

INTRODUCTION

Transylvania County is a special place with unique social and physical characteristics, culture, and history that distinguishes this community from the thousands of other counties across America. Transylvania County has experienced unprecedented economic and social changes over the past ten years that are only beginning to be understood.

- AGFA (formerly DuPont), Ecusta and Coats America have all shut down.
- The State of North Carolina has purchased over 14,000 acres of private land for recreational use.
- The County's overall population growth rate was 15% between 1990 and 2000, but the elderly population grew by 32.9% during the same time period.

As Transylvania County grows and changes over the next ten years, this comprehensive plan will help to serve as a policy guide to the county's public officials and citizens developing the community's physical and social form. This plan represents a shared vision of the County Planning Board, the Transylvania County Board of Commissioners, and the citizens of Transylvania County. This plan reflects the County's long-term needs and desires.

The following comprehensive goals are presented as a guide for Transylvania County's future development and growth.

- Preserve Transylvania County's distinctive rural character, mountain heritage, natural environment and ambiance, while promoting proactive planning and economic growth.
- Conserve the valuable land, water and air resources within the county, for present and future generations.
- Collaborate with the NC Department of Transportation to provide the best possible roads for Transylvania County and promote alternative transportation.
- Collaborate with the City of Brevard and Town of Rosman to supply reliable and safe drinking water, wastewater treatment and solid waste collection and disposal.
- Promote affordable, safe and adequate housing for all residents.
- Plan and provide appropriate public facilities and services for county residents and businesses.
- Promote the best use of land while protecting citizens' property rights.

DEFINITIONS AND PURPOSE

A comprehensive plan is an official public document adopted by the County Planning Board and the Transylvania County Board of Commissioners. The plan is a general, long-range policy guide for decision-making and is concerned with the county's overall growth and development.

The plan is *comprehensive* because the elements cover a broad range of development issues that can be influenced significantly by the County Planning Board and the Board of Commissioners.

The plan is *general* because the recommendations are broad, rather than narrowly-defined, for land use at specific sites.

The plan is *long-range* because consideration is given to the opportunities and problems that may arise over the next ten years.

The plan is *flexible* because there can (and should) be amendments to adopt as new situations and challenges appear.

Although adopted as an official public document, the comprehensive plan is not an ordinance. This plan and the accompanying maps serve as tools to identify existing resources and future needs and acts as a catalyst to help revise or establish ordinances such as the Water Supply Watershed, Subdivision and Flood Damage Control Ordinances, the Capital Improvement Program, and area plans for the various jurisdictions or townships within the County. Throughout the Comprehensive Plan, maps are used to describe important features and highlight or clarify narrative comments.

Legal Basis for Comprehensive Planning

The Transylvania County Planning Board is responsible for preparing a comprehensive plan and accompanying maps. This plan, as stated in the Transylvania County Code of Ordinances states, in part:

The Board's recommendations for the development of the County include goals and objectives for conservation of the County's distinct rural character and mountain heritage; conservation of land, water and air resources; plans for the best possible roads; promotion of alternative transportation; provision of safe and reliable drinking water, wastewater treatment and solid waste disposal; support of affordable safe and adequate housing; provision of appropriate public facilities and services; and promotion of the best use of land while protecting citizens property rights. §16-28.

Planning Efforts

The local ordinance creating the Transylvania County Planning Board was initially adopted by the County Commissioners in 1989. In the late 1980’s, the Board of Commissioners also decided to create its own Planning Department and initiated a number of very specific planning efforts. By 1994, the Board adopted a Comprehensive Plan that has been the foundation of many activities the county has pursued.

This current Comprehensive Plan was initiated in early 2002. Since that time, staff and Planning Board members have held many public meetings in various locations with different civic, religious and community groups. The Planning Board members and staff also produced a draft comprehensive plan document that was inserted in the *Transylvania Times*. Many residents responded to the accompanying questionnaire with comments and suggestions. Planning Board members began reviewing and updating the goals and objectives adopted in the 1994 Comprehensive Plan. The Planning Board also solicited comments from other county departments and State agencies.

Adoption

The following lists the adoption dates of the Transylvania County Comprehensive Plan by the Transylvania County Board of Commissioners and the Transylvania County Planning Board.

Board

Adoption Dates

Transylvania County Board of Commissioners

2-14-2005

- Ray Miller, Chairman
- Jeff Duvall, Vice-Chairman
- Jason Chappell
- David Guice
- Kelvin Phillips

Transylvania County Planning Board

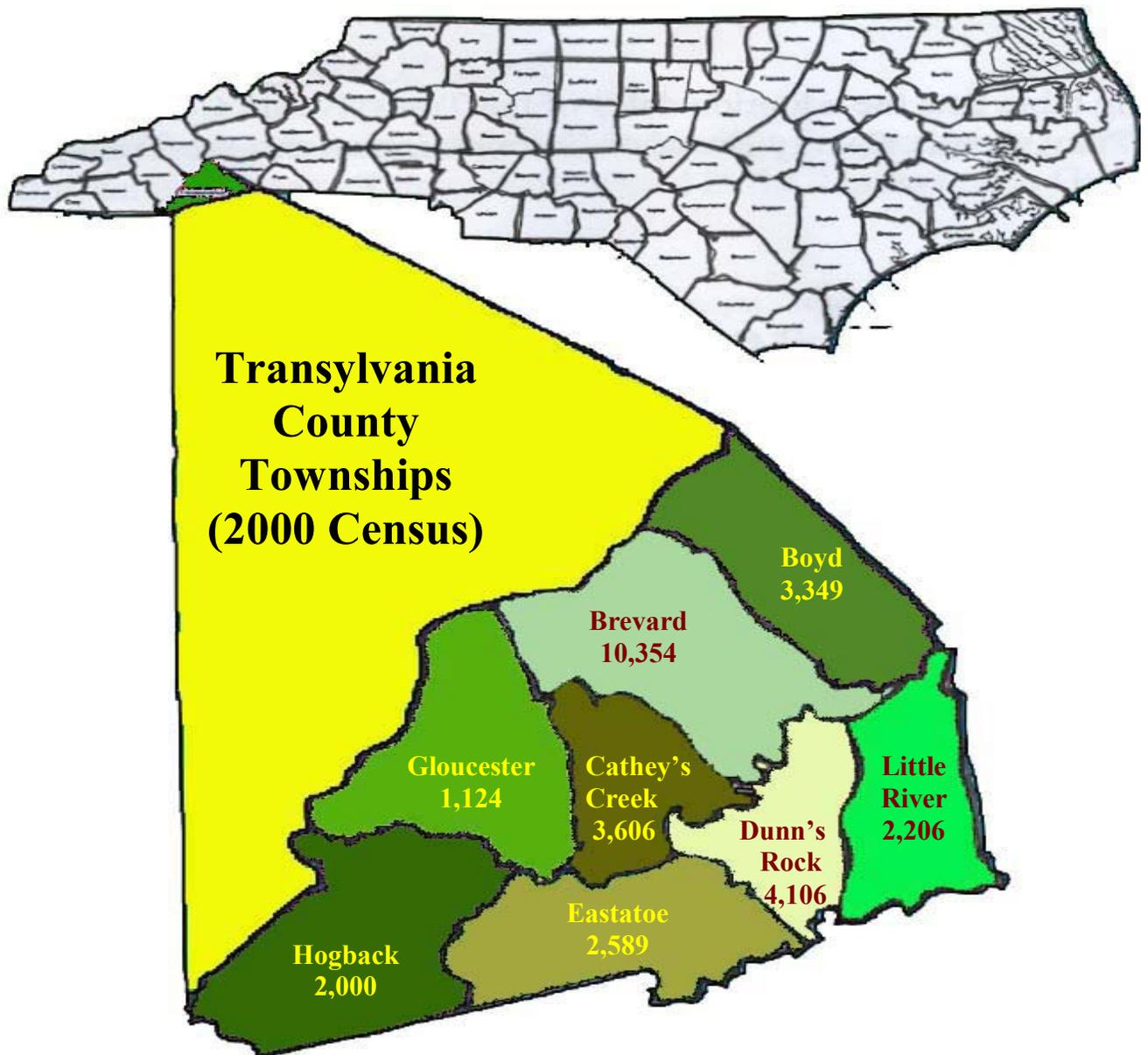
9-16-2004

- Clentis Williams, Chairman
- Joey Galloway, Vice Chairman
- Terry Crowe
- Jimmy Perkins
- Parker Platt
- Kelvin Phillips
- Mason Sexton

LOCATION

Transylvania County is located in the southwestern part of North Carolina and has a total land area of 379.7 square miles or 242,988 acres. The elevation ranges from 1,265 feet where the Horsepasture River meets Lake Jocassee to 6,043 feet near the Blue Ridge Parkway. The County is bordered by Buncombe County to the north, Henderson County to the east, Haywood and Jackson Counties to the west, and Pickens, Oconee and Greenville Counties in South Carolina to the south. The City of Brevard is located in the center of Transylvania County and is the county seat. The Town of Rosman is approximately ten miles southwest of Brevard. There are eight townships that are used primarily for US Census information.

TRANSYLVANIA COUNTY TOWNSHIPS



POPULATION AND ECONOMIC TRENDS

Chapter

1

POPULATION TRENDS

The single most important trend regarding population is the fact that Transylvania County's median age continues to increase. We are an aging population and the county is leading the State and U.S. averages.

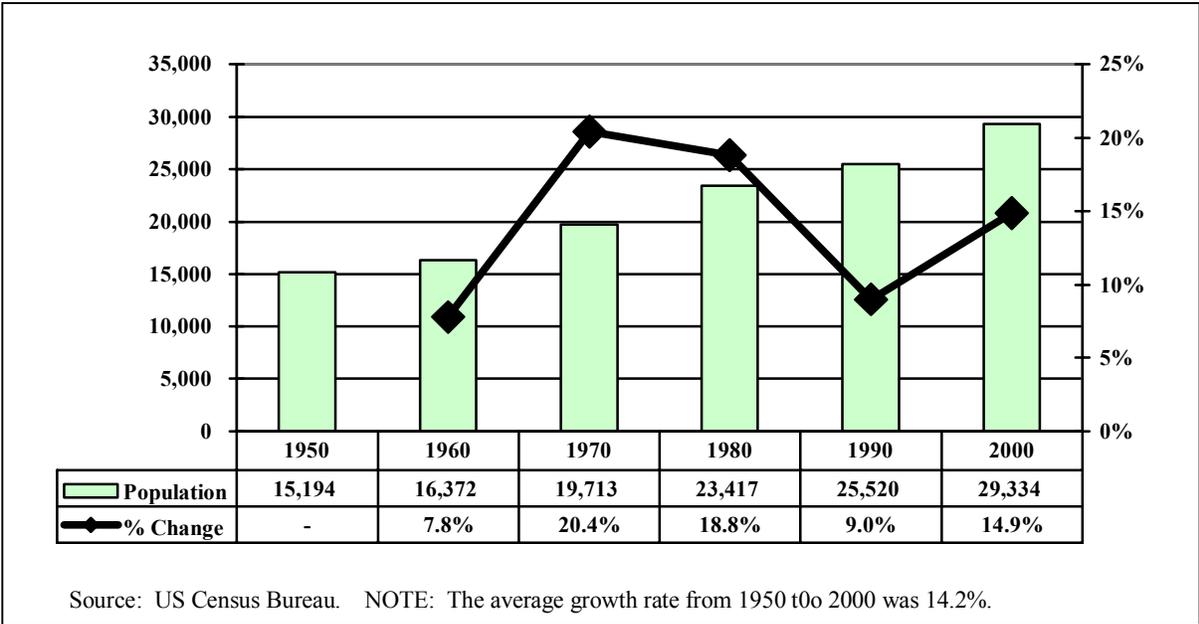
Over the next ten to twenty years, this single factor will have a tremendous impact on our economy, services, recreation needs, housing, and without question, medical service delivery.

Major economic development trends include:

- The US 2000 Census reported 29,334 county residents. This represents a growth of 14.9% between 1990 and 2000. The NC Data Center reported a population for 2003 of 29,489.
- The median age in 2000 was 43.9 and 45.3 in 2003. In 1990 the median age was 38 and in 1980 the median age was 32.
- Between 1980 and 2000, the county's population, age 65 and older, increased by 113%. This population age group represented 21.4% of the county's population in 2000.
- The greatest population growth between 1990 and 2000 occurred in the Gloucester Township with a 57.2% increase and in the Little River Township with a 44.4% increase. The Brevard township population only increased 0.1% since 1990. However, the City of Brevard's population has increased 26% since 1990.
- The county's growth rate is expected to increase anywhere between 15 to 20% over the next ten years.
- The county's summertime population increases anywhere from 13,000 to 15,000 individuals for a total population of approximately 45,000. This increase is the result of summer tourists, campers and summer home owners.
- The average household size has decreased from 2.45 persons in 1990 to 2.30 persons in 2000.
- Over the past 50 years, Transylvania County's total population has almost doubled from 15,194 in 1950 to 29,334 in 2000.

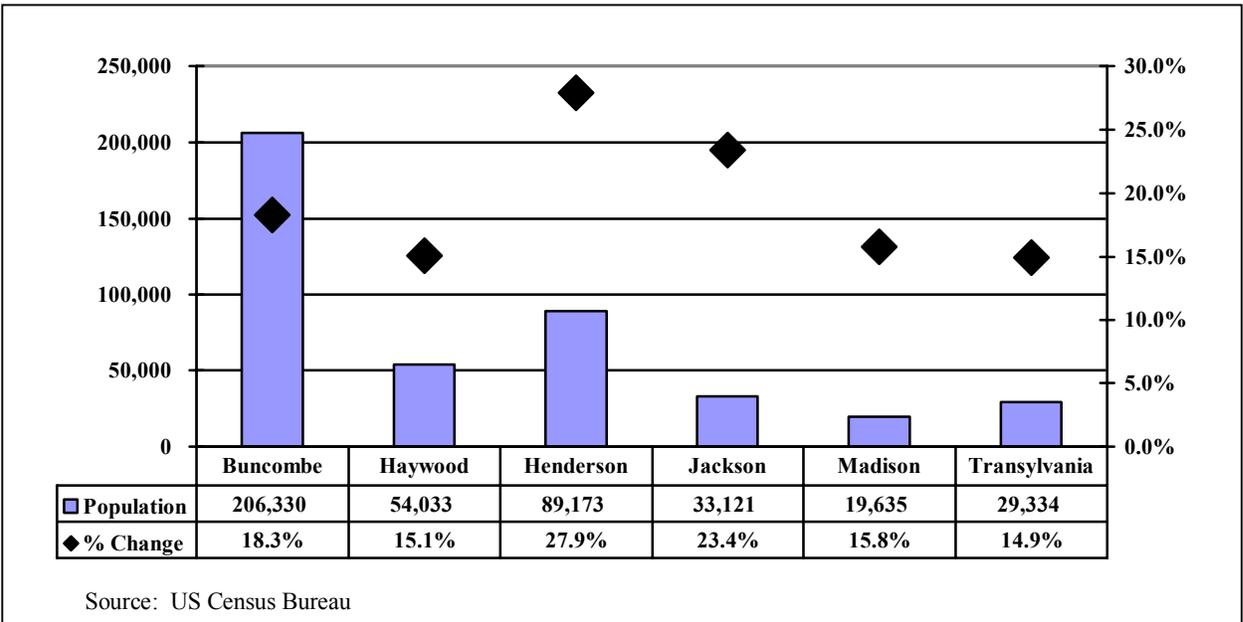
Although there have been significant fluctuations in each decade since 1950, on average the county has added approximately 300 people each year. The greatest growth occurred in the 1960's and 1970's with the growth of Ecusta and the emergence of DuPont. The county also became a focal point for retirement and vacation homes as Connestee Falls Subdivision began developing in the early 1970's.

Transylvania County Population Percent Increase

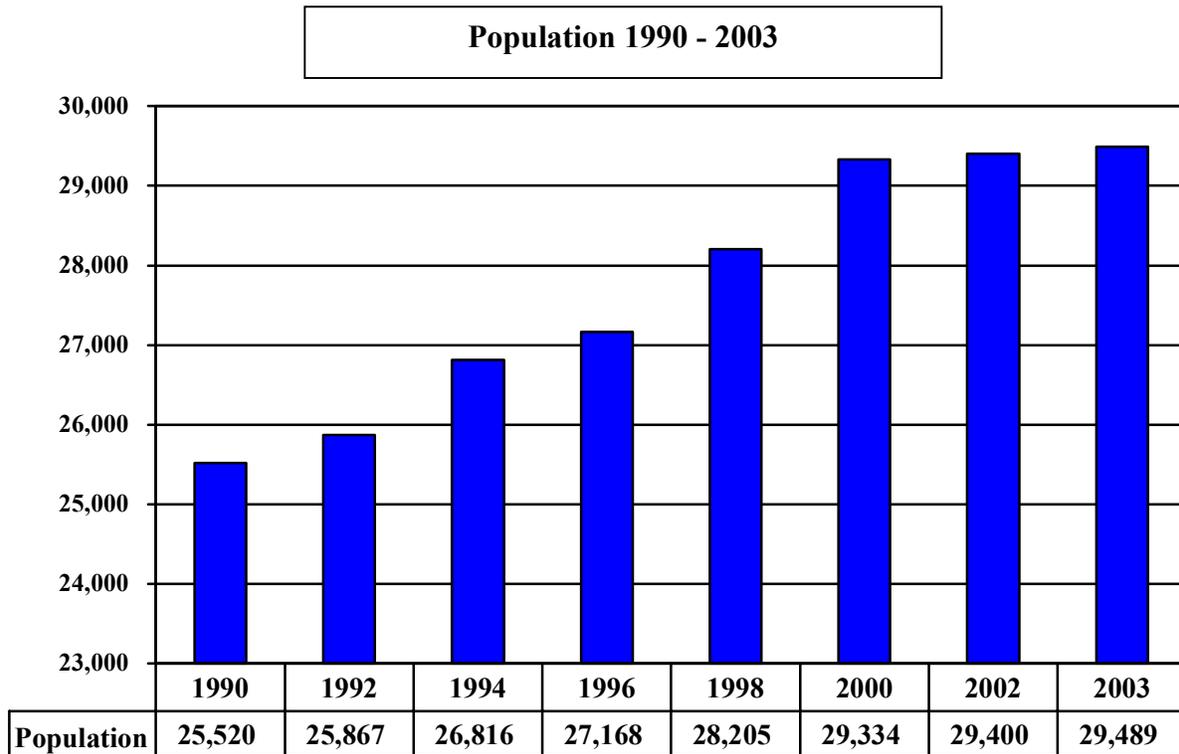


The county's growth slowed in the 1980's, but averaged 1.5% growth per year during the 1990's. Even with a growth rate approaching 15% between 1990 and 2000, most surrounding counties had higher growth rates.

1990-2000 Growth Rate



The US Census Bureau conducts population counts every ten years. The NC Office of State Planning does population estimates every year for each county in North Carolina. These estimates are based on a variety of factors including birth/death certificates, vehicle registration, income tax returns, etc. The following graph shows the county's population from 1990-2002. These estimates are used primarily for purposes of distributing per capita based funds collected and distributed by the State.



Source: 1990 & 2000 US Census Reports
 1992 – 1998, 2002 & 2003 NC Data Center

By the year 2010, the county's population could range from 32,267 to 35,201 people. By 2020, the county's population could approach 40,000. Not only will an absolute increase in population impact the county but the significant change in demographics may necessitate a variety of changes in the way economic development, health care, education and government services are viewed and provided.

Transylvania County's population is getting older. Between 1980 and 2000, the population age group 65 and older grew by 113.7% and between 1990 and 2000 grew by 32.9%. However, at the same time, the age group 0-4 showed no increase.

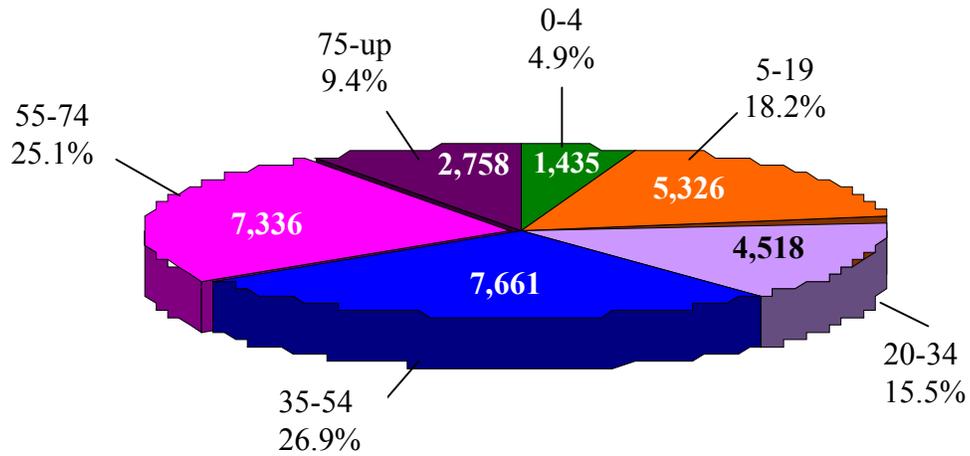
These trends will have a significant impact on future fiscal policies that the Board of Commissioners will have to develop. An older population will require more emergency services and health care facilities. A decline in younger age groups will affect school enrollment and school capital needs.

Based on historical trends, the Planning Board has developed the following data to show the potential county population in 10 to 20 years.

POPULATION PROJECTIONS					
Assumption base population 2000 = 29,334					
YEAR	2000 - 2010 PERCENT CHANGE	TOTAL POPULATION	YEAR	PERCENT CHANGE	TOTAL POPULATION
			2020	10%	35,494
2010	10%	32,267	2020	15%	37,107
			2020	20%	38,720
			2020	10%	37,107
2010	15%	33,734	2020	15%	38,794
			2020	20%	40,481
			2020	10%	38,720
2010	20%	35,200	2020	15%	40,480
			2020	20%	42,240

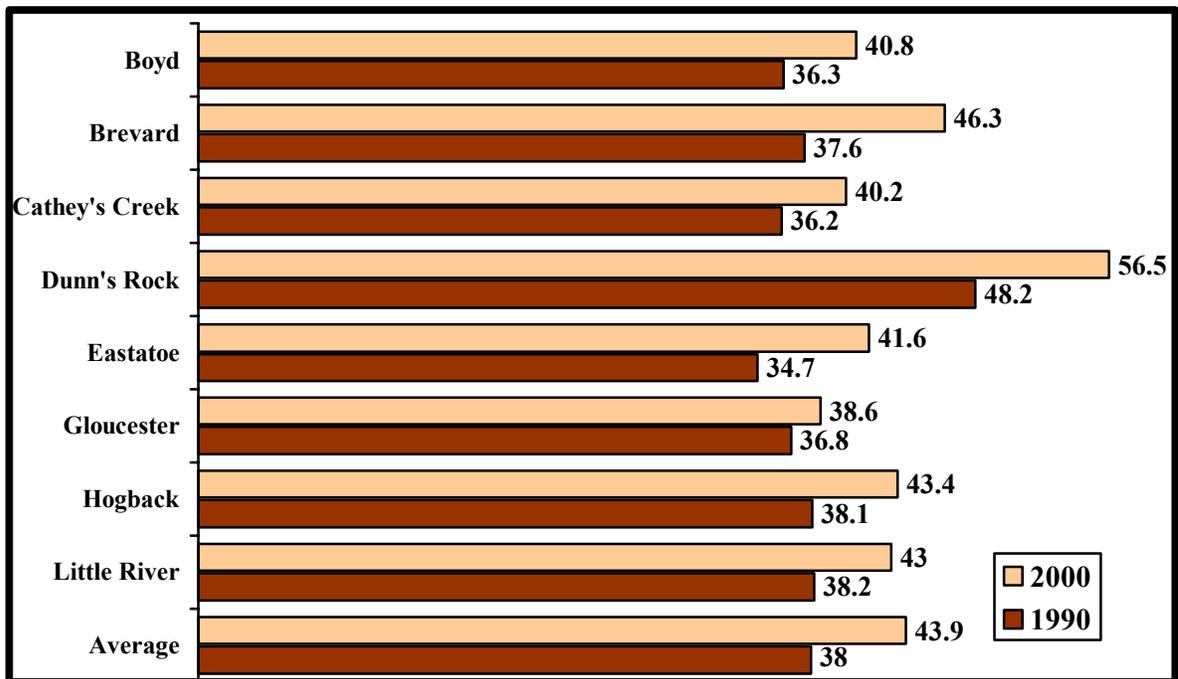
TRANSYLVANIA COUNTY AGE DISTRIBUTION					
AGE	1980	1990	2000	% CHANGE 1980-2000	% CHANGE 1990-2000
0-4	1,522	1,430	1,435	-5.7%	.0%
5-17	4,857	4,142	4,537	-6.6%	9.5%
18-54	11,599	12,329	13,168	13.5%	6.8%
55-64	2,499	2,892	3,911	56.5%	35.2%
65-Up	2,940	4,727	6,283	113.7%	32.9%
Total	23,417	25,520	29,334	25.3%	14.9%
Median Age	32	38	43	37.2%	15.5%

**Transylvania County
Age Distribution
2000 Census
Total Population = 29,334**



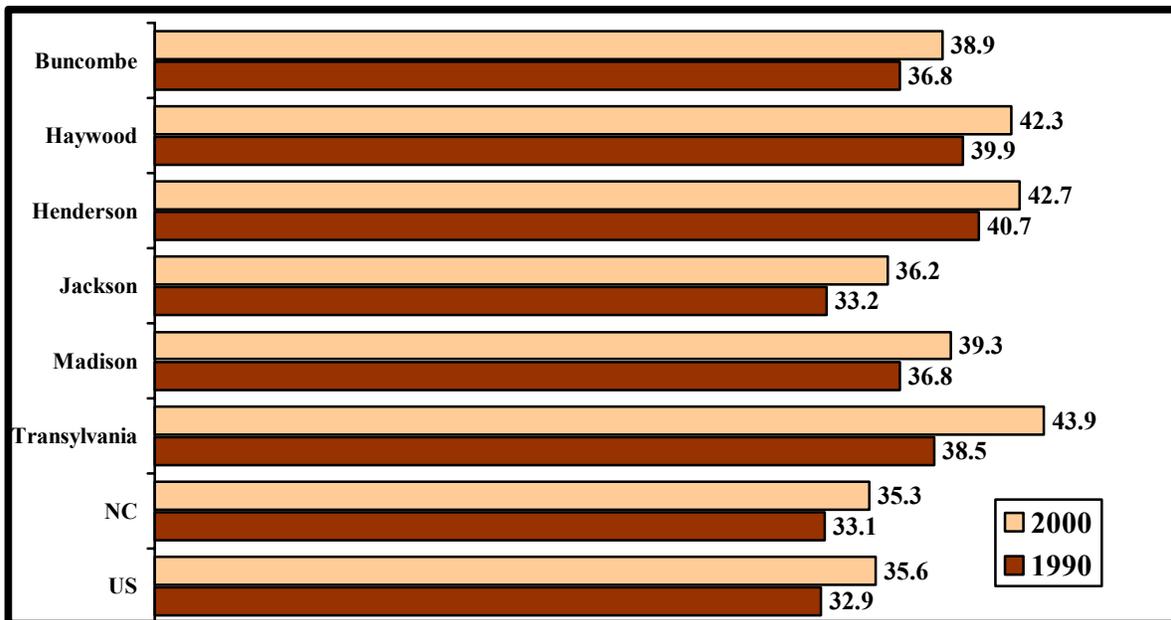
The median age increased 37.2 % in the last 20 years, from 32 to 43 in 2000. The Dunn's Rock township (Connestee, Glen Cannon and Williamson Creek area) median age was the oldest at 56.5 and the Gloucester township (Balsam Grove and Quebec) median age was the youngest at 38.6.

