in Watauga County. Cultivate an environment in which participation in this forum is both prestigious and meaningful. Meet periodically with this group and present the progress of the preceding year and formulate at least five (5) concrete objectives for the subsequent year.

- Take planning and information about managing change in Watauga County into the schools. The future of Watauga County rests with our children. They must understand and accept this immense responsibility.
- Formalize and enhance the planning consortium among the local governments and ASU to foster intergovernmental collaboration on key planning issues that are both current and prominent to the community.
- Establish quarterly status working retreats of the consortium that are managed by a facilitator that rotates annually among the five governments.
- Formulate specific annual objectives related to plan implementation and sponsor joint participation in work tasks that are of mutual interest to the participants.
- Assign responsibilities among the participants for staffing and participation in the annual "Citizens' Plan for Watauga" Forum.
- Facilitate coordinated involvement in strategic public participation events and processes.

An impression derived during the course of preparing the "Citizens' Plan for Watauga" is that the County's planning program has accomplished many objectives and achieved a great deal of success in spite of limited funding and very little notoriety during its brief history. However, there are many recommendations and issues raised within this plan that will bring new pressures and demands to bear on this very streamline program, which presently assumes responsibility for many aspects of Watauga County government.

This raises the question of how this efficient program will evolve and expand to meet these new stresses and demands. Attention should be given to:

- Assessing the overall programmatic needs associated with the ongoing planning program and the new initiatives that are associated with this plan.
- Evaluating alternative organizational options that could address the increased workload demands, to ensure that the program continues to be a viable and creative mechanism for managing change in Watauga County.
- Establishing an organizational model that would be implemented in phases in the coming years, as the need for growth and change is evident.

In Conclusion

- Watauga County is a unique and vital place, long appreciated for its natural beauty, vast open spaces, unique climate and wonderful sense of place.
- Its people and communities are special combinations of independent thinking and an expression of history and values.
- It is our good fortune to be part of this diverse community and our responsibility to prepare a prudent and responsible path for change in these times of economic and cultural transition.
- The approach should be a logical process of understanding, participation, soul-searching and decision-making, which would lead us to the means and will to manage the inevitable changes that will confront this generation and future generations.
- It is a challenge that is worthy of our complete attention.

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