Median Age by Township



The following graph compares Transylvania County's median age with surrounding counties, the State, and the nation. In 2000, Transylvania County had the highest median age in the region.

Median Age by County, State and US



Population by Township

TOWNSHIP	1980 CENSUS	1990 CENSUS	2000 CENSUS	% CHANGE 1980-2000	% CHANGE 1990-2000
Boyd	2,559	2,806	3,349	30.9%	19.4%
Brevard	10,450	10,340	10,354	-0.9%	0.1%
Cathey's Creek	3,216	3,302	3,606	12.1%	9.2%
Dunn's Rock	2,129	3,006	4,106	92.9%	36.6%
Eastatoe	1,714	2,335	2,557	49.2%	9.5%
Gloucester	807	715	1,118	38.5%	56.4%
Hogback	1,218	1,488	1,986	63.1%	33.5%
Little River	1,324	1,528	2,162	63.3%	41.5%
Total	23,417	25,520	29,334	25.3%	14.9%
Brevard	5,323	5,388	6,789	27.5%	26.0%
Rosman	512	385	490	-4.3%	27.3%

During the last decade, the greatest growth occurred in the Gloucester Township. The Gloucester population has increased by 57.2% since 1990. However, the Dunn's Rock population has increased by 92.9% since 1980. The City of Brevard's population increased by 26% between 1990 and 2000 while the Town of Rosman's population increased by 27.3%. Much of Brevard's growth is due to annexations throughout the 1990's.

Summer Population

Transylvania County's summer population fluctuates significantly and is difficult to accurately calculate. The best estimate is that the resident population increases anywhere from 13,000 to 15,000 persons during the peak summer and fall seasons when the county's 15 summer camps are open, part-time residents move back to the county, and the local motels are filled to capacity. In addition, Brevard College and the Brevard Music Center also have special camps and resident populations during the summer months. As a result, demand for county-provided services such as EMS, solid waste disposal and the library are often stretched to their capacity. Future planning should account for this seasonal population increase. The 15 summer camps each have an average of 385 campers and staff.



Brevard Music Center Concert



Sliding Rock

ECONOMIC TRENDS

Major economic events that have occurred over the past ten years will forever change Transylvania County, future jobs, the way business is conducted and how services will be provided. From the mid-1990s, manufacturing jobs essentially evaporated nationally, statewide and locally. To a large extent, macro-economic forces such as national trade policies (NAFTA), health insurance cost, environmental regulations, a strong US dollar, inexpensive foreign labor, and a host of other events drove many manufacturing processes out of the United States.

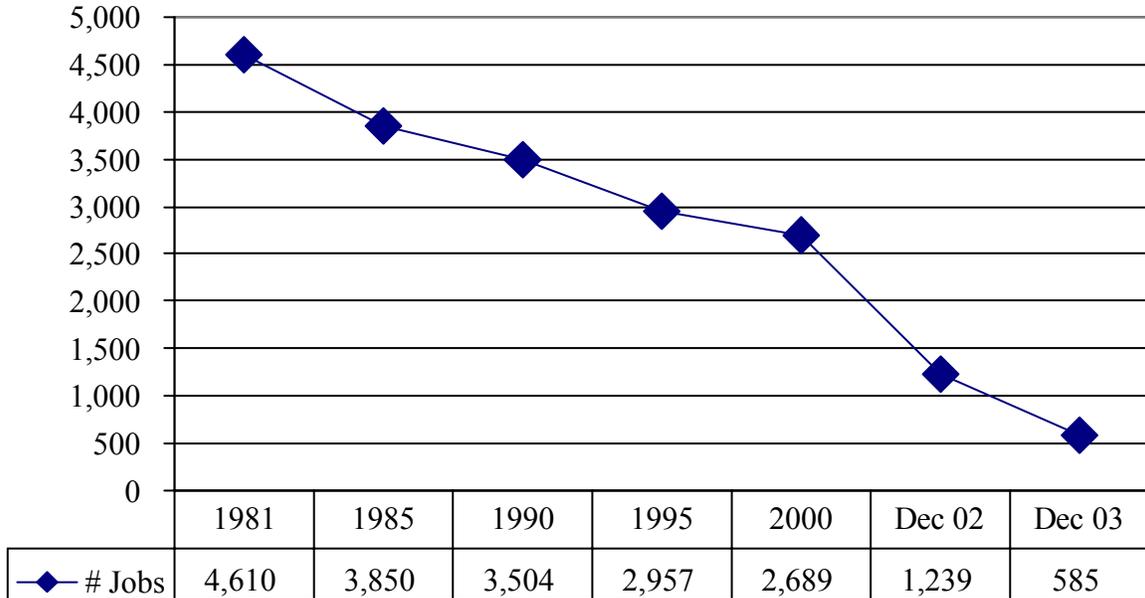
From 1990 to 2002, Transylvania County's unemployment rate averaged 3.9% as compared to 4.6% statewide and 5.5% nationally. In 2002 our average annual unemployment rate rose to 7.7%. This increase is attributable to AGFA (formerly DuPont) and Ecusta (formerly P.H. Glatfelter) closing their doors in the fall of 2002. By December of 2002, our monthly unemployment rate skyrocketed to 14.1% and was the highest in the State. In September 2003, Coats America ceased operations putting another 328 people out of work. The average unemployment rate for 2003 was 10.5% and for 2004 was 7.8%.

Major economic development trends include:

- In 1994, DuPont and P.H. Glatfelter employed over 2,374 individuals or approximately 68% of the manufacturing workforce and almost 25% of the county's total workforce.
- In 2001, AGFA and Ecusta (formerly DuPont and P.H. Glatfelter) employed 1,151 individuals or approximately 42% of the manufacturing workforce and only 12% of the county's total workforce.
- By December 2003, manufacturing jobs had declined by 87.3% since 1981.
- The 2004 median family income for the county was \$51,200 and \$52,600 statewide.
- Gross retail sales for fiscal year 1990-1991 totaled \$130,295,000. Gross retail sales for fiscal year 2002-2003 totaled \$263,949,488. This reflects a 103% increase since 1990-91.
- Between 1990 and 2000, the number of employees in the service sector grew by 14% while the number of employees in the goods producing sector declined by 18%.
- In FY 2002, revenue from ad valorem taxes accounted for \$16,882,008 or 50.3% of all revenues received by the county.
- Cultural activities offered by the Brevard Music Center, the Paul Porter Center at Brevard College, the Transylvania Arts Council and other organizations promote tourism and significantly benefit the local economy. The Chamber of Commerce, Heart of Brevard and the Tourism Development Authority further promote tourism.

Manufacturing jobs reached their peak in the early 1980's and have declined in the subsequent twenty-years.

Manufacturing Jobs

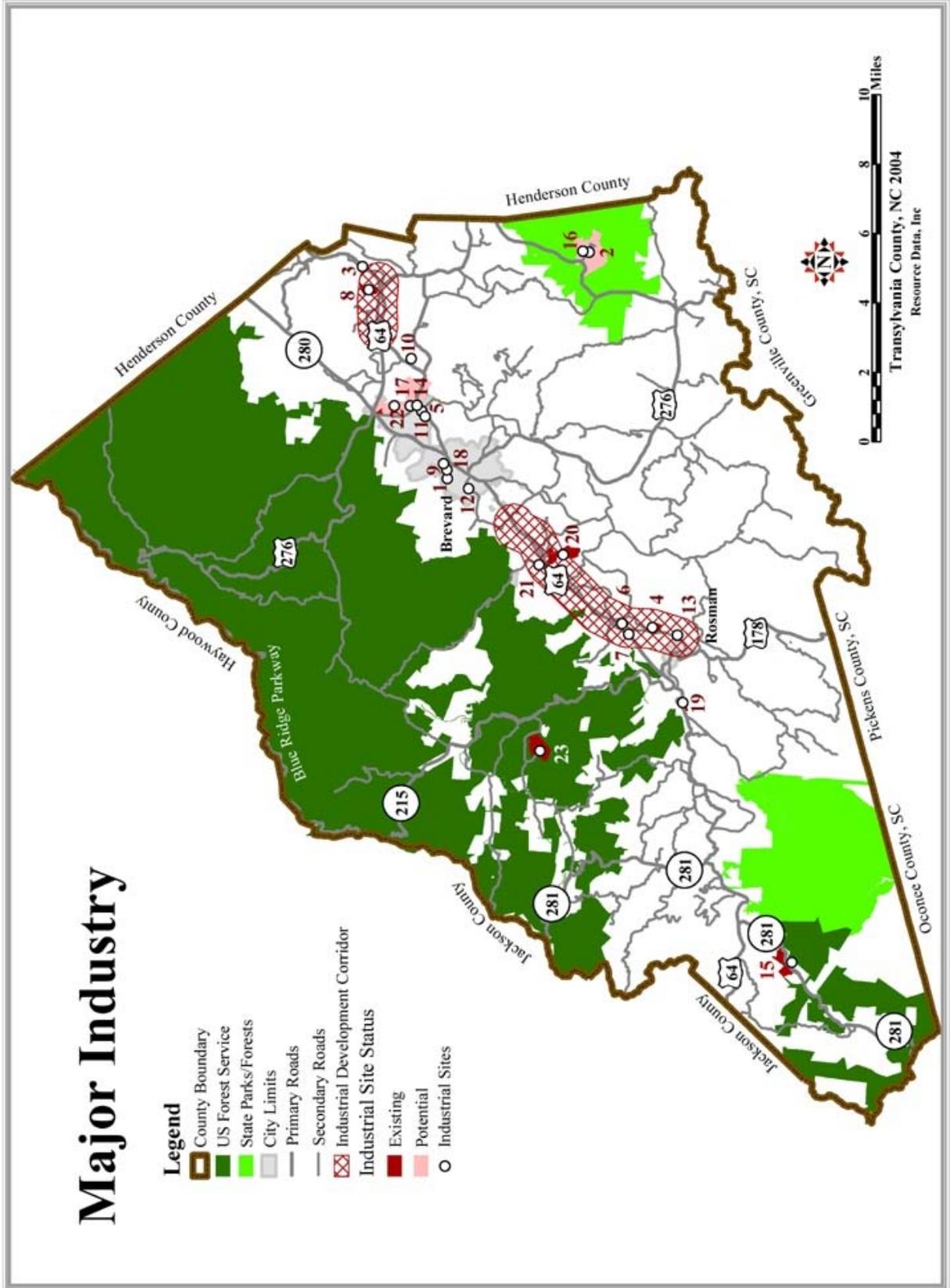


Source: NC Employment Security Comm.

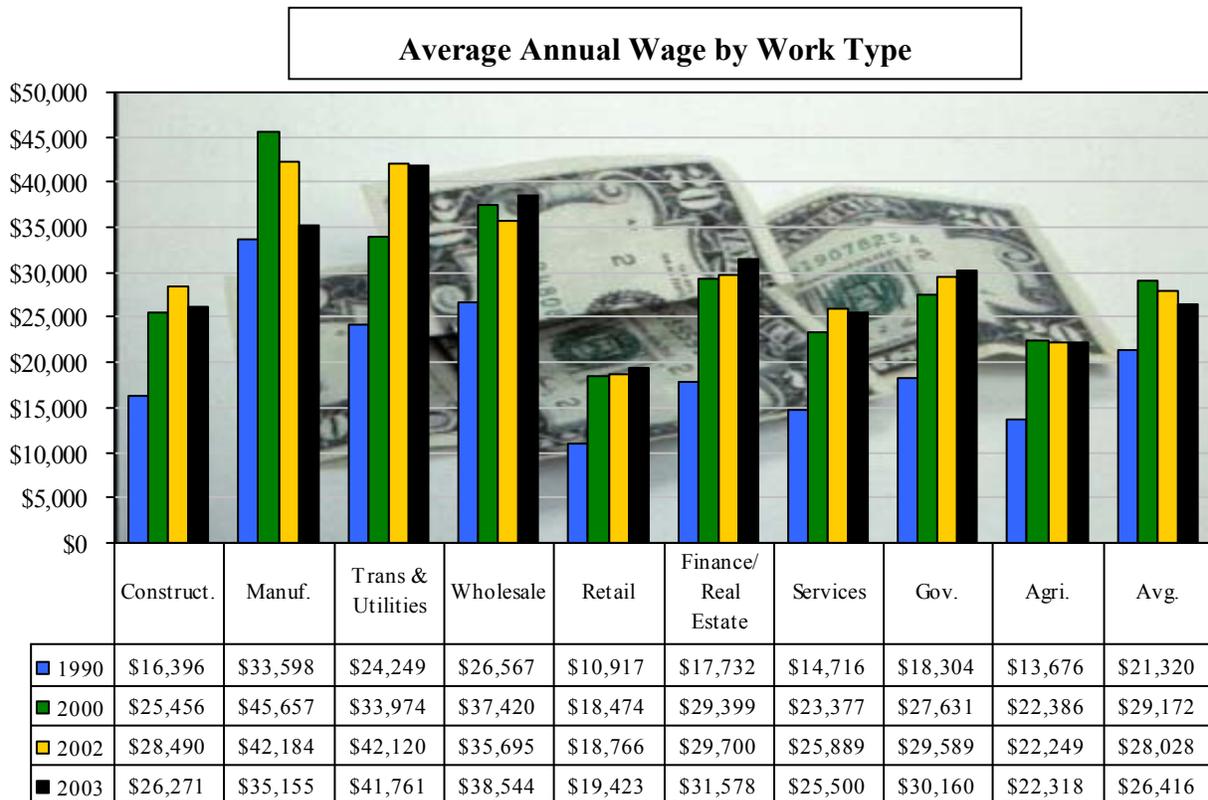
Map 1 on page 14 identifies the location of the existing industrial sites as well as the potential areas identified by the Transylvania County Planning and Economic Development Department as being suitable for future industrial development. The following table lists the industries as numbered on the map as of 2004.

<u>Industries and Industrial sites as of June 2004</u>	
1. Aegis Systems	13. Vitalie Manufacturing
2. AGFA (vacant)	14. Young Bat Company (vacant)
3. America Carolina Stamping	15. LBM Industries
4. Coats North America (vacant)	16. E I DuPont de Nemours & Co.
5. Ring Industrial Group	17. Southern Concrete Materials
6. Genie Products	18. Keir Manufacturing
7. Miller Heading & Wire Forms	19. M-B Industries
8. Penrose Quarry	20. GAIA Herbs
9. PharmAgra	21. Smith Systems
10. Pisgah Labs	22. Ecusta Business Dev. Center
11. Transylvania Vocational Services	23. PARI
12. Tucker Creek Products	

Map 1



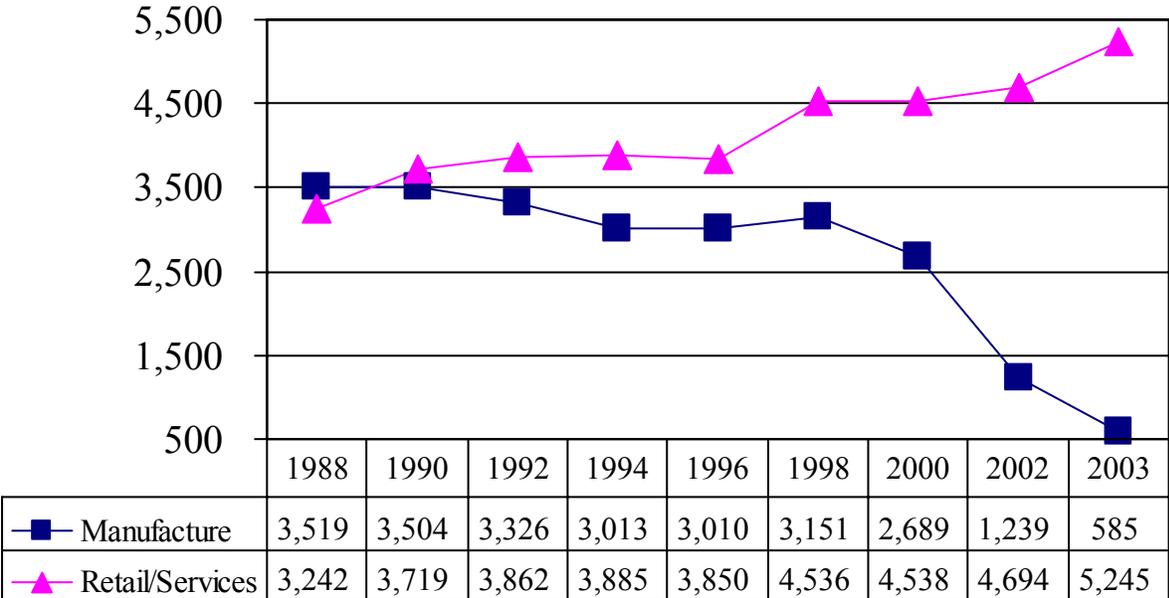
As manufacturing jobs declined county-wide, the average manufacturing wage increased through 2000 then decreased significantly by 2003. In 2000, Transylvania County had the highest manufacturing wage compared to the five surrounding counties and the State of North Carolina. However, by 2003 the County's manufacturing wage was lower than three of the five surrounding counties. In 2003, the overall average annual wage was 6.6% lower than the State's average annual wage.



Source: NC Employment Security Comm.

On a positive note, during the past two decades, the number of service and retail sector jobs grew by over 35%. This growth in service-related jobs is a driving factor in helping to moderate our unemployment level. With the closure of AGFA and Ecusta, it is unlikely that the service sector will be able to fully absorb the loss of manufacturing jobs. It is important to note that while retail and service jobs have helped to replace lost manufacturing jobs, it typically takes two service sector jobs to equal one manufacturing job from a salary perspective. Many laid-off manufacturing employees have to work two jobs, or both the husband and wife have to work in order to maintain the same income level.

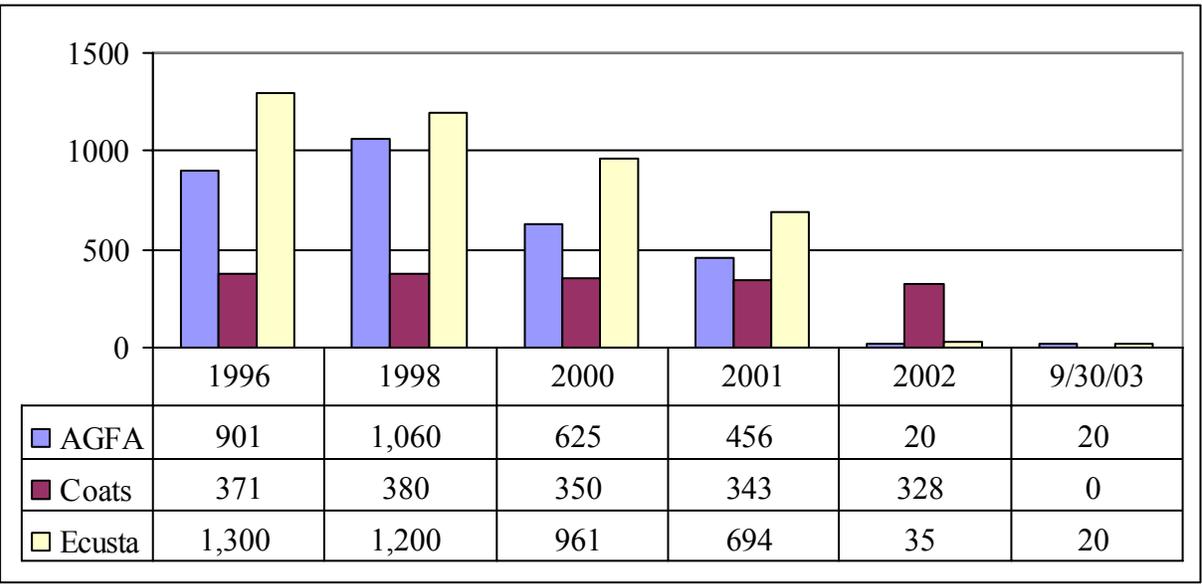
Manufactured Jobs Compared to Retail Service Jobs



Source: NC Employment Security Commission

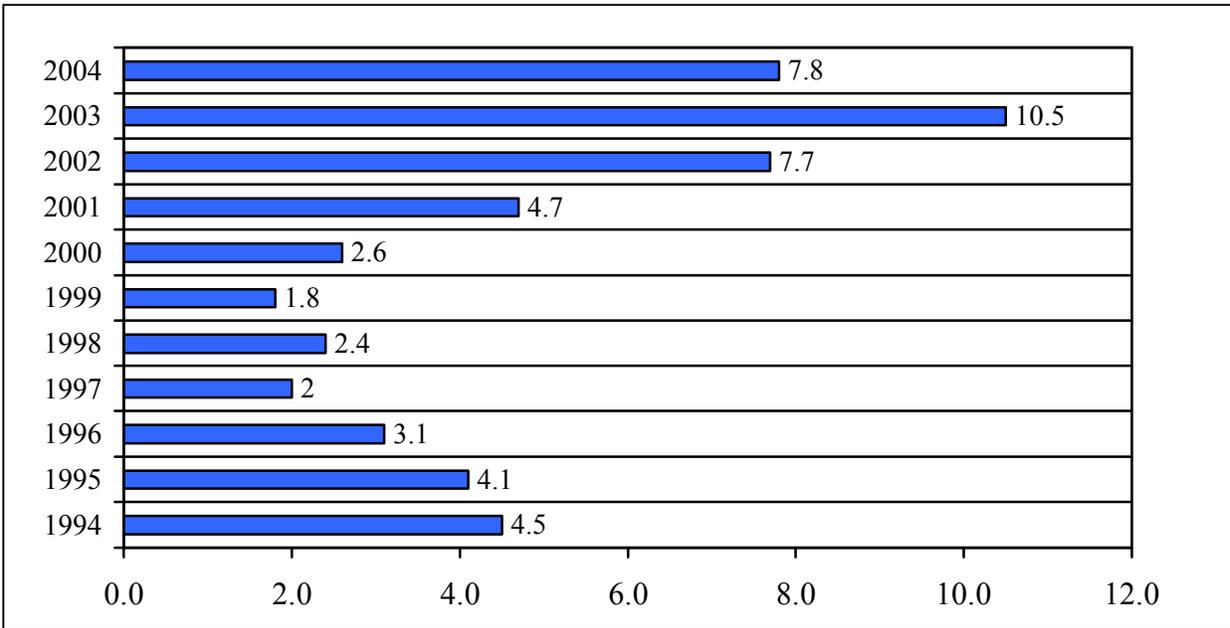
In 1998, AGFA, Ecusta and Coats America employed over 2,600 people. However, in 2002, AGFA and Ecusta shut down leaving only a skeleton crew at each facility. In September 2003, Coats America closed, putting another 328 people out of work.

AGFA, Coats America and Ecusta Employment



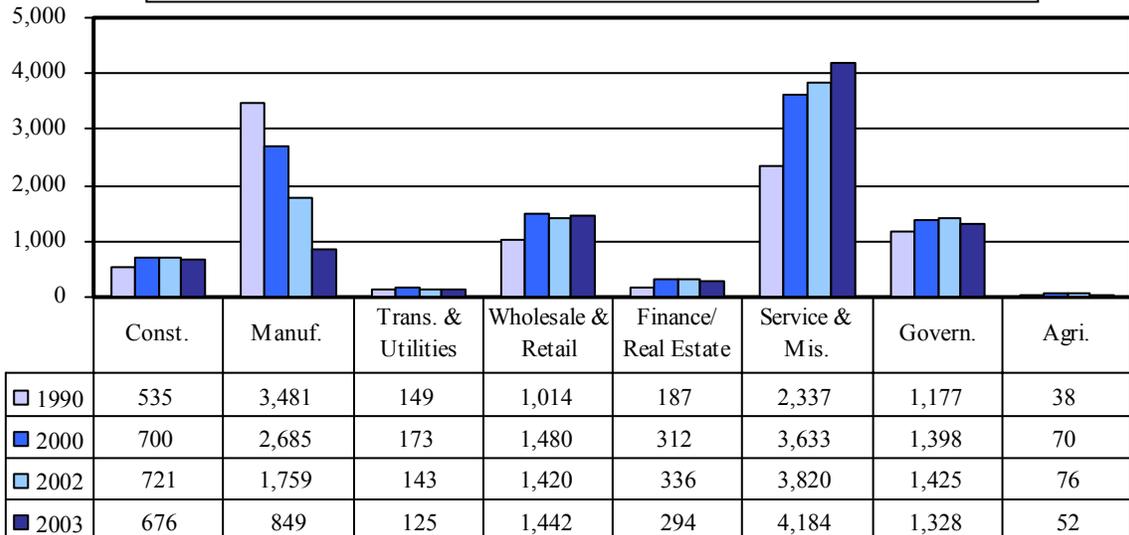
In December 2002, the unemployment rate for the county was 14%, which was the highest in the State. Since that time, the unemployment rate has dropped with the 2004 rate being 7.8%.

Transylvania County Unemployment Rates



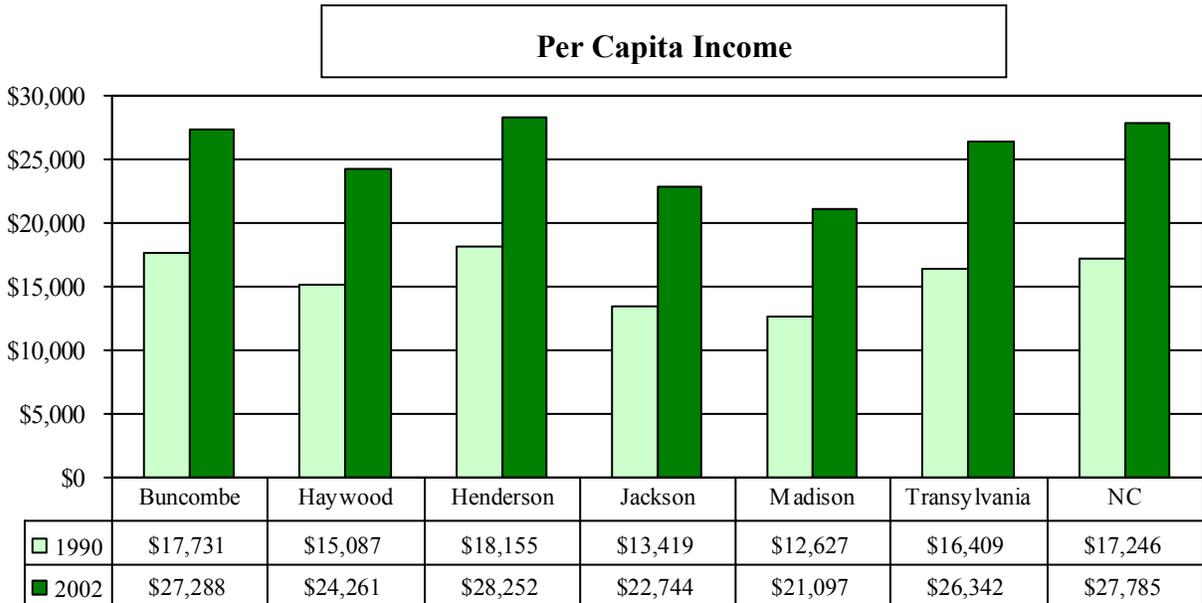
Between 1990 and 2000, total local employment increased by 4% but decreased by 6% between 2000 and 2001. This downward trend has continued and is most noticeable in the manufacturing sector. Reflecting employment trends, manufacturing jobs in Transylvania County declined 83% between 1990 and 2003.

Transylvania County Industry Employment by Work Type

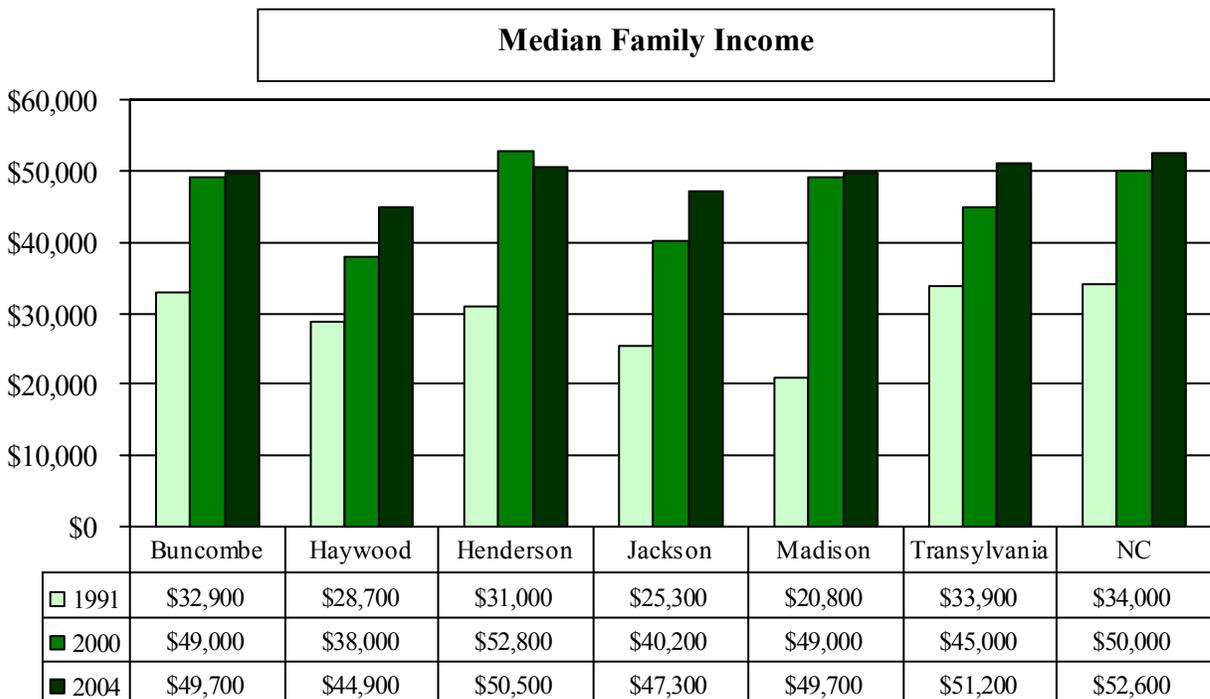


Source: NC Employment Security Commission
 Note: Employment figures are the average employment for all years

In 1990, the per capita income for Transylvania County was \$16,400 and increased to \$26,342 by 2002. Only Buncombe and Henderson counties have higher per capita incomes.



According to a U.S. Department of Housing and Urban Development report for fiscal year 1991 and 2004, Transylvania County's median family income exceeded those of surrounding counties and nearly matched the State's median family income. The median family income was higher due to the continued influx of high-income retiree's.



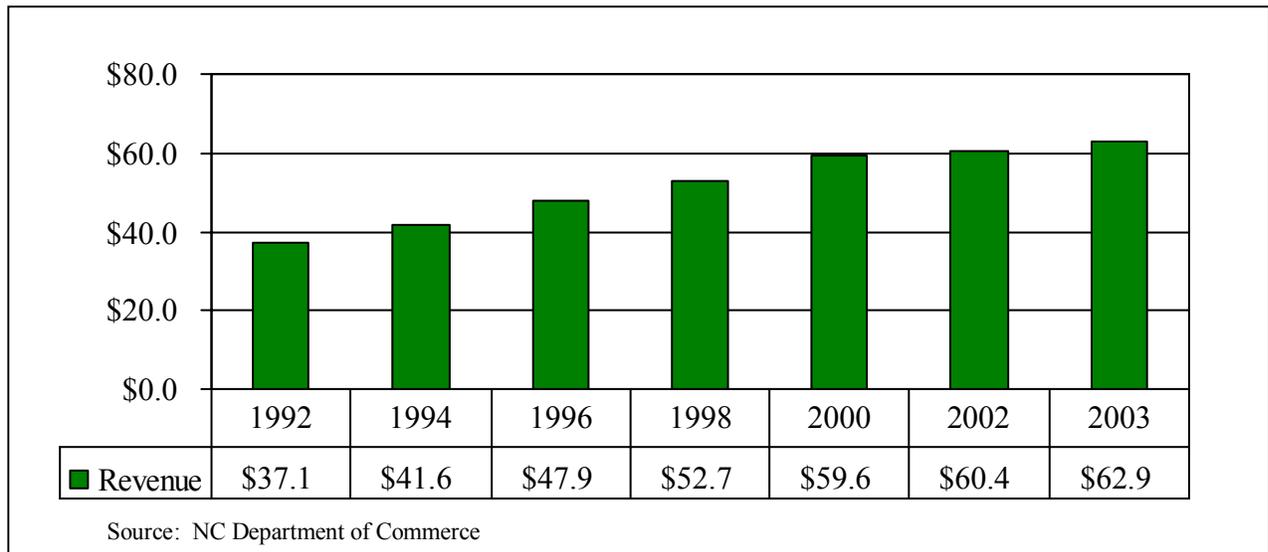
As the following chart shows, the county's major employers have changed significantly over time. The largest employers in the county are the Transylvania Community Hospital and the School System.

Major Transylvania County Employers September 2003 compared to December 1993			
<u>COMPANY OR INSTITUTION</u>	<u>PRODUCT OR SERVICE</u>	<u>Approximate # Of Employees</u>	
		2003	1993
Manufacturing			
M-B Industries	Machine Parts	208	188
Transylvania Vocational Services	Packaged Milk Products	150	148
GAIA Herbs	Herbs/Botanical Extracts	70	-----
E-Z Flow	Septic/Drain Systems	65	-----
Vitalie Manufacturing	Billiard Tables	55	45
Smith Systems	Sensors	45	22
RFS Ecusta/P.H. Glatfelter	Paper	35	1,495
Keir Manufacturing	Industrial Ceramics	20	20
AGFA/DuPont	X-ray Film	20	880
Coats America	Industrial Thread	-----	369
Non-manufacturing			
Transylvania Community Hospital	Health	530	272
Transylvania Co. Board of Ed.	Education	475	529
Transylvania County	Government	328	250
Brevard College	Education	228	135
Wal-Mart	Retail Store	187	200
Brian Center	Retirement Home	140	120
Ingles	Grocery Store	140	70
Ivy Hill	Retirement Home	110	-----
K-Mart	Retail Store	95	150
Bi-lo	Grocery Store	80	85

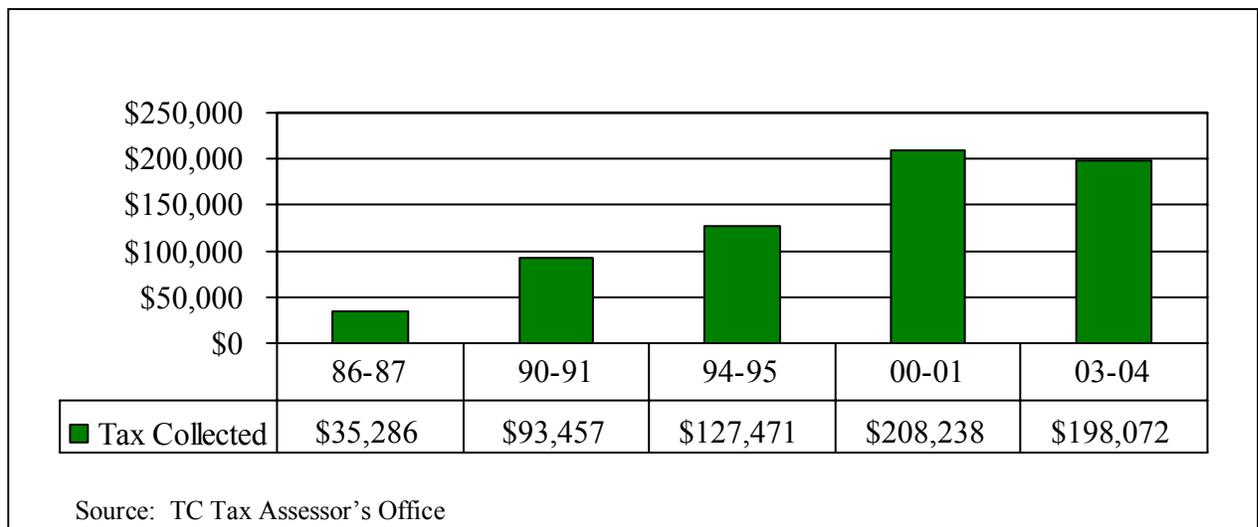
In 2003, domestic tourism in Transylvania County generated an economic impact of \$62.9 million. The county ranked 40th in travel impact among North Carolina's 100 Counties. More than 820 jobs were directly attributable to travel and tourism. Travel generated a \$14.13 million payroll in 2003.

The County's natural beauty and the charm of Brevard attract many tourists. The Tourism Development Authority (TDA) is a branch of the Chamber of Commerce that focuses on increasing tourism in the county.

**Tourism Revenue
(\$ Millions)**



**Transylvania County
Occupancy Tax**



The Occupancy Tax chart on the previous page shows the total tax collected for fiscal years 1986 to 2004. The months of May through October generate the most occupancy tax revenue for the county. Tourism plays a very big part in the county's overall economy.

The service employment sector continues to boom as a direct result of increased tourism, summer camps and a larger number of retirees permanently moving to the county from other areas of the country. Transylvania County is replete with cultural and recreational opportunities. The Transylvania County Arts Council, Brevard College, the Paul Porter Center and the Brevard Music Center all contribute to promoting the county's unique cultural heritage and diversity. Events such as summer shows at the Brevard Music Center, the Arts Festival, the Christmas Twilight Tour and numerous craft shows demonstrate the county's active and vital cultural base. Other cultural opportunities are found in local commercial art galleries, the Brevard Little Theater and programs in the local schools sponsored by the Arts Council.

Gross Retail Sales

The county's gross retail sales continue to increase. The 2003 sales were over \$263 million. This is a 75% increase in sales since 1990. Prior to 1993, there was an outflow of retail dollars to surrounding counties. A concentrated effort to reduce this outflow was initiated and two large retailers (K-Mart and Wal-Mart) located here. Since then we have been able to retain more retail dollars. The total gross retail sales for FY 2003-2004 have not been released, however, sales as of March 2004 totaled over \$213 million. Retail sales will continue to increase with the opening of Lowe's and Eckerd's.



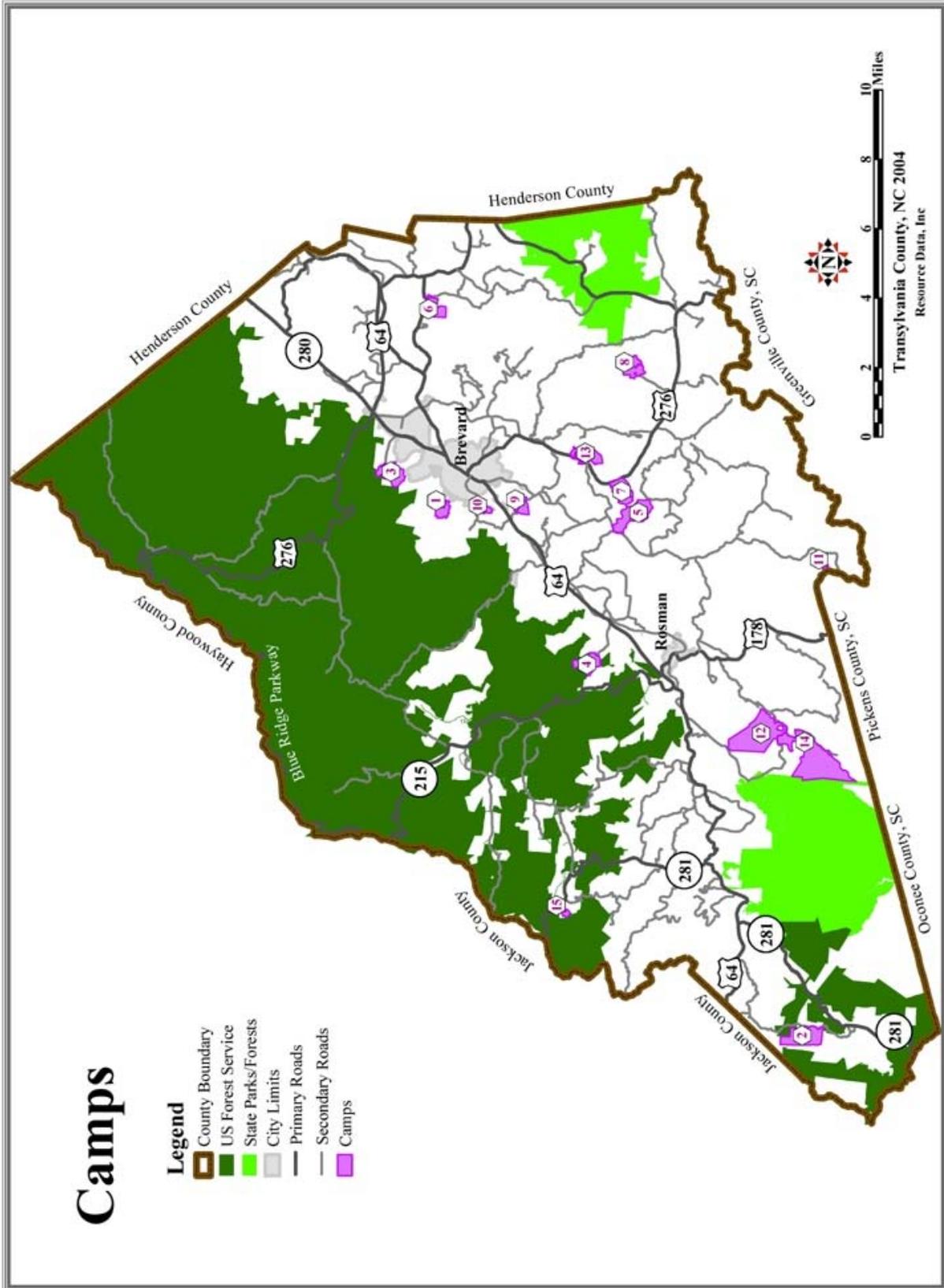
Summer Camps

Summer camps have a significant impact on the county. In a survey of 14 local camps reported to the Brevard/Transylvania Chamber of Commerce in the mid-1990's, the total annual revenue generated was over \$9,000,000 while employing over 1,150 people during camp season. As noted, these figures probably understate the economic impact that local camps have on the economy. In addition to the revenues generated directly by the camps, many of the local businesses, motels and restaurants benefit from campers' parents spending the night in the county either before or after their children start camp. This industry sector will continue to grow in the next decade. *Map 2* on the next page shows the locations of the camps.

Camps

- | | | |
|-------------------------|-----------------|--------------------|
| 1. Brevard Music Center | 6. Eagles Nest | 11. Pinnacle Point |
| 2. Camp Buc | 7. Gwynn Valley | 12. Ridge Haven |
| 3. Camp Carolina | 8. High Rocks | 13. Rockbrook |
| 4. Chosatonga/Kahdalea | 9. Illahee | 14. The Wilds |
| 5. Deep Woods | 10. Keystone | 15. Winding Gap |

Map 2



Building and Construction Activity

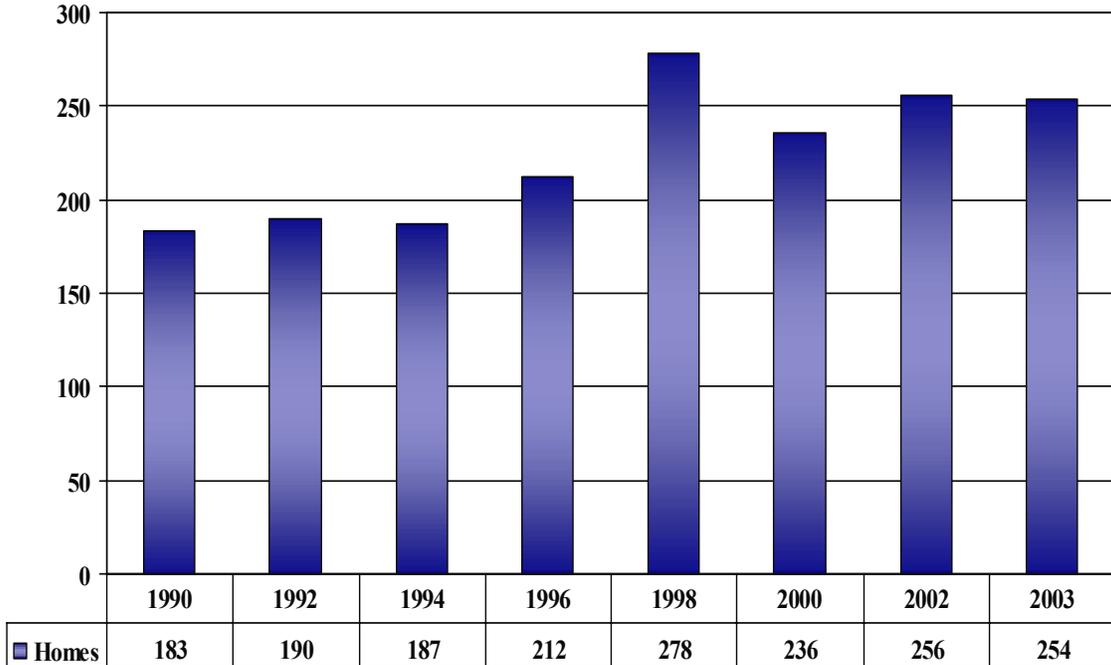
The continued construction of single-family dwelling units supported the county’s economic development and employment. In 2000, there were 235 new residential homes permitted with a total construction value exceeding \$54 million or approximately \$230,775 per home. In comparison, 254 new homes were permitted in 2003 at an average value of \$237,919 per home.

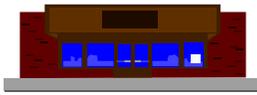
In 2003, the total value of permitted commercial construction projects exceeded \$7,623,000 versus \$5,130,000 in 2000. This represents nearly a 50% increase in value! Major commercial projects that have helped propel the construction sector include the completion of the new Transylvania County DSS building, the Hollingsworth building, Twin Dragons, Lowe’s, College Station and the renovation of several businesses in downtown Brevard. Additional construction projects that are currently permitted or under discussion include: Eckerd’s, a new library and renovation of the old Aethelwold Hotel.

The construction industry is dependent on many factors beyond the control of Transylvania County including interest rates, federal and state tax policies, demographic changes and energy costs. Nevertheless, the Planning Board thinks that Brevard and Transylvania County will remain very attractive to new commercial and residential development.

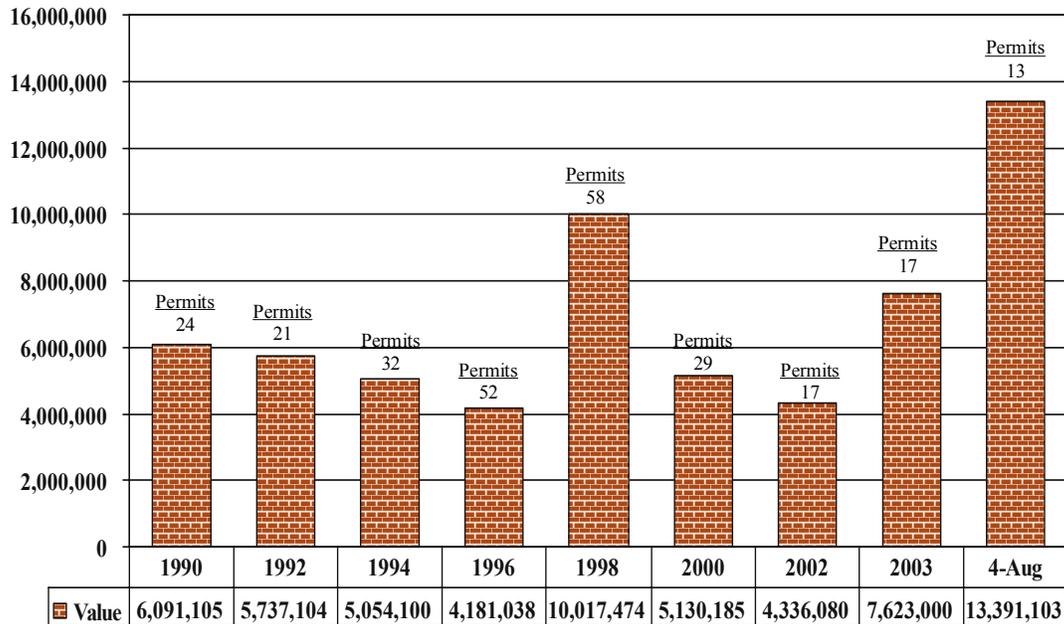


**Brevard and Transylvania County
Single Family Residential Permits**





Brevard and Transylvania County Commercial/Industrial Building Permits



Broadband

In addition to roads, water, sewer, utilities and other conventional public-sector infrastructure needed by businesses, thriving firms need affordable, high-speed Internet access. It is becoming increasingly common for businesses to demand broadband services—networks capable of carrying multiple channels of switched, interactive, multi-media communications, including voice, data and video. Without high-speed, broadband telecommunications, small communities cannot compete in creating, retaining and attracting sources of economic development.

➤ Business

Businesses increasingly rely on the Internet for global marketing and sales. Routine operations, such as reviewing catalogs, ordering supplies and reporting inventories, once performed with paper and pencil or by fax, are now conducted electronically. Even the local tire seller, hardware store, car dealer, and small manufacturing shop are engaged in business-to-business (B2B) e-commerce over the Internet. Electronic commerce—e-commerce for short—has arrived. Small-town businesses must either ride the wave or face the reality of struggling to remain competitive.

➤ Government

Local government officials can play a vital role in encouraging local businesses to understand and assume the power of e-commerce. Doing so will undoubtedly strengthen the local economy and generate new sources of employment. About 55% of all new jobs

arise from the expansions of existing businesses, and 44% are created by start-up companies. The numbers alone demonstrate the importance of empowering local firms with Internet fluency.

➤ **Consumer**

Americans turn to the Internet for an ever-expanding variety of purposes. As reported in *A Nation Online*, the most prevalent activities include e-mailing (45% of the U.S. population), searching for product or service information (33%), making online purchases (39%), and seeking health information (35%).

➤ **Education and Research Consortium**

The Education and Research Consortium of the Carolinas (ERC) stepped forward on January 22, 2002 to announce its plans to fund and implement Phase 1 of a high-capacity network in Western NC and upstate South Carolina. This consists of two Tier 2 Network Access Points (NAP) and a high-capacity fiber optic corridor connecting the NAPs. The NAPs are to be located in Asheville and upstate South Carolina—with the high-capacity corridor traversing the most urban area of the region.

The Phase 1 network was established under an affiliate organization of the ERC. The network will provide connectivity and Internet access to public libraries, universities, hospitals, and school districts to fulfill a grant agreement between the ERC and Library of Congress (LOC). The network will ensure effective, low-cost access to services and resources available through the Internet including the digital collections of the LOC. An objective of the network is to reduce or contain costs for affiliated institutions. The ERC intends to leverage the network by making it available to the private sector as well as the public sector.

The ERC network could have a significant effect on Transylvania County by creating an opportunity for redundancy and lower backhaul costs for Citizens Telephone. Additionally, connection to the ERC network will allow Brevard College, Blue Ridge Community College, the County schools, hospital, and others to access the private networks and future databases offered on the ERC network.

GOAL I: POPULATION AND ECONOMIC GROWTH

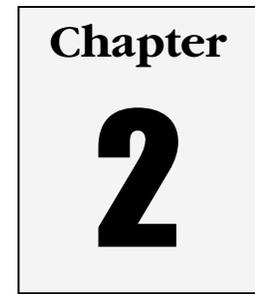
Preserve Transylvania County's distinctive rural character, mountain heritage, natural environment and ambiance, while promoting proactive planning and economic growth.

Objectives

1. Encourage all local governments and private organizations to work together to develop solutions to common problems. (i.e., local governments, school system, Chamber of Commerce, TCarts).
2. Work with the NC State Office of Planning, the NC Department of Transportation and other resources to anticipate future population growth trends over the next ten years.

3. Planning Board with help from the Tax Assessor's Office to observe development trends along major corridors and parcel splits throughout the county in order to better prepare the community for future needs.
4. Develop both short-term and long-term strategies to help increase the number of younger individuals (age 54 and younger) wanting to remain in or move to Transylvania County.
5. Promote a strong, diversified economic base to provide future employment opportunities for our citizens and expand the tax base. Specific tasks include:
 - A. County Commissioners and Economic Development Advisory Board (EDAB) to implement or facilitate the implementation of the Strategic Economic Development Plan.
 - B. EDAB, Chamber of Commerce, Heart of Brevard and the Tourism Development Authority to assist our existing industries, businesses and camps so they will be successful.
 - C. Tourism Development Authority (TDA), Chamber of Commerce and EDAB to promote tourism and support organizations that actively promote tourism (i.e., Heart of Brevard, Brevard Music Center, TCarts).
6. EDAB to work with Blue Ridge Community College to promote job and employment training programs designed to meet the needs of a transitioning work force and to provide opportunities for higher employment rates and wages in the county.
7. EDAB and Planning Board to promote industrial, commercial and residential growth by planning and/or recommending the extension of water, sewer and roads to desired areas.
8. The county should be notified by the City of Brevard and Town of Rosman when they are considering areas to include in future annexations or extra-territorial jurisdiction extensions.
9. Work with Transylvania County Joint Historic Preservation Commission and encourage greater economic redevelopment in downtown Brevard, the Town of Rosman and in the county by identifying financial benefits that promote the revitalization of existing buildings – particularly historic properties and the reuse of property.
10. Support the Transylvania County Arts Council and other “arts” related organizations as a way to diversify and enhance the county's economic well being.
11. EDAB and Transylvania Partnership to actively support private efforts to provide the county with fiber optic, ADSL and state-of-the-art technology and promote Transylvania as a “high-tech” county.

ENVIRONMENTAL CHARACTERISTICS



The environmental characteristics associated with any community generally explain the historic development trends and will continue to dictate future growth patterns. Transylvania County is no exception. Mountain terrain and extensive floodplain areas along the French Broad River and its tributaries have and will continue to influence development, roads and our economic potential. As in many situations, these attributes are both a blessing and a hindrance.

Major environmental factors include:

- Transylvania County’s unique mountainous and natural environment strongly influence future development location and density.
- Steep slopes and soil physical features often impede development.
- Floodplain accounts for 6.27% of the county.
- Government-controlled land represents over 46% of the county’s land area. In 1990 government-controlled lands represented less than 34%. The increase occurred as a result of the State’s acquisition of DuPont State Forest and Gorges State Park.
- There are at least 178 miles of High Quality Water Streams in the county that will impact future development potential.
- The county is responsible for enforcing the Water Supply Watershed Ordinance as mandated by the State.
- Nearly 300 identified animal and plant species are protected, endangered or threatened.

Geology

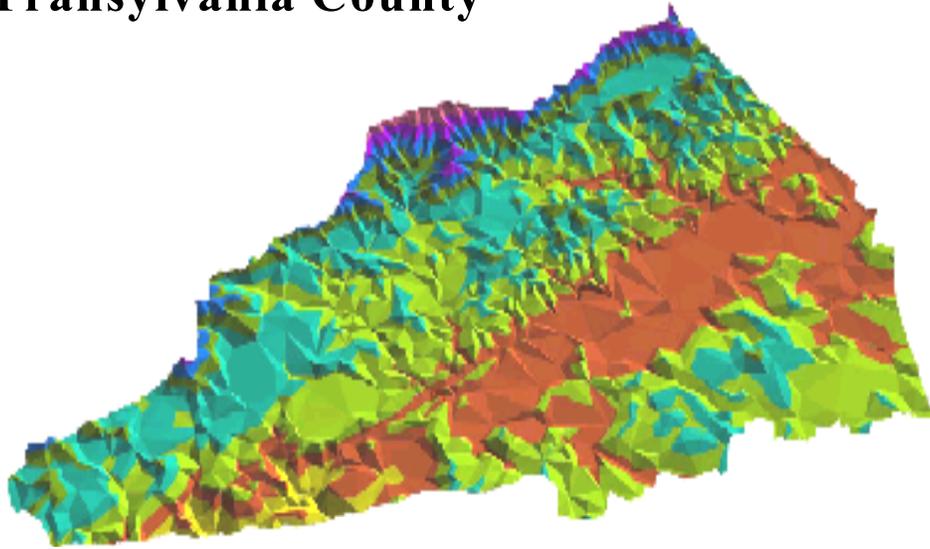
Generally, the geologic formations of the county do not impose severe constraints for future development; however, rock outcroppings and areas where bedrock lies close to the surface are not suitable for most development. The rocks in the county are chiefly gneiss and schist. The major rock formation types are described in Appendix A.

Soils

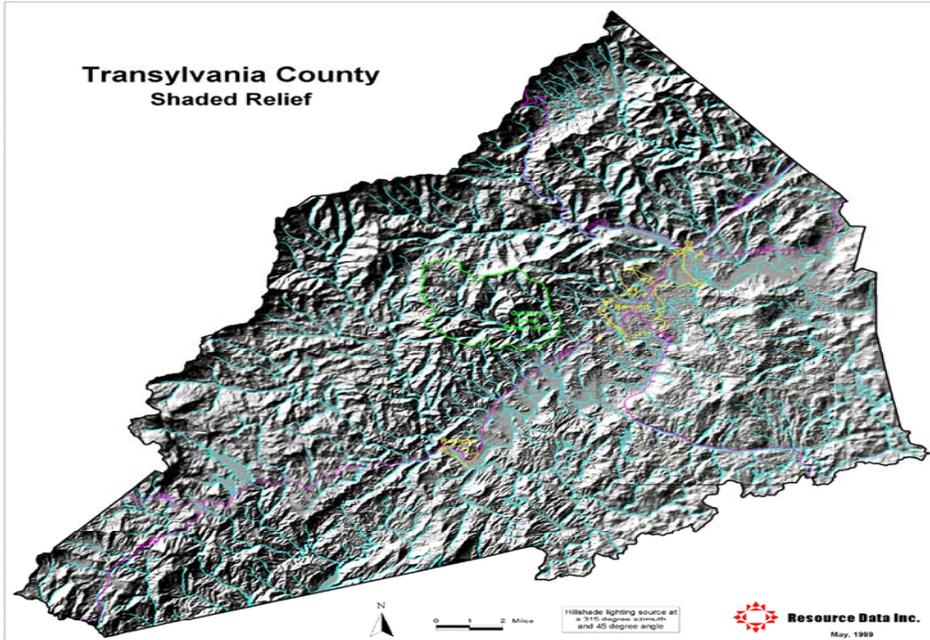
Soil conditions dramatically influence land development and use. Insufficient knowledge of soil characteristics and limitations often create severe land-use problems (i.e., soil erosion, building foundation settling, poor road base, septic system failure), resulting in additional costs that must be absorbed by the property owner, and often, the community. It is essential that general soil characteristics enter into the planning and development processes. The six major soil associations in Transylvania County impose different types of development limitations and are discussed and shown in Appendix B. Specific site development proposals should be evaluated using more detailed soil information found in the *Soil Survey of Transylvania County* or by contacting the Transylvania County Natural Resources Conservation Service (NRCS).

The following two graphs help to highlight the county's unique physical characteristics. The pink areas represent the highest reaches of the county and the large brown area represents the French Broad and Little River valleys. The second graph clearly shows the mountain ridges and valleys. Major rivers and creeks are also shown in blue. In both pictures, the Brevard Fault is clearly visible and bisects the county.

Transylvania County



Transylvania County
Shaded Relief



Slopes

Map 3 shows the general slope characteristics of the land in Transylvania County. Slope, expressed as a percentage, measures the change in elevation over a horizontal distance, generally 100 feet. Slopes exceeding 10% predominate. Because steep slopes present difficulties for most road and building construction, they severely limit development type and density. Conversely, care must be taken when evaluating land in the 0 to 10% slope category. Much of this land lies within floodplain and has limited development potential or, in the case of land in the floodway, is not developable.

The Transylvania County Subdivision Ordinance, adopted in 1991, prohibits developers from building gravel roads that exceed 18% and paved roads exceeding 20%. This standard was adopted to help ensure that emergency vehicles can gain access to residential developments.

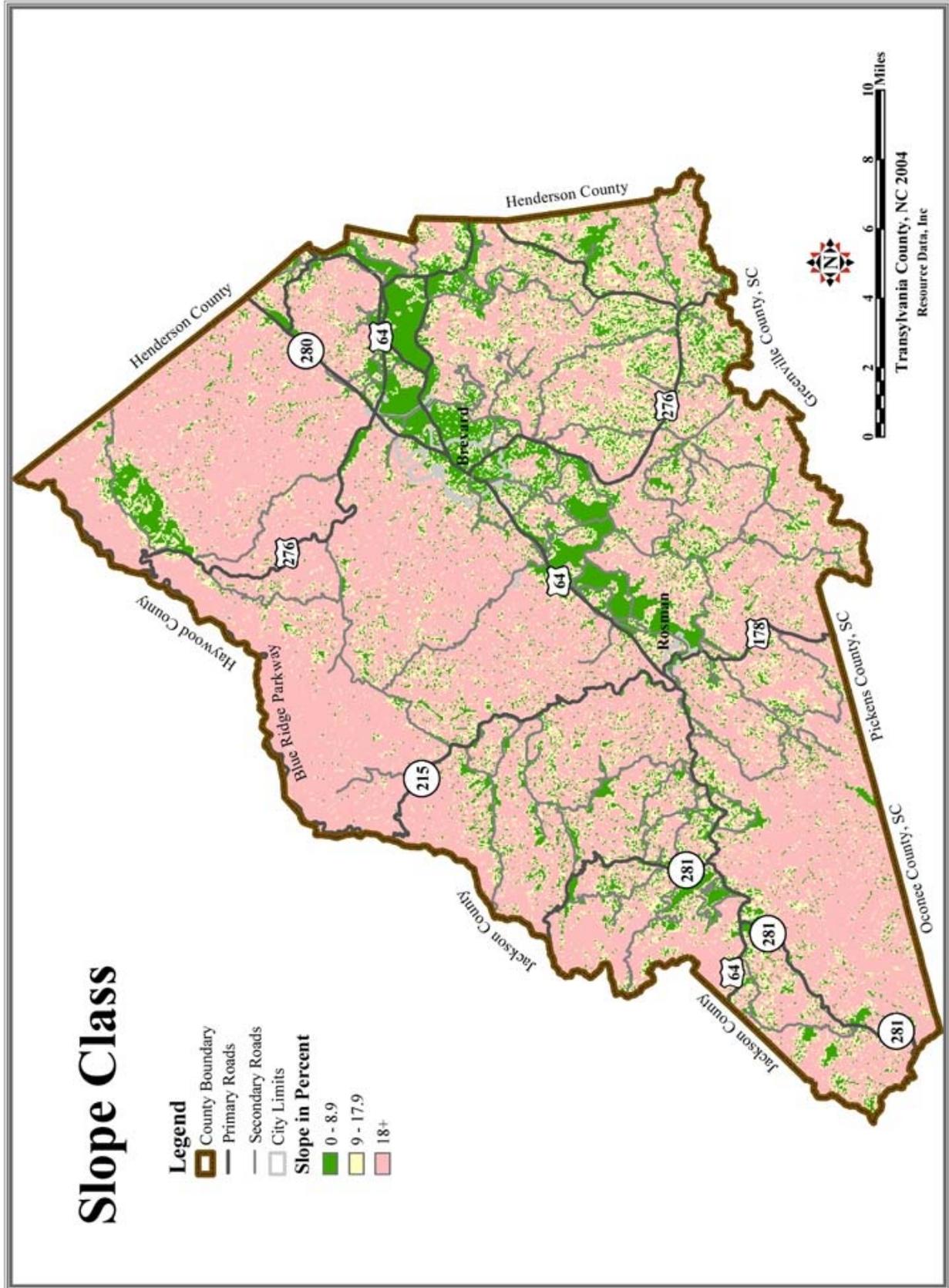
Map 4 shows elevations in the county. Elevation changes create the slope characteristics of the county.

Land Uses

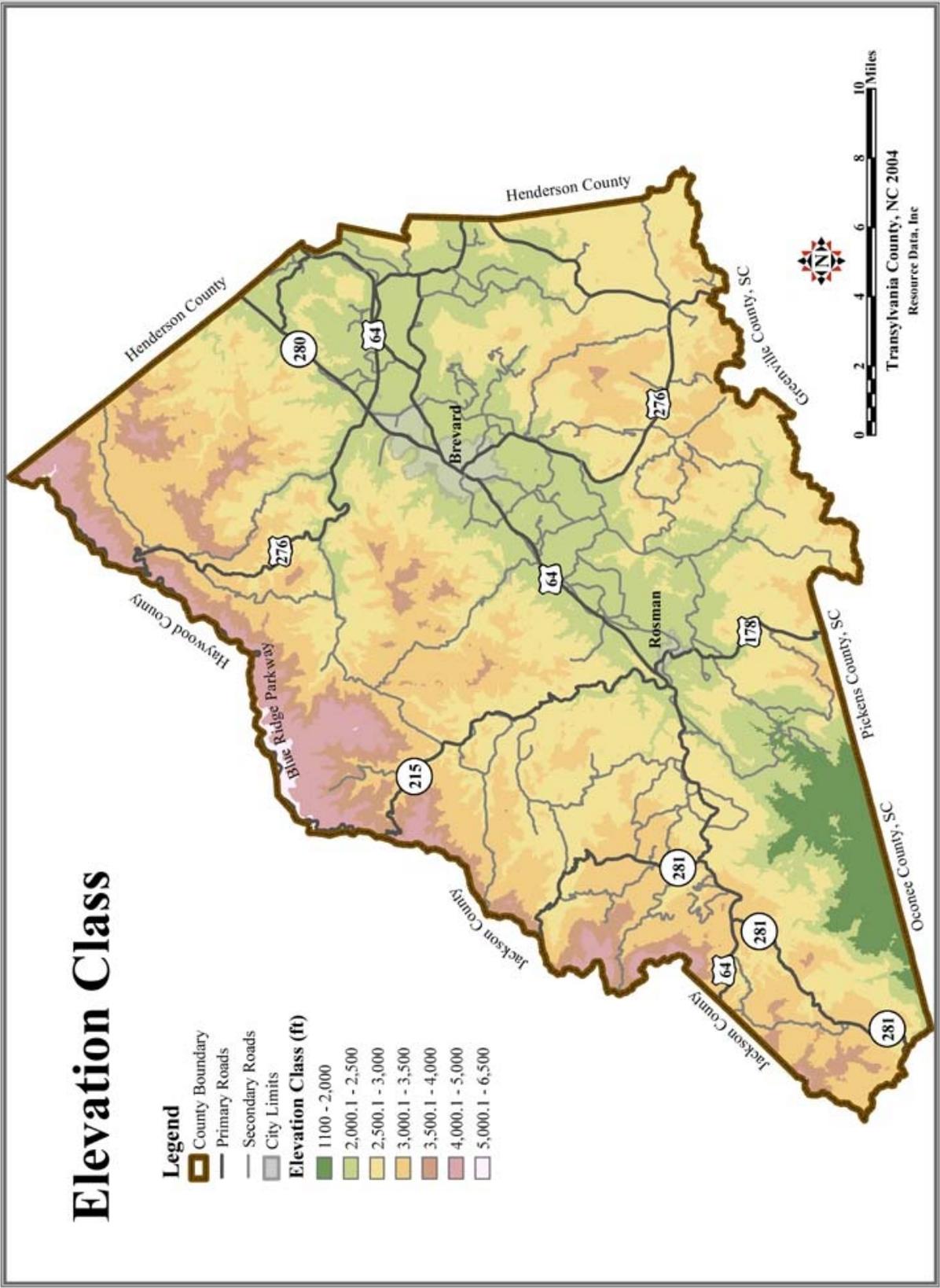
Over 42% of the county's land is in State or National Forest. See the following table.

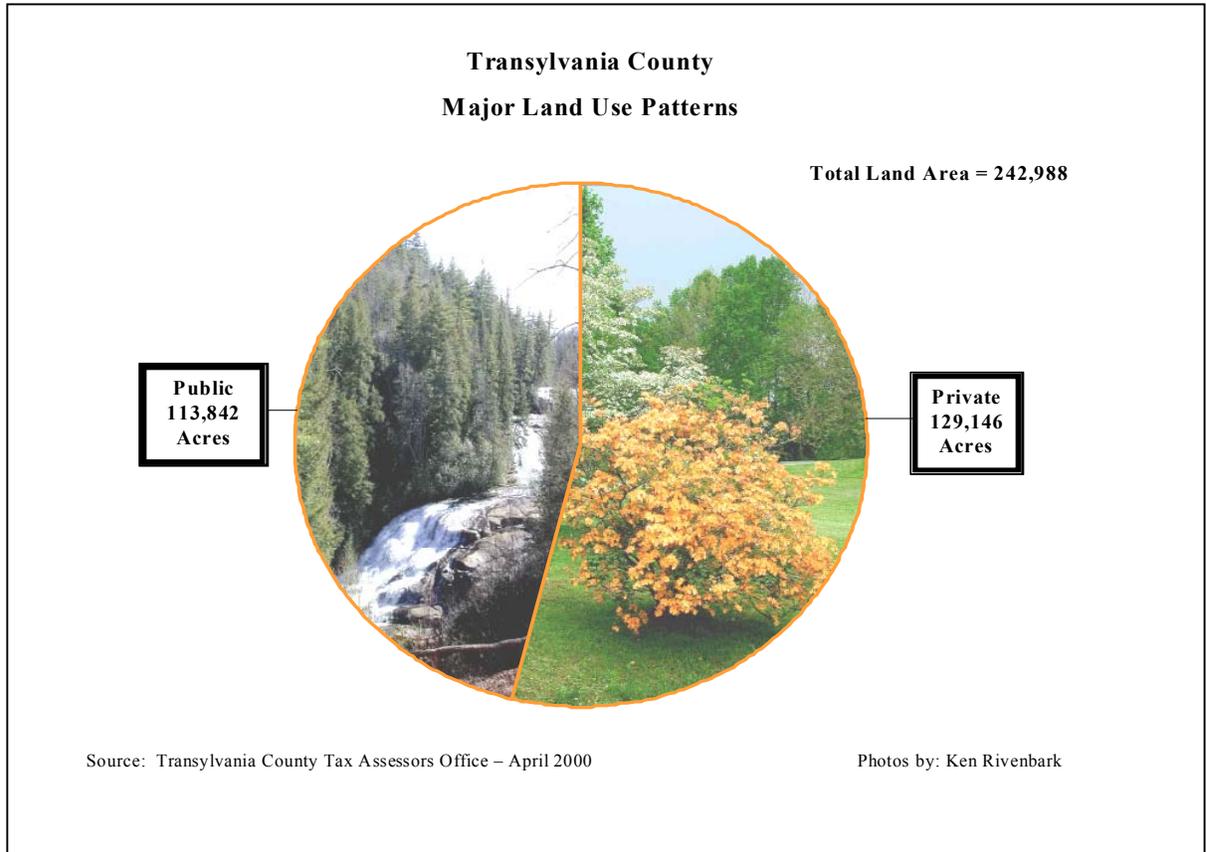
Transylvania County Public and Private Land (2004)		
<u>Property</u>	<u>Acreage</u>	<u>Percent</u>
Pisgah National Forest	81,952	33.7%
Nantahala National Forest	6,360	2.6%
Gorges State Park	8,728	3.6%
DuPont State Forest	6,140	2.5%
<u>Exempt Property</u>	<u>Acreage</u>	<u>Percent</u>
Federal	155	0%
State	15	0%
Other	7,080	2.9%
Crescent Resources	3,412	1.4%
Total Untaxable Land	113,842	46.7%
Total Private Land	129,146	53.3%
Total Acreage	242,988	100%

Map 3



Map 4

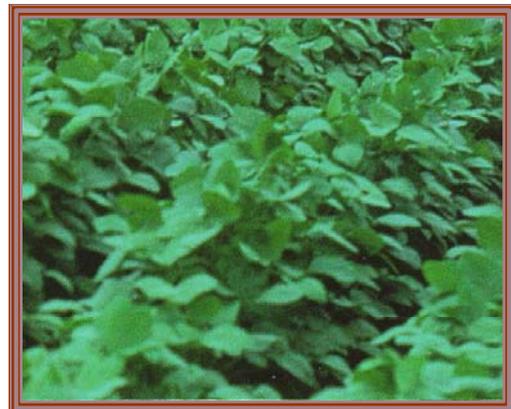




Farmland

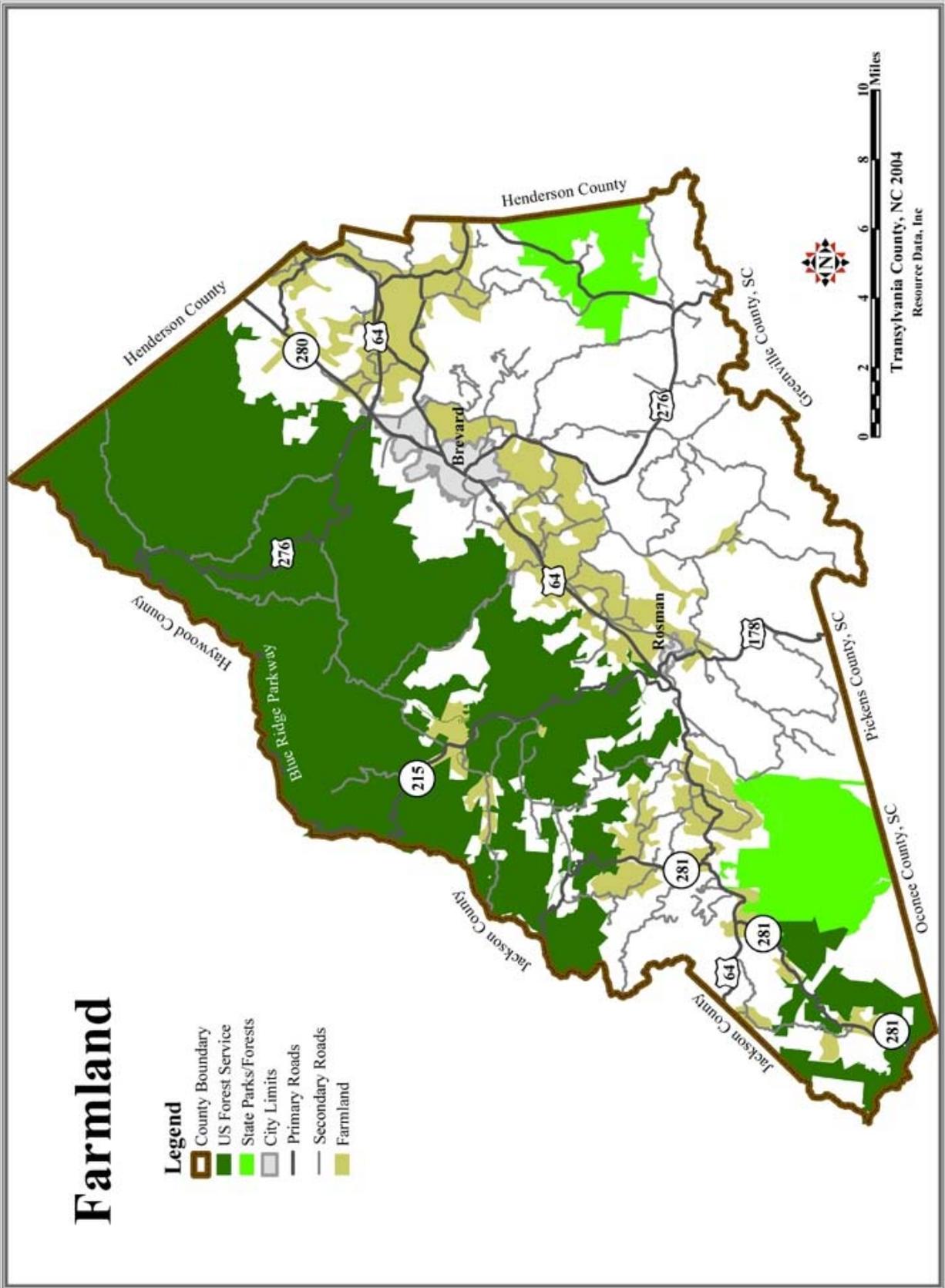
In 1994, the Natural Resource Conservation Service identified over 13,500 acres of prime farmland. By 2000, farmland had dwindled to only 9,000 acres primarily due to development activity (*Map 5*). Of those 9,000 acres, approximately 8,000 acres are in field crops, predominantly hay and corn. Cash crops include:

- 25 acres in tobacco valued at \$410,330
- 350 acres in vegetables (mostly tomatoes) valued at \$1,057,890
- 800 acres of sod valued at \$4,000,000
- 200 acres of nursery/greenhouse structures and stock valued at \$21,480,000.

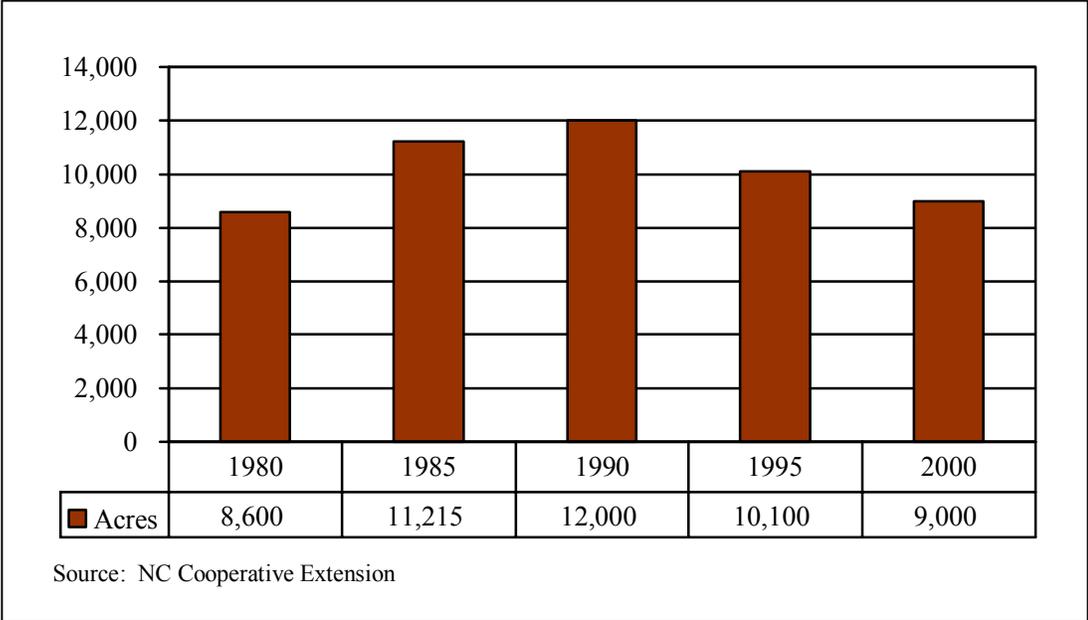


In March 1996, the Transylvania County Commissioners adopted the Transylvania County Voluntary Farmland District Ordinance. This ordinance is to 1) facilitate communications with non-farm Transylvanians; 2) protect the rural nature and character of Transylvania County; 3) encourage and protect the economic viability of the agricultural community; and 4) increase the identity and pride in the agricultural community and its way of life.

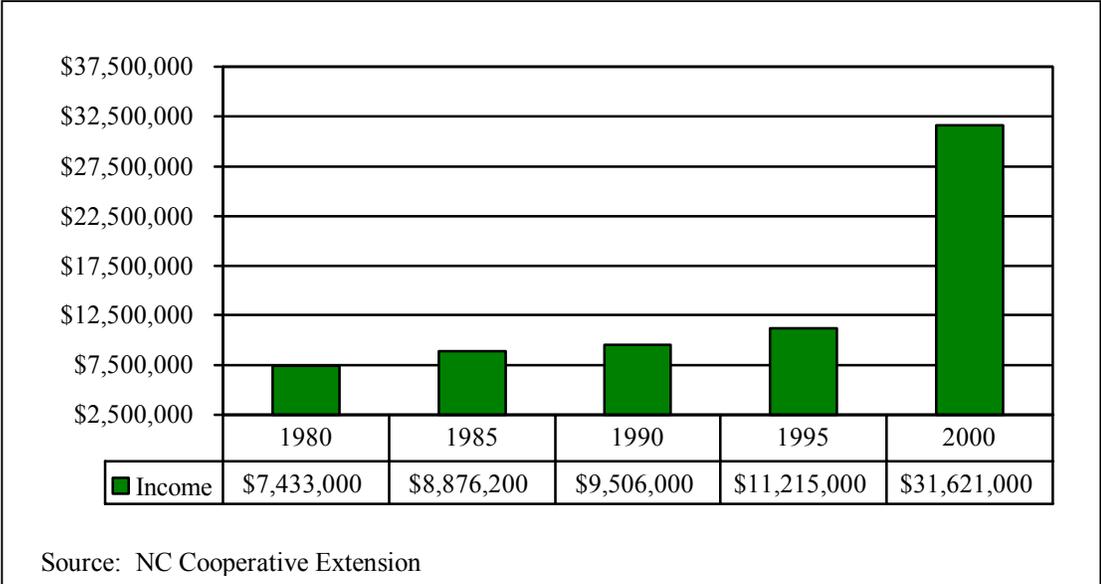
Map 5



Acres of Harvested Cropland



Agriculture Income



The significant increase in agriculture income in 2000 was due to GAIA Herbs locating to the county and sod farms.

Water Resources - Surface

The availability and location of water and wastewater dictates how communities grow. Transylvania County is the "Land of Waterfalls." Water has and will continue to significantly influence Transylvania County's growth and development. Most areas in the county receive

between 60 and 80 inches of rainfall annually (over 100 inches in the higher elevations). As a result, periodic flooding of the French Broad River and its tributaries has led to the adoption of the Transylvania County Flood Damage Control Ordinance. This ordinance prohibits all development within the floodway and places restrictions on the type and location of development in the 100-year floodplain (*Map 6*). In March 1998, the Federal Emergency management Agency (FEMA) updated the January 1980 Transylvania County and City of Brevard floodway and floodplain maps. The updated maps more accurately reflect the current flood zones.

According to the NC Department of Environment and Natural Resources, the water quality of our streams is good to excellent. To help protect and enhance stream quality throughout the State and Transylvania County, the Department of Environment and Natural Resources (DENR) and the Environmental Management Commission have recently adopted several new surface water regulations. In 1990, the state adopted the High Quality Water (HQW) regulation and designated over 178 miles of HQW streams in Transylvania County (57 miles on private lands and 121 on public lands). This amounts to 18% of the state's total HQW stream mileage. The HQW classification effectively prohibits commercial development and limits future residential development to one house per acre within a one mile radius of the designated stream or from the nearest ridge line and is enforced by DENR.

Map 7 shows the major watersheds within the county. The State requires that counties and local municipalities having jurisdiction over water supply watersheds (for drinking water) have ordinances to protect these sources. In December 1993, the County adopted the Transylvania County Watershed Protection Ordinance. Transylvania County has five State identified water supply watersheds; however, two watersheds are located entirely or partially within either National Forest or Park Service land. The County is not responsible for developing water supply watershed protection ordinances for streams located outside its planning jurisdiction or entirely within the National Forest.

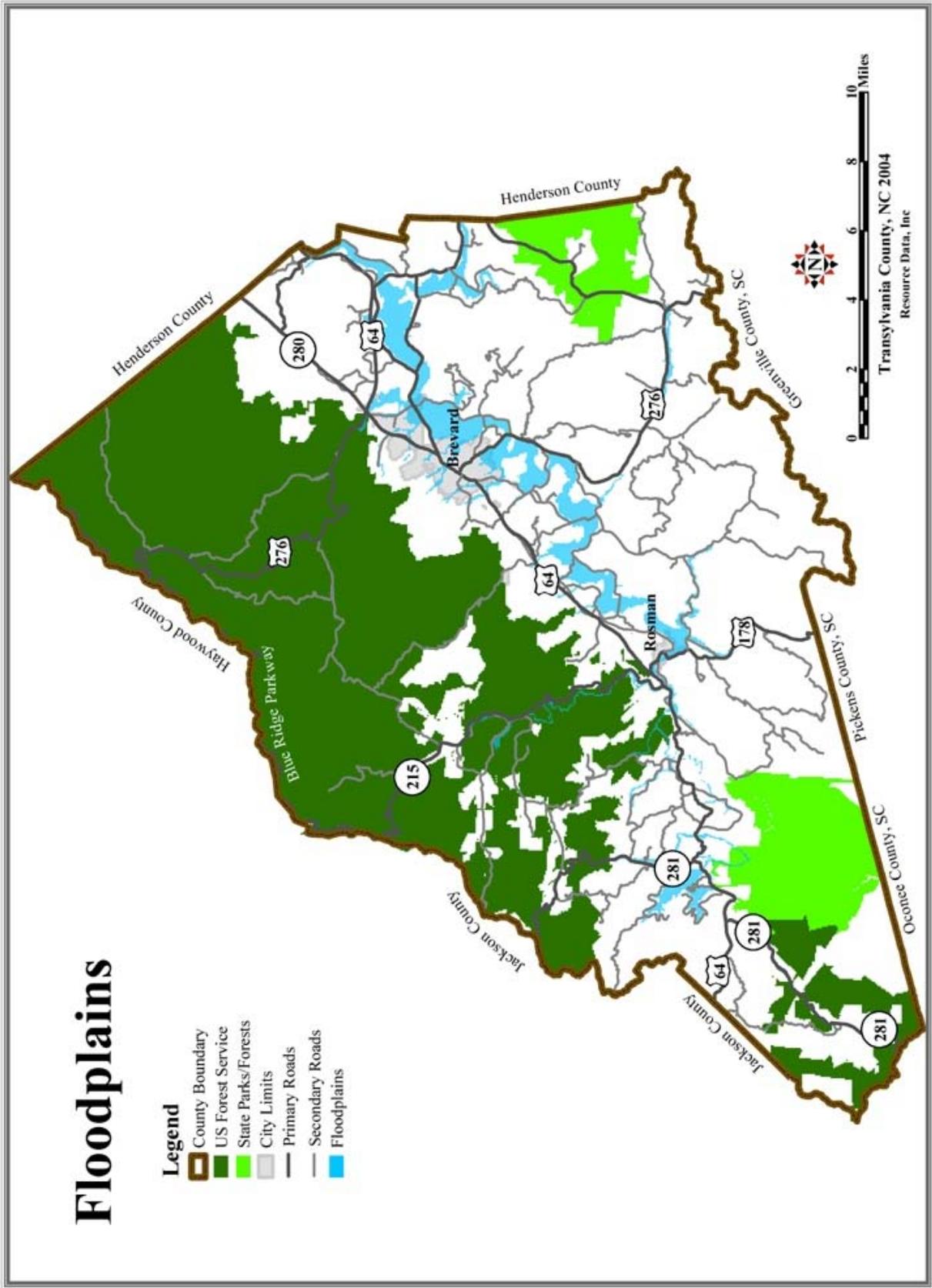
The major water supply watershed that Transylvania County must protect is Cathey's Creek. This watershed, classified as a WS-II, is the primary water supply source for the City of Brevard and serves approximately 8,000 people. Seventy-eight percent of the watershed is owned and controlled by the National Forest Service. The remaining land area is owned by seven private property owners and the City of Brevard. Future development in this watershed is limited to residential development and farming.

STATE IDENTIFIED WATERSHEDS & CLASSIFICATION

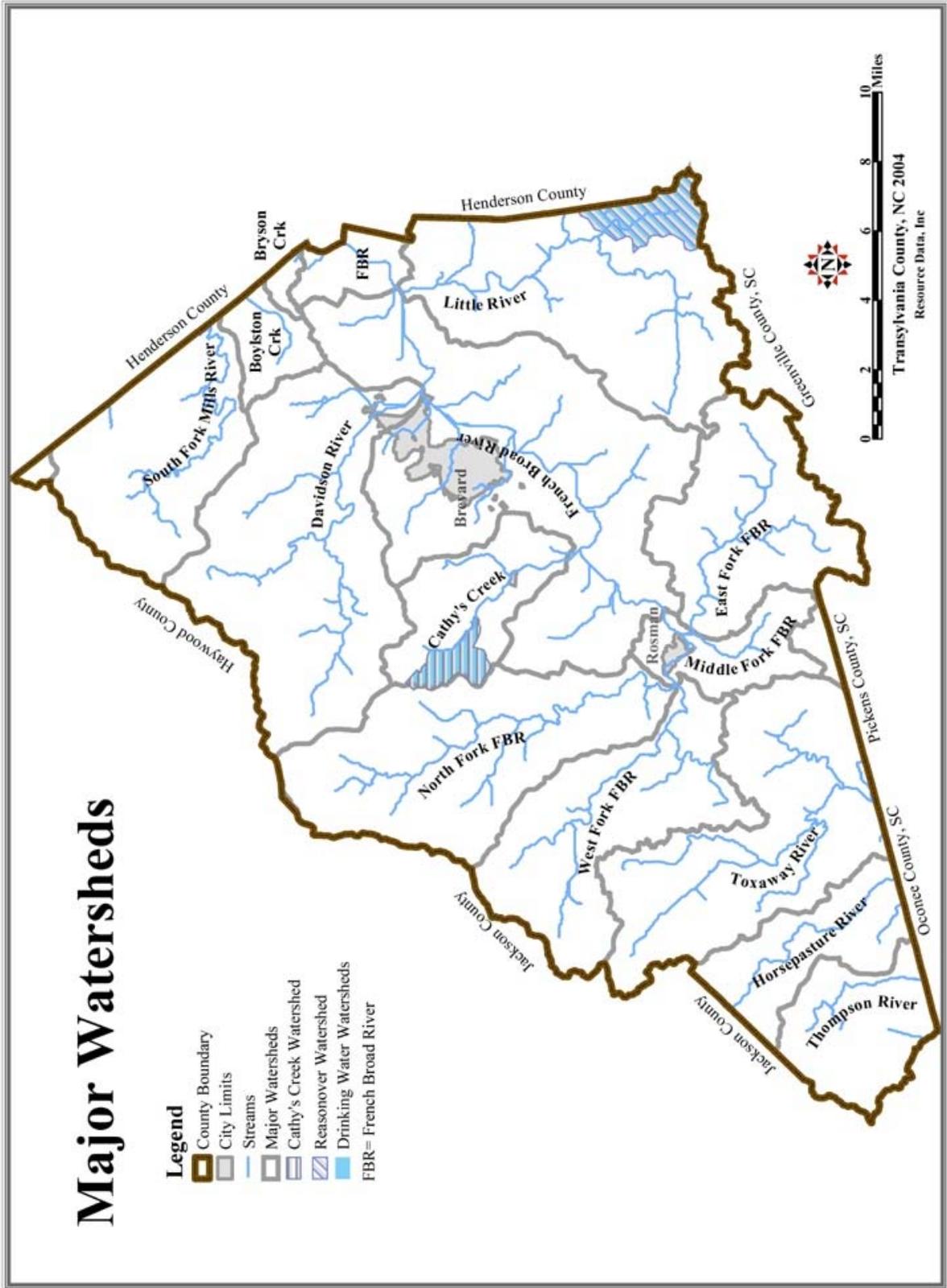
<u>WATERSHED NAME</u>	<u>CLASSIFICATION</u>	<u>ACRES</u>	<u>LOCATION</u>
Bradley Creek (Part of Mills River)	WS-I	5,298	National Forest
Cathey's Creek	WS-II	7,295	National Forest/Private
French Broad River	WS-V* ¹	N/A	National Forest/Private
Mills River	WS-II	14,463	National Forest
Reasonover Creek/Lake Julia	WS-V*	2,623	Private

*No restrictive standards apply to this classification
¹The French Broad River is not currently classified, but could receive a WS-V classification if used as a potable water source.

Map 6



Map 7



Water Resources - Underground

The majority of residents in Transylvania County obtain drinking water from either public or private underground wells. Although underground water sources are generally considered to be safe from pollution or contamination, future well placements should give special consideration to existing wells and septic systems in the adjacent area. During prolonged dry periods such as the late 1990’s and early 2000’s, many wells provided insufficient water flow. As the county continues to develop, the use of wells as a water source for residential and industrial/commercial development may become a limiting factor for development in some areas and necessitate the establishment of either county water districts or a county-wide water and/or wastewater system(s). As growth continues, existing independent water supply systems could collectively serve as a starting point for separate water districts or a county-wide water system.

Significant Natural Areas

Transylvania County has many significant natural areas identified by the State because of their unique environmental characteristics.

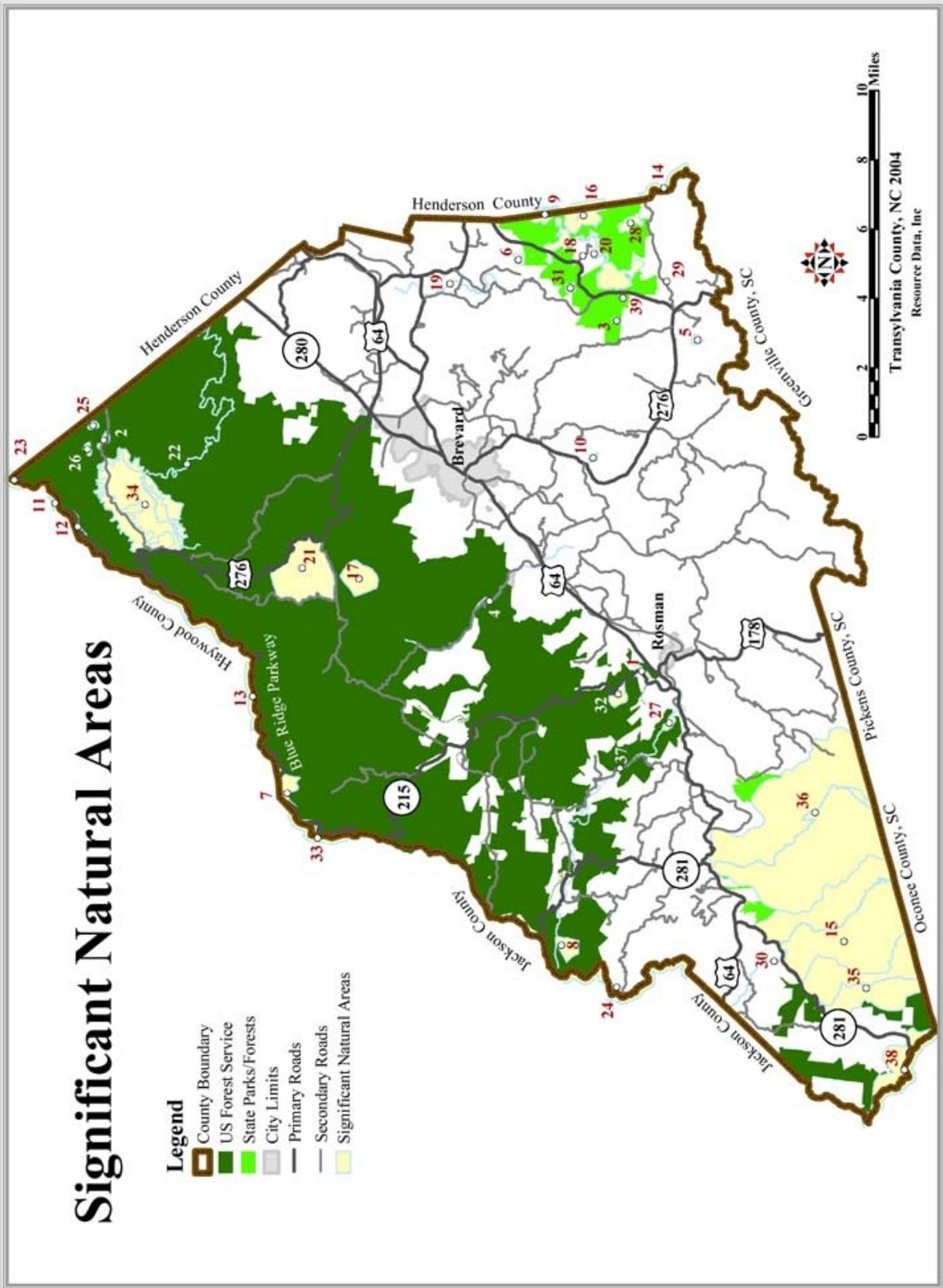
As with many other environmental and natural occurrences in Transylvania County, the most significant natural areas are located within the National Forest boundaries or in the relatively undeveloped land owned by

Significant Natural Areas	
1. Big Ridge	21. Looking Glass Rock
2. Bradley Creek Swamp Forest -Bog Complex	22. Mills River/South Fork Mills River Aquatic Habitat
3. Buckhorn Creek Swamp	23. Mount Pisgah
4. Cathey’s Creek Aquatic Habitat	24. Panthertown Valley
5. Cedar Mountain Bog	25. Pilot Cove Swamp Forest-Bog Complex
6. Cox Branch Cove	26. Pilot Rock
7. Devil’s Courthouse	27. Quebec Mountain Slope
8. Dismal Falls	28. Reasonover Creek Cove
9. Dry Branch Bog	29. Reasonover Swamp Forest-Bog Complex
10. Dunn’s Creek Slopes	30. Savannah River Headwaters Aquatic Habitat
11. Flat Laurel Gap Bog	31. Sheep Mountain Slopes and Seeps
12. Frying Pan Gap	32. Spice Cove
13. Graveyard Fields	33. Tanasee Bald/Tanasee Ridge
14. Green River Headwaters	34. The Pink Beds
15. Horsepasture River Gorge	35. Thompson River Gorge
16. Joanna Mountain	36. Toxaway River Gorge
17. John’s Rock	37. West Fork French Broad River Aquatic Habit
18. Lake Derra Marsh	38. Whitewater River Falls and Gorge
19. Little River (Transylvania) Aquatic Habitat	39. Wilkie Trail Bog
20. Little River/Cedar Mountain Natural Areas	

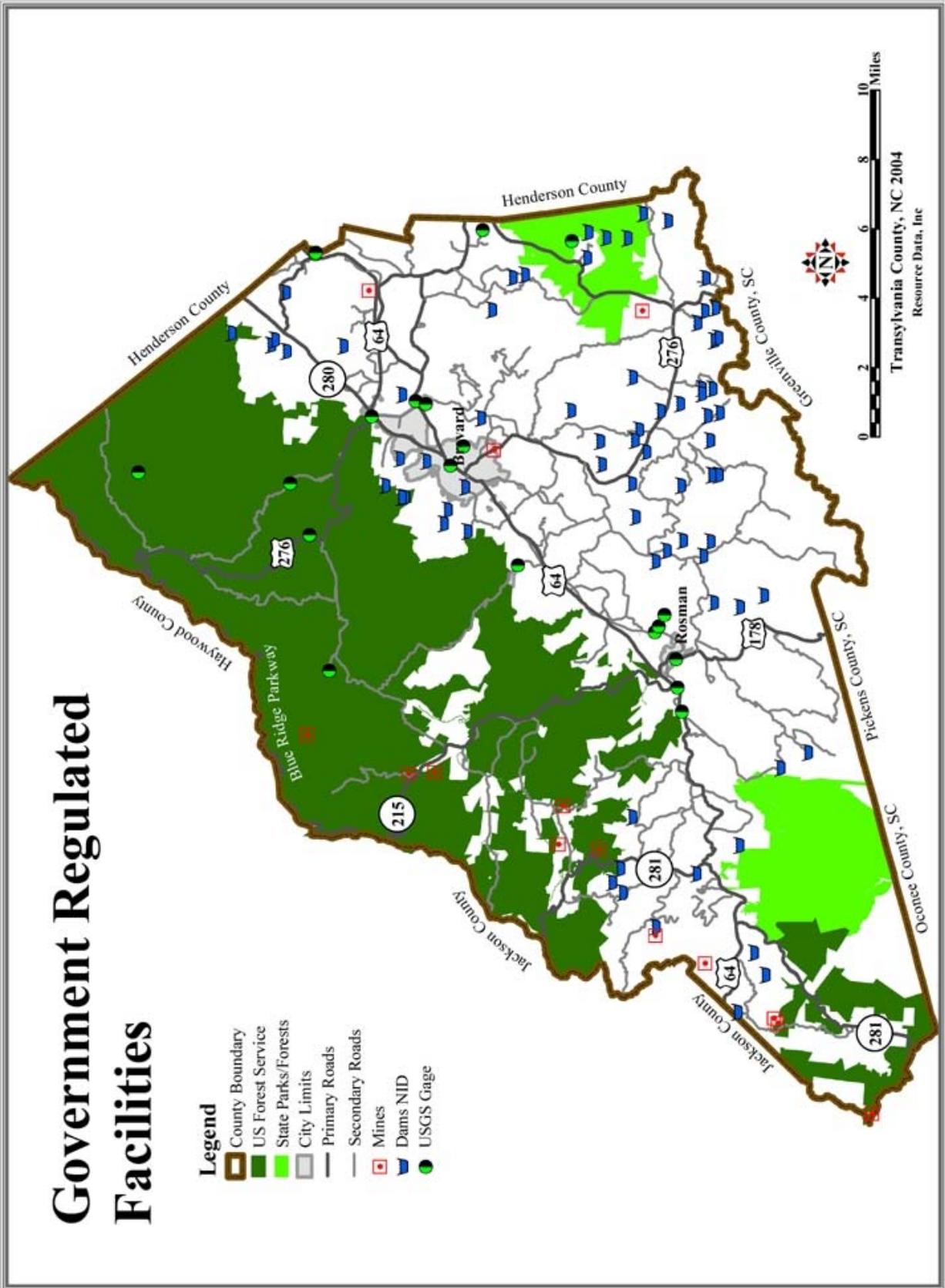
the State and managed by the NC Park Service and the NC Department of Wildlife, located in the south central portion of the County (*Map 8*). Future development around these areas should be limited or carefully planned to preserve these natural areas.

Transylvania County has nearly 300 protected, endangered or threatened species (PETS). The animal and plant species identified by the state are varied and are distributed throughout the county. The majority of PETS occurrences are either at the upper elevations near the Blue Ridge Parkway where the elevation approaches 6,000 feet or at the lower elevations around the Toxaway and Horsepasture rivers. A small concentration of PETS are located in the Cedar Mountain area and consist primarily of plant species associated with wetlands. The County should try to ensure that these species' habitats remain viable.

Map 8



Map 9



Regulated Discharges and Hazardous Material Handling

The Environmental Protection Agency (EPA) lists 46 sites in Transylvania County permitted to discharge low levels of chemicals to water, 15 sites permitted for air releases and 27 sites listed as hazardous material handlers. Some sites are industries and quarries and some are institutions such as hospitals, schools, and camps. However, most of the sites listed are small businesses such as auto service stations, cleaners, and laboratories.

Fire department personnel throughout Transylvania County are trained in hazardous material response at either awareness or operations level. When a hazardous material incident occurs, the fire department having jurisdiction provides the initial response and incident assessment. The local fire department in conjunction with other emergency services agencies, secures the scene, provides care for the injured, implements initial decontamination procedures, begins evacuations of affected areas if required, and establishes contact with the hazardous material response team stationed in Asheville.

Government Regulated Facilities

There are numerous dams, mines and river gauging facilities throughout the County that are permitted and maintained by the Environmental Protection Agency (EPA) and the North Carolina Department of Environment and Natural Resources (NC DENR). *Map 9* on the previous page shows the location of these facilities.

GOAL II: ENVIRONMENTAL CHARACTER

Conserve the valuable land, water and air resources within the county for present and future generations.

Objectives

1. Develop strategies that promote continued physical development of Transylvania County with minimal damage to the environment.
2. Encourage well-designed and thought-out residential, commercial and industrial developments to take place in areas that have readily available access to water, sewer and well-maintained roads to increase density while minimizing the impact on existing residential and sensitive environmental areas such as floodplain, water supply watersheds, steep slopes, wetlands, etc.
3. Support reasonable regional and state legislative initiatives to reduce pollution that damages our rural environment and harms the health of our citizens.
4. Planning Board to work with Brevard College and the Environmental Quality Institute Volunteer Water Information Network (VWIN) to monitor stream quality in Transylvania County.

5. Planning and Building Permitting and Enforcement Departments and NRCS should work with FEMA and the NC Division of Emergency Management to periodically evaluate the existing Transylvania County Flood Damage Control Ordinance. The same organizations need to continually monitor existing flood control measures while trying to identify new tools to help alleviate and mitigate future flooding, soil erosion and water quality issues as the County continues to develop.
6. The Building Permitting and Enforcement Department will continue to monitor and utilize the County's Flood Damage Control Ordinance and work with local developers, contractors and land owners to make them aware of the uses of flood-prone property.
7. The County EDAB and Economic Development Department should encourage the expansion of existing industries/ businesses and prospective new industries/ businesses in the County in ways that minimize harmful air or water discharges.
8. Promote voluntary farmland preservation and encourage farmers and landowners (including timber, nursery crops and trout producers) to work with the NC State University and the NC Cooperative Extension Service to understand and implement best management practices.
9. Planning Department to monitor and advise the Planning Board and County Commissioners on the status of Federal and State Stormwater Control Phase II legislation that may impact the County.
10. Planning Board should develop recommendations on ways to encourage the preservation of aesthetically and economically valuable views and green spaces.
11. Work with landowners to develop riparian conservation along the French Broad River and its tributaries.

TRANSPORTATION

Chapter

3

- The Transylvania County Thoroughfare Plan and Map were adopted by the County Commissioners in 1990 and 2001.
- The Transylvania County Thoroughfare Plan and maps on page 45, identify new road locations for NC 215 and US 276.
- There are approximately 407 miles of roads in Transylvania County. Three hundred forty-seven miles or 85% of the roads are paved. *Map 10* shows the primary roads in the County.
- A Brevard by-pass location continues to be debated. Although this by-pass may be located entirely within the Brevard planning jurisdiction, it will significantly impact county residents.
- Between 1990 and 2000 vehicle registrations increased 25% and over 63% since 1980.
- The Blue Ridge Parkway along with several state and local scenic byways add to the County's reputation as a tourist destination.
- Transylvania County is a member of the Land-of-Sky Rural Planning Organization (LOSRPO). The LOSRPO was formed in 2002 to help coordinate transportation goals/projects at a regional level.
- The incorporation of the Town of Mills River along NC 280 to the Transylvania County line will significantly impact travel between Brevard and the Asheville Regional Airport.

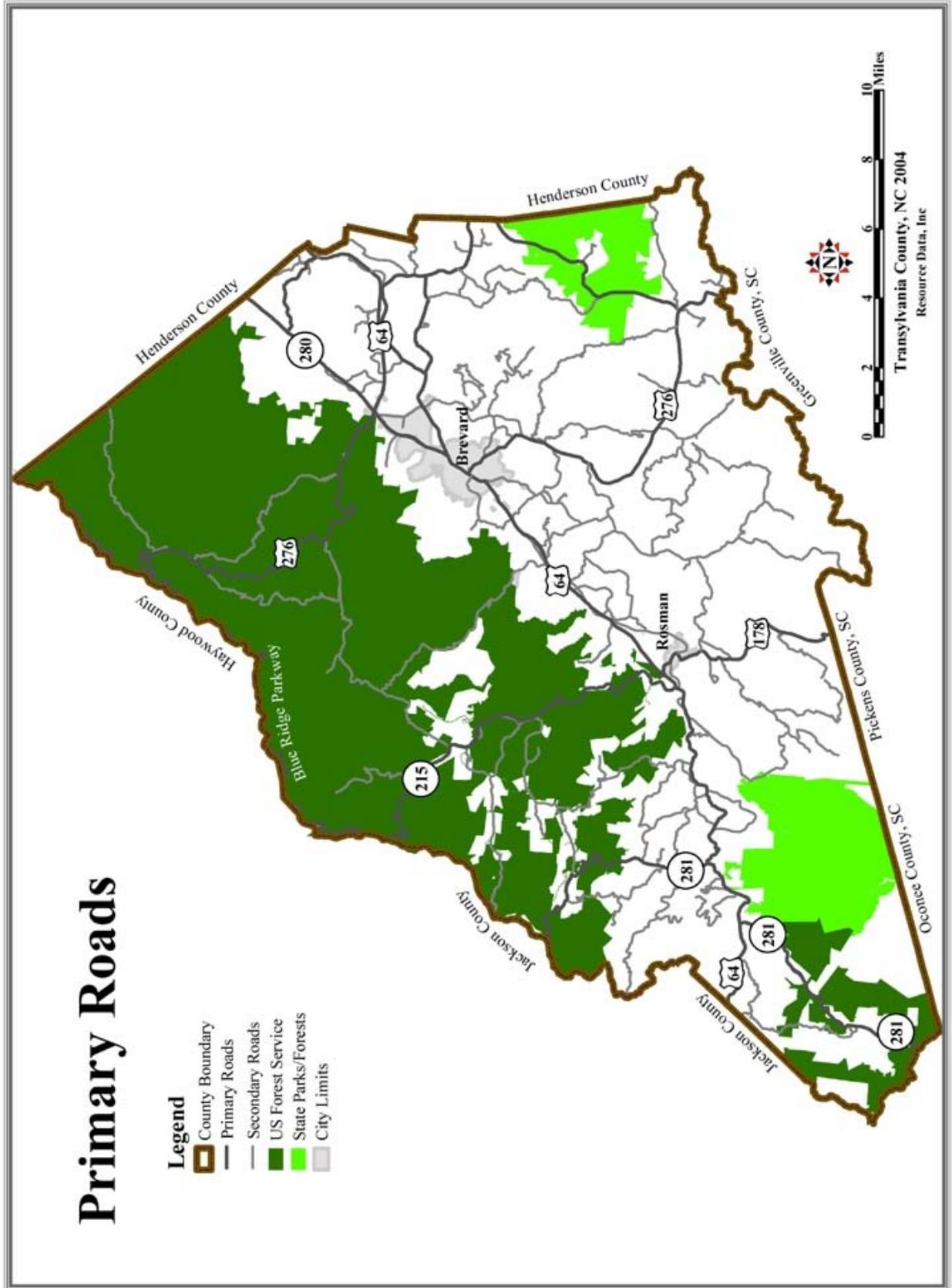
County Thoroughfare Plan

The thoroughfare plan's purpose is to provide a functional system of streets, roads, and highways that permit direct, efficient and safe travel. Roads and bridges are designed to have specific functions and service levels to help minimize traffic and land use conflicts. In 2001, the State Department of Transportation (DOT) and the Transylvania County Board of Commissioners adopted the County's Thoroughfare Plan and Thoroughfare Plan Map. Highlights from this plan are included in this document, but the reader should review the actual plan for more detailed discussion and recommendations. The Thoroughfare Plan Roads table on page 46 shows the functionally classified roads in Transylvania County by category.

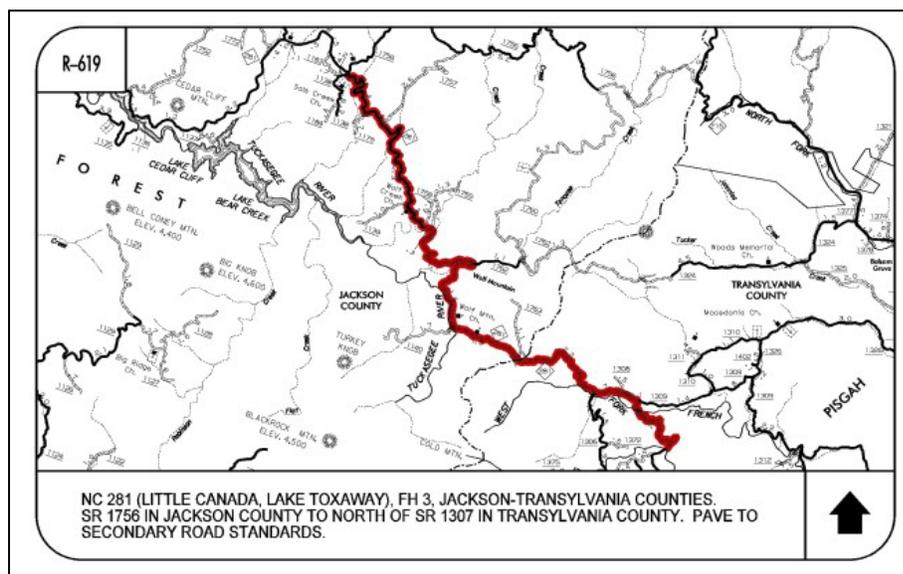
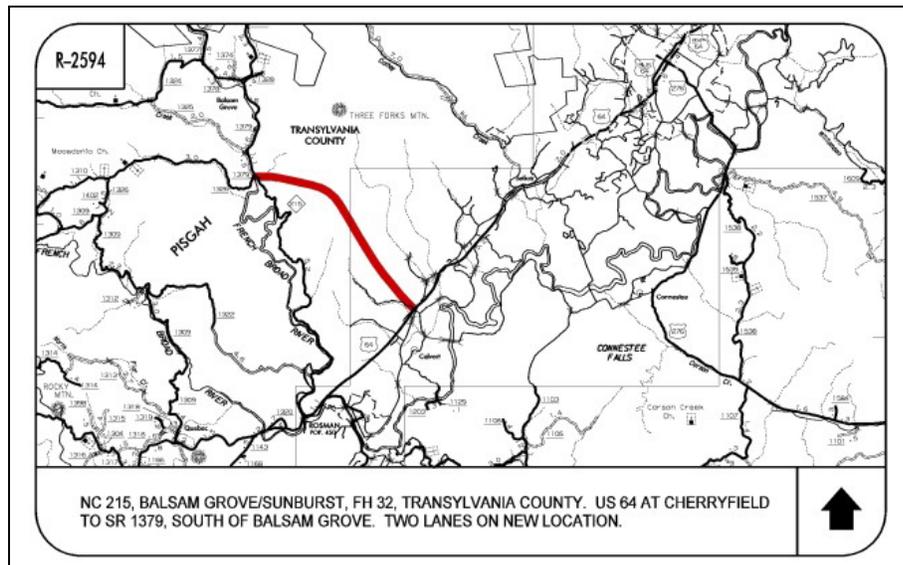
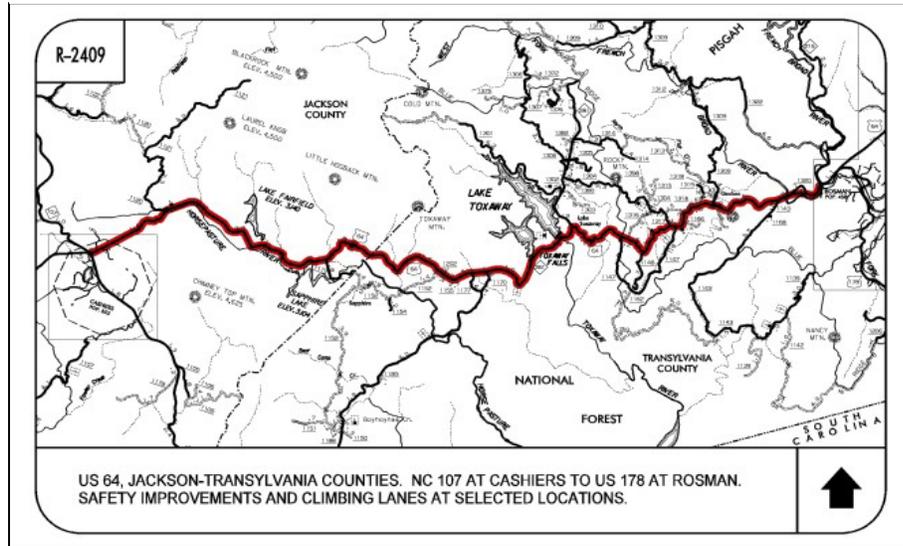
Projects currently in the Transportation Improvement Program for Brevard and Transylvania County are: (maps on page 45)

- ◆ Safety improvement and climbing lanes on US 64 from NC 107 at Cashiers to US 178 at Rosman.
- ◆ Relocation and construction of NC 215.
- ◆ Improving and paving NC 281 N to Jackson County.

Map 10



Thoroughfare Plan Maps



THOROUGHFARE PLAN ROADS

<u>PRINCIPAL ARTERIALS</u>	
None	
<u>MINOR ARTERIALS</u>	
US 64	US 276, south of Brevard
US 178	Blue Ridge Parkway
<u>MAJOR COLLECTORS</u>	
US 276, north of Brevard	SR 1304 (Kim Miller Rd.)
NC 215	SR 1388 (Old Rosman Hwy.)
NC 280 (Asheville Hwy/I-26 connector)	SR 1504 (Old Hendersonville Hwy.)
NC 281	SR 1528 (Crab Creek Rd.)
<u>MINOR COLLECTORS</u>	
SR 1103 (Walnut Hollow Rd.)	SR 1518 (Davidson River Rd.)
SR 1107 (East Fork Rd.)	SR 1533 (Everett Rd.)
SR 1110 (Island Ford Rd.)	SR 1536 (Cascade Lake Rd.)
SR 1128 (Whitmire Rd.)	SR 1540 (Wilson Rd.)
SR 1195 (Calvert Rd.)	SR 1543 (Elm Bend Rd.)
SR 1348 (Probart St.)	SR 1591 (Staton Rd.)

City of Brevard

During the years of 1997-1999, the city sponsored a community-based planning effort named *Focus 2020*. The *Focus 2020* plan developed a number of short-term and long-term initiatives for proposed implementation. Transportation issues were addressed in these reports. NCDOT had just completed its update of the Thoroughfare Plan for the City of Brevard in September 1998. The *Focus 2020* plan suggested that the City of Brevard initiate their own Transportation Study. Around December 2000, a consultant was chosen to work with the Long Range Planning Committee and was charged to draft the city's Transportation Study. The study was approved by City Council at their September 2, 2003 meeting.

Major issues discussed in the study:

- Existing Road System
- 2025 Traffic Growth
- Traffic Forecasts
- Assessment of Asheville Highway Bottleneck
- Assessment of Pisgah Forest Gateway Bottleneck
- Parking Facilities and Parking Needs
- Bicycle Facilities
- West Loop
- Unbalanced Pairs through downtown Brevard

Traffic Safety

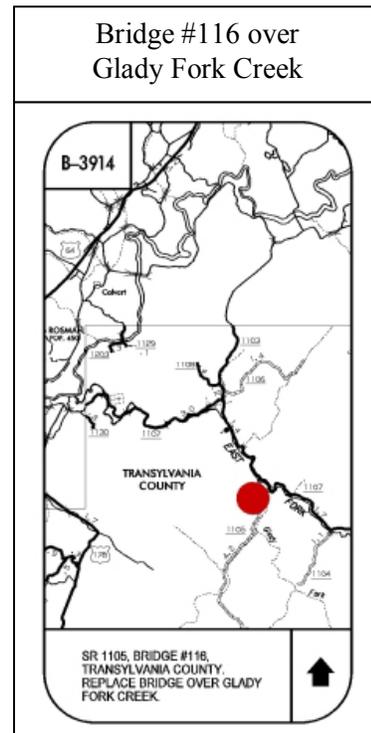
Traffic accident records assist in locating problem areas in the County's road system. The Intersection Accident Listing for the period from January 1, 1996 to December 31 1998 is compared to the period January 2001 to December 2003. Those intersections with 15 or more accident's or where the accident severity is considerably higher than the state average are identified as significant highway accident locations. There were no highways listed as significant highway accident locations for these time periods.

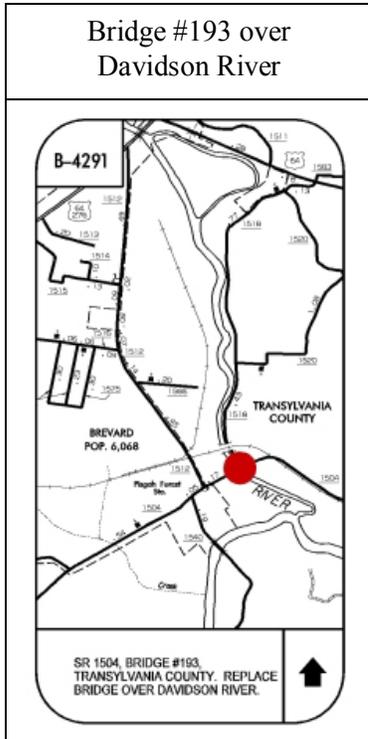
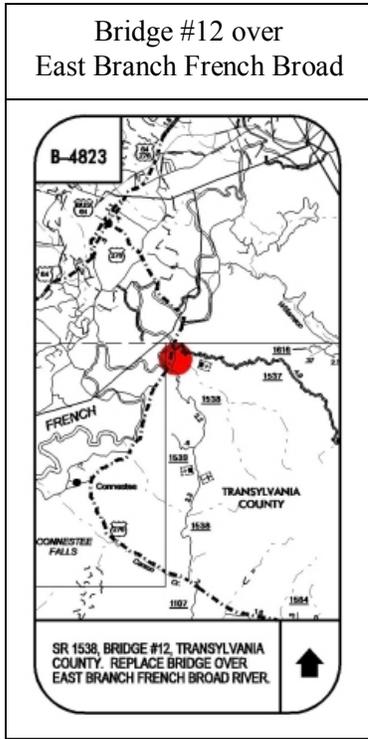
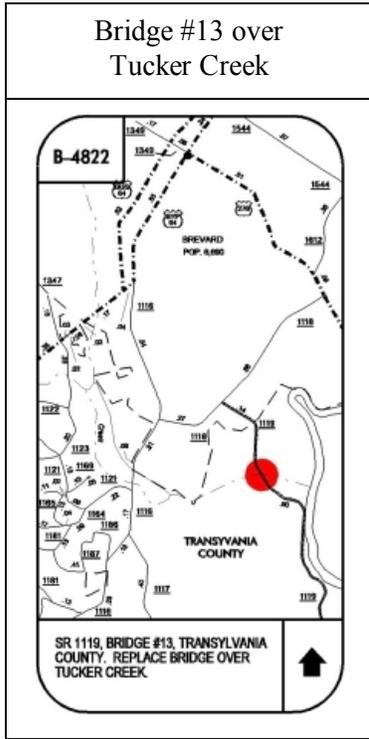
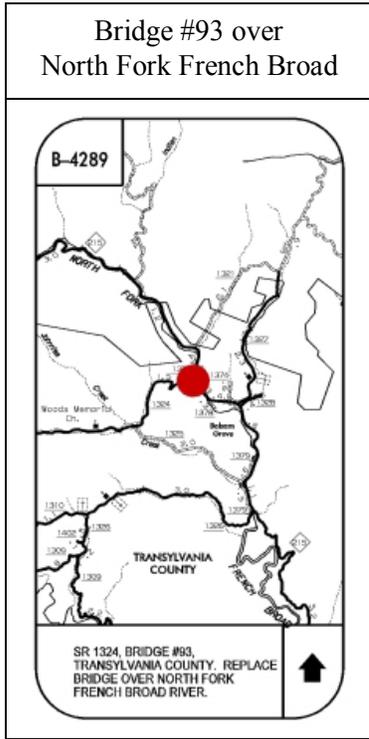
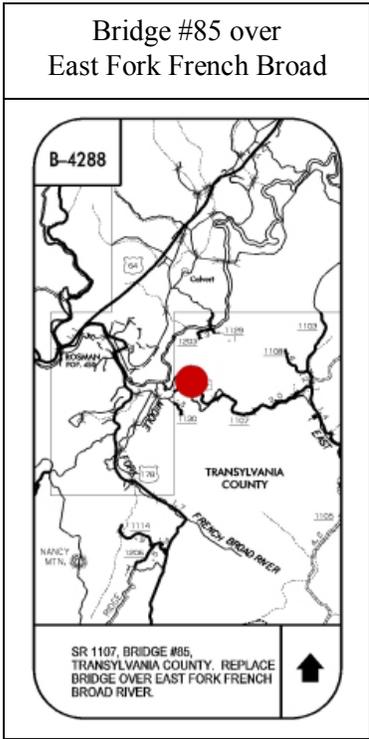
Location	Number of Accidents 1/96-12/98	Number of Accidents 1/01-12/03
SR 1504 (Old 64) at SR 1518 (Davidson River Rd.)	8	13
US 64 at SR 1528 (Crab Creek Rd.)	10	9
US 64 at NC 281	7	9
US 64 at SR 1506 (Lyday Loop Rd.)	6	7
US 276 at SR 1540 (Wilson Rd.)	< 5	7
Old US 64 at SR 1528 (Crab Creek Rd.)	< 5	7
NC 280 at SR 1598 (Capps Rd.)	< 5	7
US 64 at US 178	< 5	6
SR 1195 (Calvert Rd.) at SR 1388 (Old Rosman Hwy.)	< 5	5
US 64 at SR 1502 (King Rd.)	< 5	5
US 64 at SR 1518 (Davidson River Rd.)	7	5
US 64 at US 276	7	5
US 64 at NC 280	7	< 5

Bridge Conditions

Bridges are a vital and unique element of a highway system and are the most expensive component to construct and maintain. Any bridge inadequacy or deficiency presents a vulnerability for road failure and disruption to a community. As a result, it is important that all bridges be constructed to the same design standards and be well maintained. The following maps show bridges in the County that are scheduled to be replaced between 2004 and 2010 because of deficiencies (2004 TIP).

Source: NC Department of Transportation





Stoplights

The number of stoplights in Transylvania County has increased from 22 in 1990 to 27 in 2004. Seven new lights have been installed from the Transylvania County line to I-26 along NC 280 since it was widened to five lanes. The Mills River Incorporation in 2003, encompassing NC 280 to the Transylvania County line, may lead to the installation of additional stoplights.

The City of Brevard is in the process of tying stoplights together through a central control system which will allow improved synchronization.

Airports

Transylvania County is served primarily by the Asheville Regional Airport in Buncombe County. This airport, the most extensively developed airport in Western North Carolina, has an 8,200 foot paved runway, an instrument landing system, an air traffic control tower, and terminal radar. The airport is within a 25-minute driving distance from Brevard. This convenient access has allowed businesses and individuals to more readily receive and ship products nationwide. Asheville Airport has direct flights to Atlanta, Cincinnati, Detroit, Houston and NYC.



In 1994 the County had two small private airstrips located near Brevard and Cedar Mountain at the former DuPont facility. The Transylvania County Airport, a privately owned public airport in Penrose opened in 2000. The airport serves as a designated relief airport for the Asheville Regional Airport. It has a 2,903 foot long, 50 foot wide runway and offers fuel, washing and maintenance service. Hanger space is available for 30 aircraft.

Railroads

The County is served by Norfolk Southern Railway Company. Norfolk Southern Railway offers freight service with a main line between Asheville and Salisbury-Spencer. Asheville is also the major shipping point, offering daily switching and piggyback service.



The railway right-of-way and track parallels the French Broad River from Henderson County to Ecusta. A major concern is how long Norfolk Southern will continue to maintain this line. Should Norfolk Southern decide to abandon the line as a result of lost revenue, the County will need to evaluate whether or not it should try to purchase or control the right-of-way for future use.

Bus Transportation

Transylvania County is no longer served by bus. However, Transylvania County does provide transportation for several groups of citizens. Children participating in the Child Development program and elderly persons participating in the Nutrition and Day Activities programs are picked up at their residences and taken to program sites and are then returned to their homes. The County also provides transportation for handicapped persons.

Handicapped children are taken to the public schools and handicapped adults who are clients of Transylvania Vocational Services (TVS) are taken to TVS for training. On a weekly basis, the County provides transportation (for a fee) between downtown Brevard and the Pisgah Forest shopping center for the general public.

Scenic Byways

Scenic Byways are designated by the State of North Carolina. A scenic byway is defined as being any road or parkway traversing areas of relatively high value from an aesthetic, recreation, historical, scientific or cultural standpoint.



Scenic Byways in the County

- US 64 West (Waterfall Byway)
- US 276 North (Forest Heritage Byway)
- US 215 (Forest Heritage Byway)
- NC 281 (Whitewater Way)

In addition, Transylvania County has designated the NC Scenic Byways and the following as Scenic Corridors:

- NC 280 from SR 1510 (Hudlin Gap Rd) to the top of Little Mountain
- SR 1593 (Staton Rd) from SR 1536 (Cascade Lake Rd) to SR 1528 (Crab Creek Rd)
- US 64W from SR 1329 (Israel Rd.) to top of New Cut

Off-premise advertising is prohibited on these scenic byways and corridors. The Blue Ridge Parkway is another federally protected scenic route.

Bicycle Transportation

In July 1998, the NC DOT Division of Bicycle and Pedestrian Transportation in conjunction with the Transylvania County Planning and Economic Development Department produced the Transylvania County Bicycling map. The map includes seven bike routes and lists the many points of interest along the routes with country stores, campgrounds, bicycle shops and much more. Funding for this project was provided through the NC DOT Transportation Improvement Program.



In 2003, the City of Brevard completed a section of the bike/pedestrian path from Osborne Road to the County Recreation Department with plans to eventually connect downtown Brevard to Pisgah National Forest.

GOAL III: TRANSPORTATION

Collaborate with the NC Department of Transportation (NCDOT) to provide the best possible roads for Transylvania County and promote alternative transportation.

Objectives

1. Actively encourage NCDOT and/or state identified regional transportation organization (Rural Planning Organization, etc) to fund and complete identified Transportation Improvement Programs (TIP) and the adopted county and city Thoroughfare Plans. The following are major issues over the next ten years:
 - ◆ Safety improvement and climbing lanes on US 64 from NC 107 at Cashiers to US 178 at Rosman.
 - ◆ Relocation and construction of NC 215.
 - ◆ Improving and paving NC 281 N to Jackson County.
2. Work with NC Department of Transportation and other state and federal agencies to identify new funding sources to help improve existing State or Federal highways on a regional basis.
3. Work with developers to ensure that residential, commercial and industrial access roads meet minimum standards for traffic volume and safety, taking into consideration environmental constraints. The NC Department of Transportation requires developers to obtain a driveway permit before connecting to state maintained roads, therefore, the Planning Department will require that you submit the driveway permit when submitting the preliminary plat for a minor or major subdivision.
4. Encourage private companies and the County's Transportation program to extend transportation services to areas within and outside Transylvania County for general public and special populations such as the elderly, handicapped, and youth for medical and other needs not available within the county.
5. Encourage the growth and development of adequate air transportation facilities within the County. EDAB to support regional efforts to attract more flights to Asheville Regional Airport that are competitively priced.
6. Actively work to maintain and preserve the existing Norfolk Southern Railway extension to Ecusta and the Jennings Industrial Park by regularly contacting Norfolk Southern Corporation representatives and rail users.
7. Work with NCDOT, City of Brevard and Town of Rosman to identify and construct safe bike lanes and pedestrian paths throughout the County to promote alternative transportation, health and tourism.
8. Work with NCDOT to increase the safety of existing and new intersections while minimizing the need for new stoplights.
9. Planning Board and Department should evaluate the Transylvania County Subdivision Control and Manufactured Home Park Ordinances to make sure that existing road standards are adequate and address safety and environmental issues while considering the developer's expenses.

WATER SUPPLY, WASTEWATER, AND SOLID WASTE

Chapter

4

- The City of Brevard and Town of Rosman provide water and wastewater service to approximately 8,000 residents.
- Several large residential developments throughout the County provide water and/or wastewater service to individuals living in the developments.
- Approximately two-thirds of the County's population obtain their drinking water from private wells.
- Transylvania County should work with Brevard and Rosman to ensure that their water supplies are protected, and the water and wastewater treatment facilities are well maintained.
- Future industrial/commercial and residential development will necessitate water supply extension agreements between the County, municipalities and future developers.
- The Woodruff landfill should meet the County's need for constructive capacity for the next 16 years. There is also developable capacity for an additional 40 years.

Water Supply and Distribution Systems

Safe and adequate water supply throughout the County is fundamental to the County's future economic growth and environmental protection. In addition, the health and safety of the residents is dependent on water for domestic and commercial use as well as for fire fighting.

Brevard

The City of Brevard obtains water from Cathey's Creek, a state designated and protected water supply watershed.

Cathey's Creek at the city water plant flows at 30 cubic feet per second (19.4 million gallons per day (MGD)). The water treatment plant is capable of treating 2.6 MGD. In the year 2000, 50% of this capacity was treated. According to the Brevard Comprehensive Water Study, prepared by B.P. Barber and Associates (1989), the peak city-wide water demand is projected to be 1.67 MGD by 2010 – well below design capacity. The system is capable of serving customers up to 2,450 feet in elevation at the center of the service area. Customers up to 2,210 feet can be served at the edges of the service area. Supplemental pumps and storage are generally required above those levels. Since 1990, three additional storage tanks have been added to the system — two 75,000 gallon and one 244,000 gallon — bringing the storage total to 2,394,000 gallons.

The city wastewater plant is designed to treat 2.5 MGD. This capacity is well matched to the water treatment plant capacity (2.6 MGD) and should be adequate to serve the city well beyond 2010.

The city's excess water and sewer treatment capacity is a significant asset in attracting future growth. The city's ability to provide adequate and reliable water service can be used as an effective growth management tool. Through a carefully planned expansion of the system, the city can influence the location and direction of higher density development within the planning jurisdiction. This planned expansion will reduce the capital costs associated with serving new areas and should discourage suburban sprawl by promoting more compact development within any expanded service areas.

Water service can also be used to encourage the annexation of areas adjacent to the city limits. The city will pursue grant funding, when it's available, to defray the cost to city residents for utility extensions. Brevard has a cooperative planning agreement with the County for extensions into the extraterritorial jurisdiction (ETJ). The City Council must approve all water service outside the city limits and in the city's ETJ. The Council's current policy is to require that developers of property outside the city limits petition for annexation in order to obtain utility service. In 1996 the city began charging new commercial and industrial users water impact fees to account for their impact on the city's water treatment system and to help pay for future water and sewer expansion.

Cathey's Creek has a combined two-year low flow yield of about 1.3 MGD and 29 and 49 year low flow yields of 0.73 MGD and 0.63 MGD, respectively. These low flows could necessitate that Brevard consider alternative water sources, such as the French Broad River, in the event of a prolonged drought. Such a decision could have an enormous impact on future land use requirements upstream from a possible intake location.

Rosman - The Town of Rosman has four deep wells that provide approximately 165,600 gallons per day (GPD). Currently there are approximately 500 individuals served by this system. Available surplus capacity is 105,600 GPD. To assure the viability of these wells, Rosman and Transylvania County should consider land use controls that limit development of businesses or activities that could threaten the underground water quality within a one-mile radius of the existing wells. Within the next ten years, the County should also work with Brevard and Rosman to connect both water systems.

Other - Numerous residential developments throughout the County use wells to serve residences (i.e., Sapphire Lakes, Connestee Falls, Lake Toxaway, Knob Creek/Williamson Creek area, and Turkey Pen Mobile Home Park). County industries also obtain water from both wells and surface waters, such as the Davidson, French Broad and Little Rivers. Combined, there are over 180 public water supply systems identified by the state that are permitted to serve a potential population of over 34,000 people. A public water supply system is defined as any water source serving 15 service connections or 25 residents.

Wastewater Collection and Treatment Systems

There are two municipal, five industrial and several community wastewater treatment systems located throughout Transylvania County. These systems help to protect human health and protect the environment from degradation. In addition, there are several trout farms that also discharge into surface waters.

Brevard - The city wastewater plant is designed to treat 2.6 MGD and currently has an available surplus of 1.0 MGD. As reported in *The Brevard 201 Facilities Plan*, this plant should be adequate to serve Brevard beyond the year 2010. Effluent is discharged into the French Broad River.

Rosman - The Town of Rosman is served by one 40,000 and one 50,000 GPD extended aeration type sewage treatment plants that discharge effluent into the French Broad River and serves approximately 500 people. Average daily flow is approximately 70,000 GPD. Future growth in the Rosman area will require expansion of the treatment plant as well as extension of the interception lines.

Industrial Systems – North American Pulp Products Company (NAPPCO), operating at the Ecusta Business Development Center, generates about 6,000,000 GPD of wastewater while

manufacturing flax pulp. The wastewater is treated in a 30 million GPD plant, settled in a 75 acre lagoon, then discharged into the French Broad River.

<u>MUNICIPAL AND INDUSTRIAL/COMMERCIAL</u>	
Coats America Co.	Mitchell Bissell Industries
Camp Carolina	PARI
Camp Illahee	Town of Rosman – WWTP
City of Brevard – WWTP	Transylvania Utility Co.
AGFA Brevard	USDA – Schenck Job Corps
Ecusta Business Dev. Center	USDA – Sliding Rock Rec. Area
Eagle’s Nest Camp	
<u>RESIDENTIAL</u>	
Falls Racquet Club	Indian Falls Resort
Lake Toxaway Co.	Sapphire Lakes
Sherwood Forest	Toxaway Falls
Transylvania Evergreen Corp.	The Wilds Camp & Conference Center

Domestic wastewater from the plant is treated in a 180,000 GPD secondary treatment plant. Effluent from this wastewater plant is then discharged into the wastewater treatment lagoon and then into the French Broad River.

The wastewater treatment plant at the former AGFA site is permitted to treat 2.4 MGD but is currently operating at 0.3 MGD. Depending on whether operations resume at this site, this treatment facility may be shut down. Mitchell-Bissell Industries has the ability to treat approximately 20,000 GPD.

Private Systems - Several manufacturing plants, business facilities, and larger residential developments provide wastewater treatment by using small package plants that treat wastewater prior to discharging the treated water into a stream. Developments using package treatment plants include: Catatoga, Indian Falls Resort, Lake Toxaway, Sherwood Forest, and a number of summer camps. Although these systems are relatively inexpensive to install, they require a substantial investment of time and money to operate correctly. Without proper operation techniques and maintenance, these systems have the potential to do more environmental damage than an equal number of septic systems.

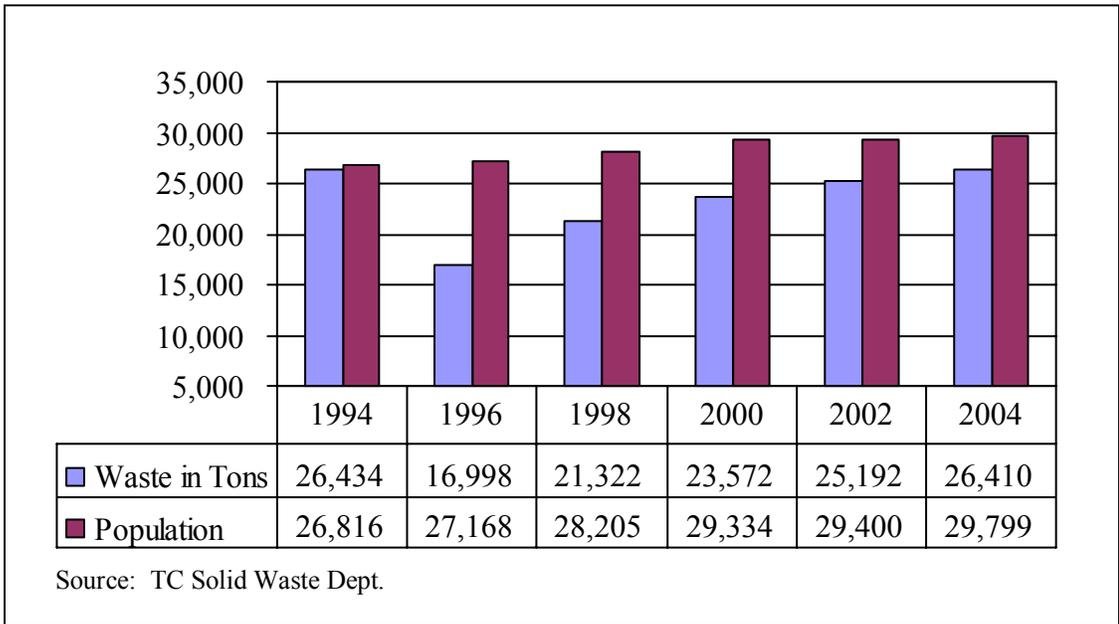
Most private residences located in the County rely on septic systems to treat wastewater. All sub-surface wastewater treatment systems, including septic systems are to be inspected by the County Health Department prior to use. A septic system's size and design are often limited by the soil type, slope and proximity to drinking wells and property lines.

Solid Waste

The County owns and operates a lined sanitary landfill located along the Eastern Continental Divide that is constructed to prevent ground and surface water contamination. This state-of-the-art landfill has capacity for 16 more years. Future phases or cells can extend the life of the landfill up to 40 more years and will be built as demand necessitates. In 2002, the landfill accepted an average of 2,100 tons of solid waste per month or roughly 142 pounds per person. This represents a 14% decrease in waste per person since 1990. This decrease is due to the implementation of the tipping fee established in 1995 and increased recycling. In addition to the sanitary landfill, the County also operates a land clearing and inert debris (LCID) landfill for materials such as construction waste, stumps and yard debris.

The Solid Waste Department is responsible for the collection and transportation of household waste generated by county residents. The City of Brevard and several private contractors also collect residential waste on-site and transport this waste to the Woodruff facility for a fee.

**Total Solid Waste in Tons
Compared to Population**



The County currently operates four collection centers (Calvert, Connestee, Pisgah Forest and Woodruff) where residents may drop off their household waste and may participate in recycling. Recycling materials currently accepted include glass, aluminum cans, plastic bottles, newspapers, magazines and cardboard. In addition, motor oil and car batteries are collected at the Pisgah Forest Center and appliances (white goods) at the Woodruff Center.

Transylvania County holds an electronics and household hazardous waste collection one day a month. Items collected are shipped to other recycling centers that handle these materials.

Current recycling collection is approximately 1.5 tons of recyclables per day.

The 2004-2005 budget for the County's Solid Waste Department exceeds \$1.5 million. Because of the financial burden associated with operating a permitted landfill, the County will have to continually evaluate funding alternatives, collection and disposal methods and operational costs. In 1992, the County Commissioners created the Solid Waste Advisory Committee and hired a consultant to develop a long-range plan for the existing landfill and its operation. Important to this process is the need to review the Solid Waste Management Plan periodically. The last update of the Solid Waste Plan was in 2003. This plan is designed to reduce Transylvania County's waste by 6,072 tons in FY 2012-2013. To do this, Transylvania County will continue to use a unit pricing program at the collection centers and a tipping fee at the landfill that is competitive regionally. The unit pricing program requires that each bag of municipal solid waste (MSW) delivered to a collection center for disposal be tagged with a sticker indicating that the solid waste disposal fee has been paid for that bag. Currently the fee is \$1.25 per bag. This successful program has been in place for eight years and is the primary element in the county's waste reduction efforts. The landfill tipping fees are designed to provide incentives for the separation of certain materials from the waste stream. LCID materials, if separated, are received at half the MSW tipping fee. Wood and brush material, suitable for grinding into mulch, is further discounted. Materials that can be shipped to recycling markets are accepted at no charge at the landfill and the collection centers.

Transylvania County has a goal to reduce its annual per person disposal rate from 1.16 tons in 1992 to 0.98 tons by 2012.

During the next ten years, the County should continue to explore new methods to encourage residents to recycle more household waste, and evaluate new waste disposal methods (i.e., composting, incineration and regionalization). In addition, due to the transportation costs involved with hauling waste to the Woodruff landfill site, the County has consolidated collection centers. Incineration and composting have been studied and determined to be prohibitively expensive, but may become more viable in the future.

For more information see the County's Solid Waste Plan 2003 Update.

GOAL IV: WATER, WASTEWATER AND SOLID WASTE

Collaborate with the City of Brevard and Town of Rosman to supply reliable and safe drinking water, wastewater treatment and solid waste collection and disposal.

Objectives

1. Plan and assist the City of Brevard and Town of Rosman to identify and extend water and sewer services to areas where well and septic tank use pose human health or environmental hazards and to encourage industry, commercial developments, and higher-density residential development.
2. Plan and evaluate the feasibility of a County water and sewer district to provide future water and wastewater services to areas outside of existing municipal water and sewer services. Identify and plan for future water supply watershed(s) on the French Broad

River or its tributaries (upstream from Brevard) for future water treatment facilities or water intake lines.

3. Continue to enforce the County's Water Supply Watershed Ordinance to protect the City of Brevard's water supply on Cathey's Creek.
4. Maintain and encourage an efficient and environmentally sound system of solid waste collection, recycling, and disposal. Explore alternative waste disposal methods such as privatization, regionalization, composting and incineration. The Solid Waste Department and County Commissioners will explore new ways to minimize the use of the landfill while at the same time minimizing the cost per ton by evaluating recycling programs, regionalization efforts and the possibility of shipping waste to a private landfill.
5. Work with industries to help them maintain and acquire water and wastewater permits issued by the State.
6. Support volunteer groups and the continued use of community service workers and/or inmates to pick up litter along the County's roadsides. Develop a litter campaign to keep Transylvania clean.

HOUSING

Chapter

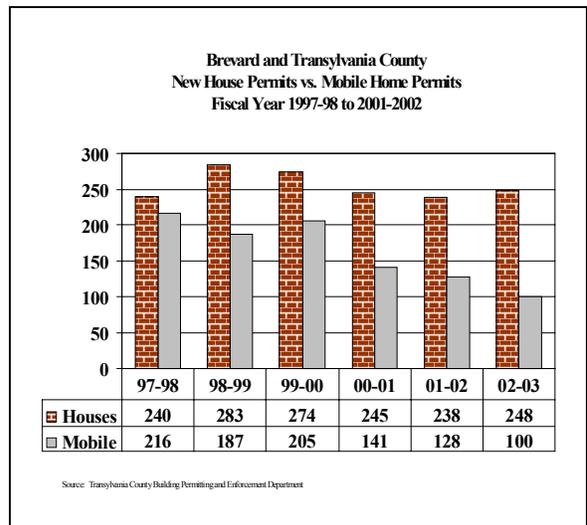
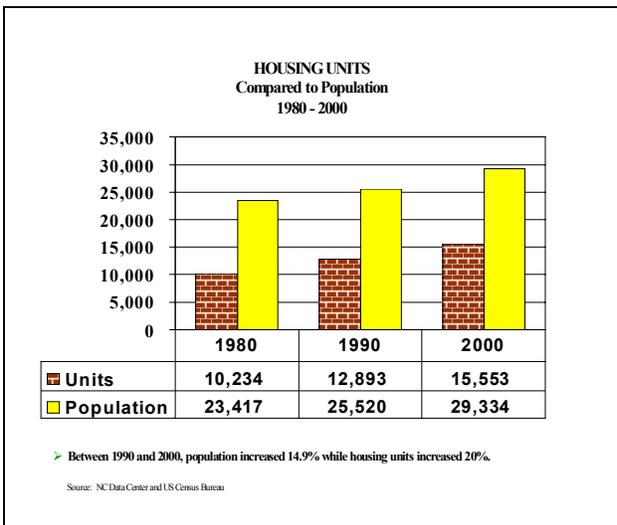
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Transylvania County is a predominately rural, residential county. Residential subdivisions located in the County occupy approximately 12.9% of the County’s total land area. This characteristic will probably continue to dictate the County’s future “look” and development trends.

- The 2000 US Census reported 15,553 homes in Transylvania with approximately 3,233 homes identified as summer or part-time residents.
- Dunn’s Rock and Eastatoe townships have had the greatest growth in housing during the last 20 years.
- In 2000, the median home value in Transylvania County was \$122,300 and \$108,300 in North Carolina.
- The 2000 US Census reported that of the 15,553 homes in the County, only 6,945 are owner occupied. Of those homes, 12% are valued at less than \$60,000. Twenty-five percent are valued between \$60,000 - \$99,999. Fourteen percent are valued between \$100,000 - \$124,999. Thirty percent are valued between \$125,000 - \$199,999. Seventeen percent are valued between \$200,000 to \$499,000. Two percent of the owner occupied homes in the County are valued above \$500,000.
- According to the County Tax Assessor’s Office, there are over 4,000 manufactured and mobile homes in Transylvania County as of December 2003.

New Home Construction

The 2000 US Census identified 15,553 housing units in Transylvania County. Between 1990 and 2000, the number of residential homes constructed grew by 2,660 or 21% and has contributed significantly to the County's economy and employment. These new homes represented well over \$30 million in additional tax base for the County in 2000. *Map 11* shows buildings currently on county tax maps that were built prior to 2000.



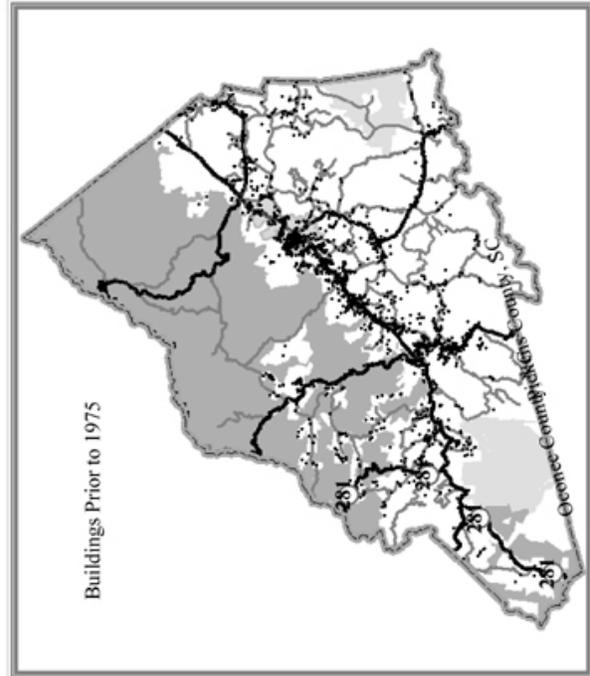
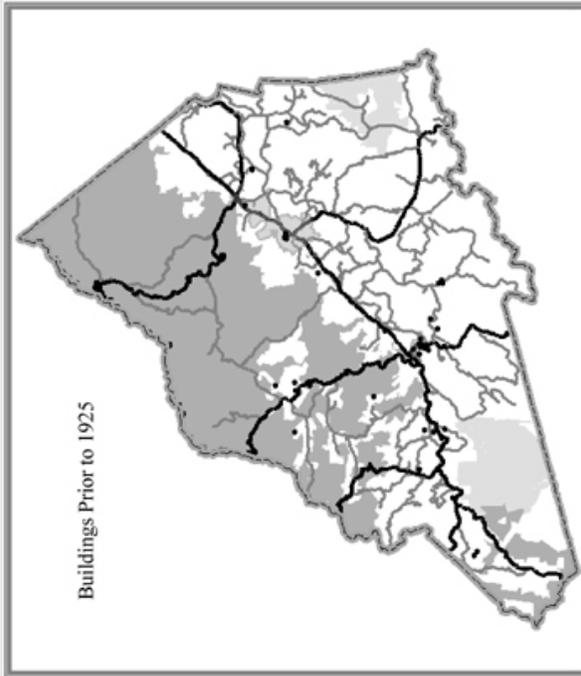
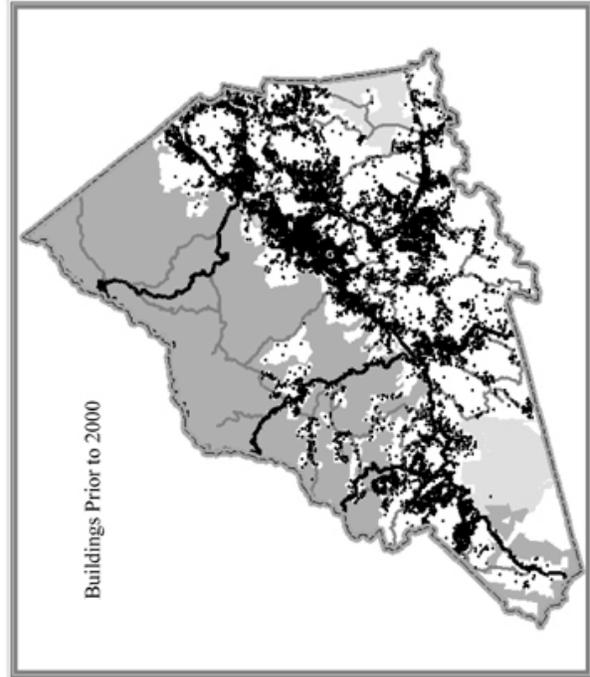
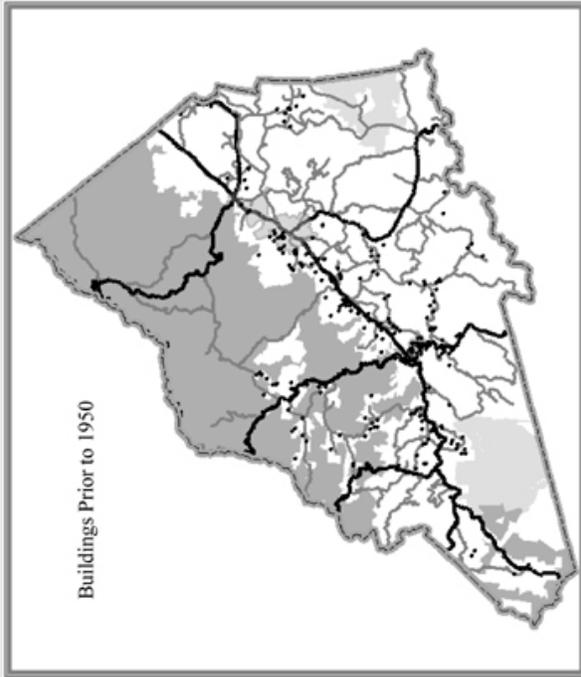
Map 11

Development

- Legend
- County Boundary
 - Building Locations
 - City Limits
 - Primary Roads
 - Secondary Roads
 - US Forest Service
 - State Parks



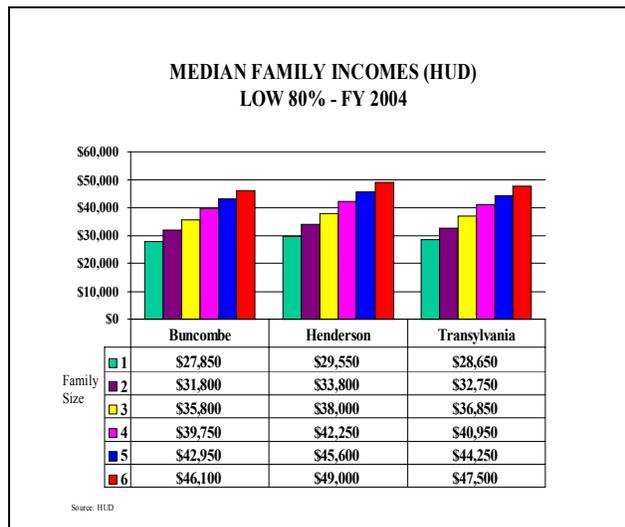
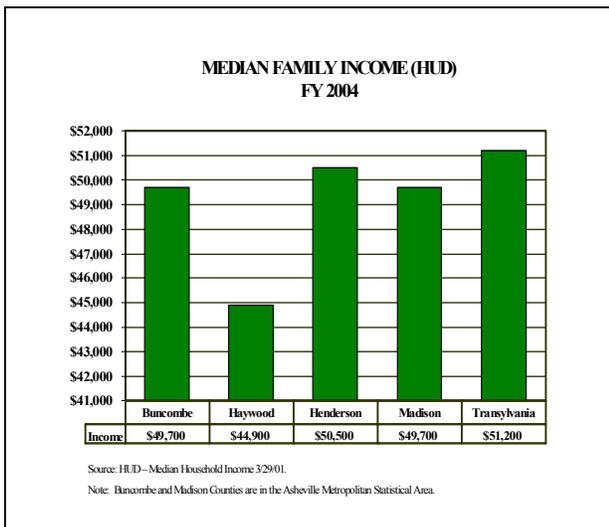
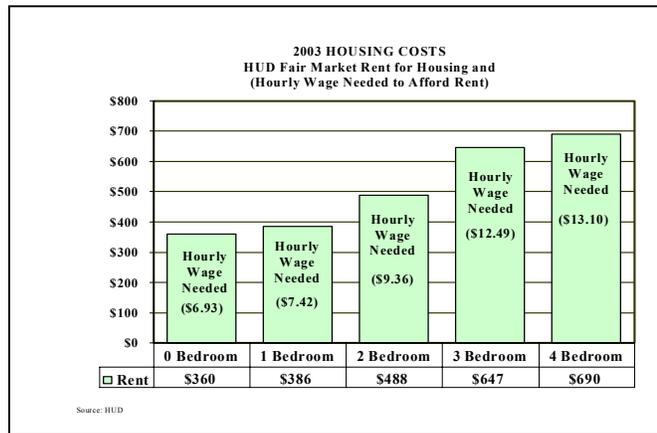
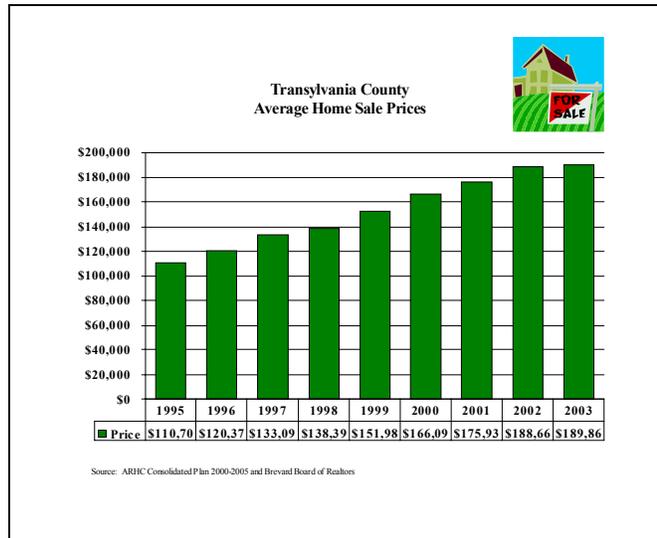
Transylvania County,
NC 2004
Resource Data, Inc



Affordable Housing

Affordable housing continues to be an issue that the County and other public and private organizations are trying to address. Assuring that all residents have access to safe, adequate and affordable housing is a high priority for the County. Clustered home developments and manufactured housing will provide affordable housing to many; however, a significant cost incurred by developers and new home owners is often associated with the installation of wells for drinking water and septic systems. By developing joint water and sewer extension policies, the County and its municipalities can help lower these costs.

The widely-used term “affordable housing” begs the question “affordable to whom?” The term is generally used to mean “housing which a person or family at 80% of median income could occupy without spending more than 30% of their gross income on housing costs.” Median income is determined by HUD for each county or metropolitan statistical area (MSA) and is adjusted periodically for family size.



Manufactured Homes

Manufactured housing continues to offer many residents affordable housing. For first-time home buyers or those with limited incomes, these homes provide an affordable alternative. As of December 2003, there were approximately 1,637 double-wide manufactured homes and over 2,377 mobile homes registered in the County. From January 2000 to December 2003, the Transylvania County Building Permitting and Enforcement Department permitted 515 mobile homes vs. 1,001 stick-built homes. Cathey’s Creek Township had the greatest number of newly permitted manufactured homes.

Typically, manufactured and mobile homes are located on individual parcels throughout the County; however, there are several predominately manufactured or mobile home parks and/or subdivisions including Black Hawk, Gray Fox, River Ridge, River Sanctuary, Turkey Pen Mobile Home Park and Winnford.

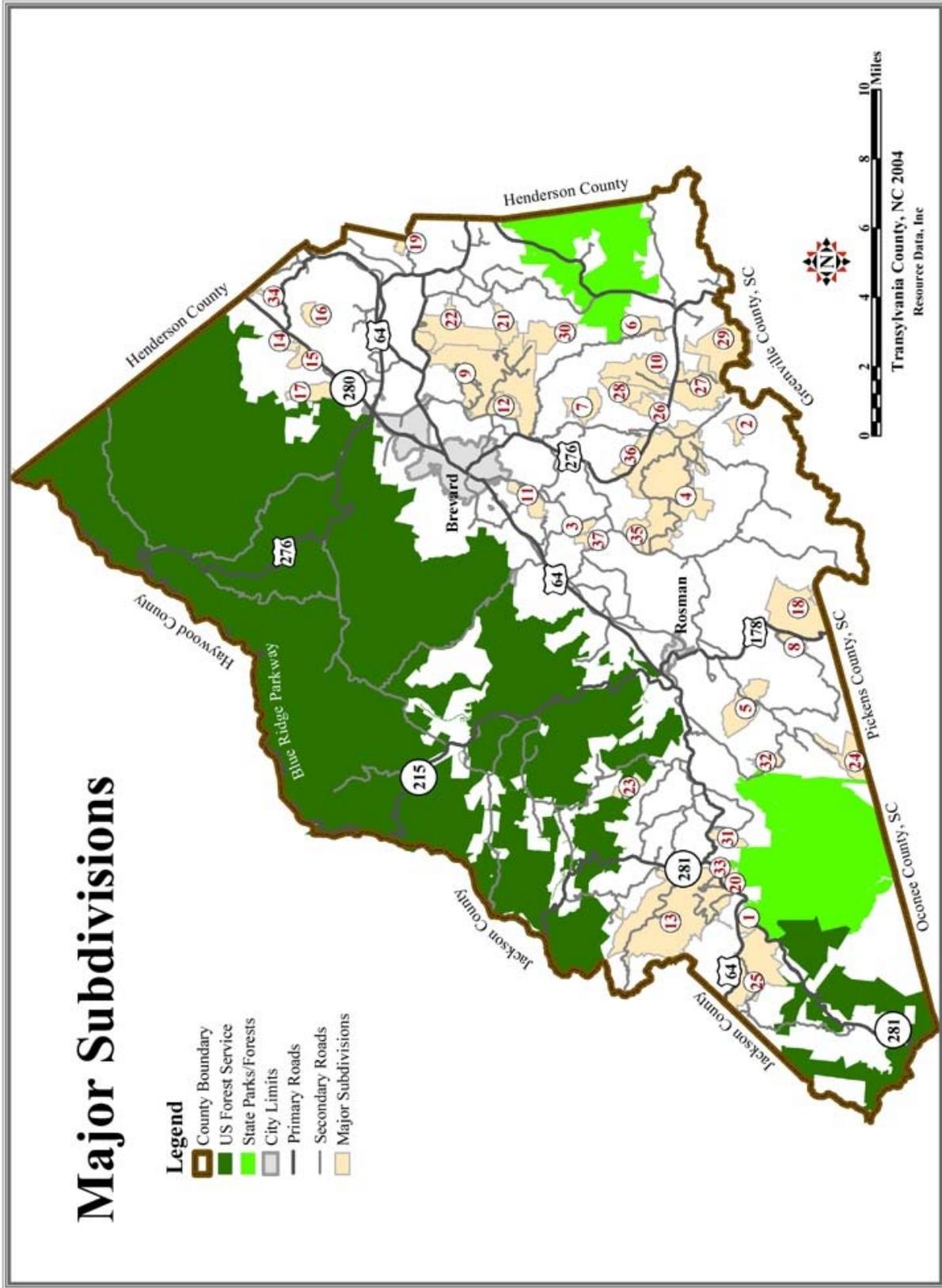
Existing Subdivisions

Transylvania County has approximately 90 minor and major subdivisions located throughout the County. Major subdivisions include those shown on the Subdivisions table and *Map 12*. Many smaller subdivisions exist.

Over the last five years, the County has seen an increase in the number of new developments with parcels that are greater than 10 acres. This is probably due to the fact that, by State Statutes, any new parcel greater than 10 acres is exempt from local subdivision requirements. Another growing trend is the creation of subdivisions that have few building sites while most of the land is protected with conservation easements that prohibit further land subdivision. The significant benefit to the owners and developers is the tax credits that can accrue.

<u>Subdivisions</u>	
1. Bear Wallow Springs	20. Outdoor Resorts
2. Big Hill	21. Pisgah Forest Farms
3. Chasewood	22. Reserves
4. Connestee Falls	23. Richland Ridge
5. Continental Divide	24. Round Mountain
6. Deer Chase	25. Sapphire Lakes
7. Eagles Lake	26. Sequoyah Woods
8. Eastatoe Gap	27. Sherwood Forest
9. Glen Cannon	28. Steel Creek
10. High Rocks	29. Stones Lake
11. Illahee Hills	30. Sylvan Habitat
12. Knob Creek/Falls Creek	31. The Falls Racquet Club
13. Lake Toxaway	32. The Wilds
14. Laurel Lake Estates	33. Toxaway Falls
15. Lobdell Woods	34. Turkey Pen
16. Melglen Farms	35. Walnut Hills
17. Mine Mountain Estates	36. Whiskey Creek
18. Indian Camp Mountain	37. Windover Farms
19. Mountain Meadows	

Map 12



Subdivision Ordinance

On February 25, 1991, the County Commissioners adopted a Subdivision Ordinance. The primary purpose of the ordinance is to ensure that new residential homes are accessible to emergency vehicles such as fire and rescue trucks. With this goal in mind, the ordinance sets forth minimum road standards for new developments and limits unpaved road grades to a maximum slope of 18% and paved road grades to 20%. A major concern is that the most suitable areas for residential development have already been utilized.

As a result, future areas for residential development will most likely be located in less desirable topographical areas. This will inherently increase development cost. One way developers can reduce costs is to build clustered home developments that typically require significantly less land to be disturbed for both the construction of new homes and their access roads.

Historic Housing

During 1991, the Transylvania County Historic Properties Commission (now known as the Transylvania County Joint Historic Preservation Commission) hired a consultant to identify historic homes and structures located in the County. The study inventoried over 735 buildings and structures that were at least 50 years old.

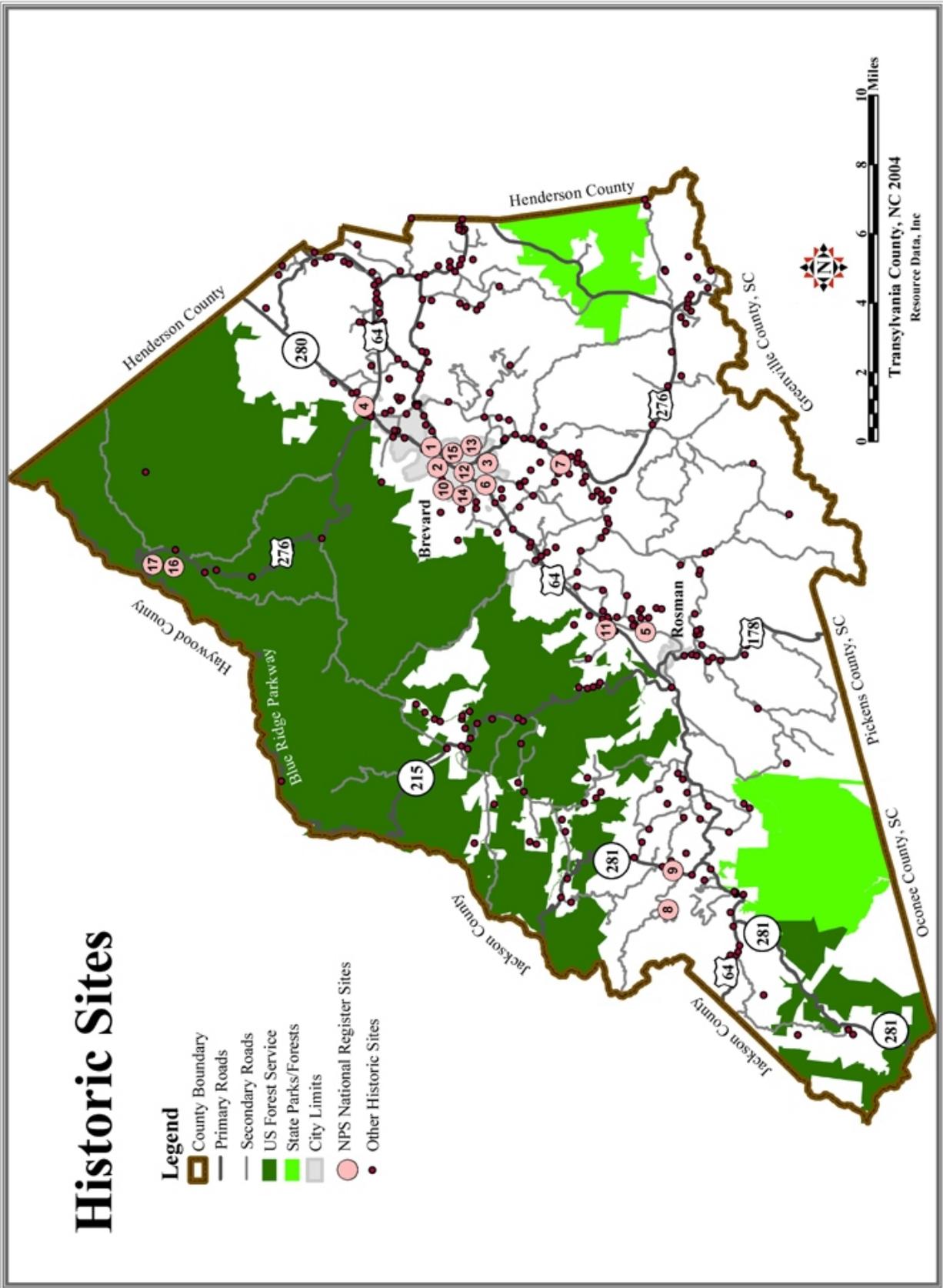


Map 12 shows the general concentrations of historical structures. Future developments should take care to help protect these properties for their historical and cultural significance. Tax incentives are available for properties on the National Register of Historic Places and for properties designated as local historic landmarks. For more information, contact the Transylvania County Joint Historic Preservation Commission or the NC Historic Preservation Office in Arden, NC.

National Register of Historic Properties in Transylvania County

- | | |
|---|------------------------------------|
| 1. William Breese, Jr. House (Inn at Brevard) | 10. McMinn Building |
| 2. Brevard College Stone Fence & Gate | 11. Morgan Mill |
| 3. Max & Claire Brombacher House | 12. Silvermont Mansion |
| 4. William Deavor House | 13. St. Phillip's Episcopal Church |
| 5. Flem Galloway House | 14. Transylvania County Courthouse |
| 6. Godfrey-Barnette House | 15. Main St. Historic District |
| 7. Hanckel-Barclay House (Chestnut Hill) | 16. Biltmore Forest School |
| 8. Hillmont (Greystone Inn) | 17. Cantrell Creek Black Forest |
| 9. Lake Toxaway Methodist Church | Lodge |

Map 13



GOAL V: HOUSING

Promote affordable, safe and adequate housing for all residents.

Objectives

1. Encourage future residential developments to take place in well-designed subdivisions or developments that are coordinated with necessary facilities and services such as water, sewer, roads and emergency services.
2. Promote development and construction of affordable housing units. County Commissioners should consider updating the permit fee schedule to assist developers or individual contractors who are building houses for low income families.
3. Provide and/or coordinate funds and building materials to assist County residents in maintaining or rehabilitating existing, substandard housing in order to meet minimum building requirements.
4. Continue to review and modify existing ordinances and/or policies that affect residential development (e.g., the Subdivision Ordinance, Manufactured Home Park Ordinance and the water/sewer policy).
5. Work with Transylvania County Joint Historic Preservation Commission and other organizations to encourage the protection of historic structures.
6. Planning Department to help coordinate efforts, by local not-for-profit organizations to obtain funding through the Asheville Regional Housing Consortium and other funding sources.
7. Work with the City of Brevard and Town of Rosman to extend water and sewer lines to specific areas of the County that would be ideal for future, higher-density residential development rather than commercial or manufacturing.

COMMUNITY SERVICES

Chapter
6

When planning for the future growth and development of Transylvania County, adequate provisions for community facilities and public services is an important issue. This chapter addresses the future needs of public schools, safety, health care, the County library, and recreational resources.

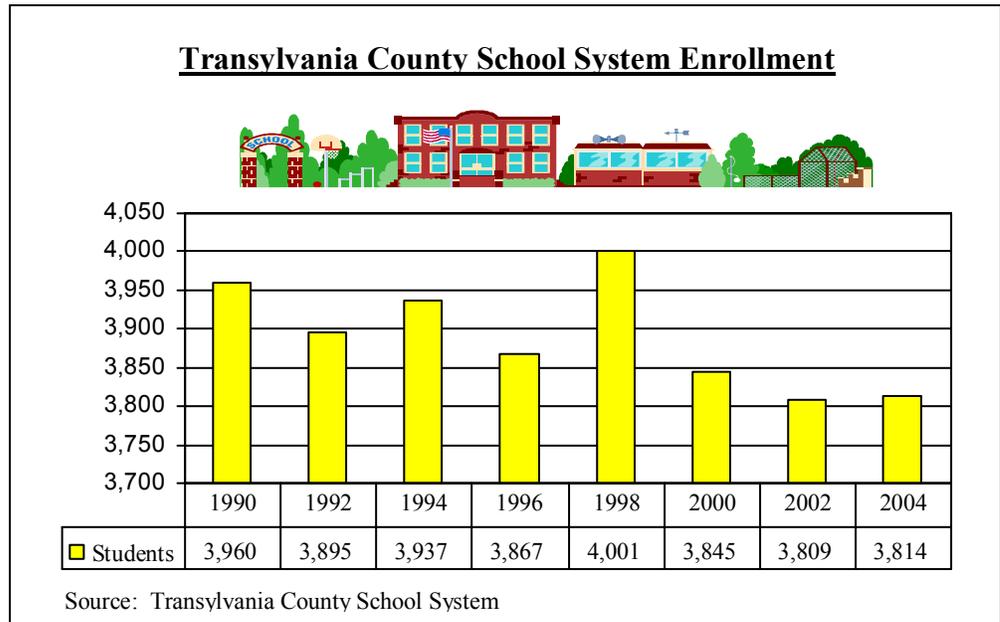
- Funding community service needs has and will continue to be costly.
- The Capital Improvement Plan has helped the County to identify and prioritize its needs.
- In fiscal year 2004-2005, the Capital Improvement Plan identified \$907,747 in capital needs.

EDUCATION

As reported in the *Transylvania County Strategic Plan*, "the county school system was ranked as the number one school system in North Carolina during 1995-1996 and 1996-1997 and consistently ranks in the top 10 public school systems of North Carolina. However, the State no longer ranks school systems but individual schools are given awards of excellence. Brevard High School is the only high school in the State to be designated as a School of Excellence.

The Transylvania County School System provides classes for all children, kindergarten through the twelfth grade as well as education for the gifted and special needs students.

The 2003-2004 average daily enrollment was 3,792 and represented a decrease of approximately 150 students from 1999-2000. However, the 2004-2005 average daily enrollment



increased slightly with a total enrollment of 3,814 students. Employment opportunities and the availability of affordable housing will impact future enrollment patterns.

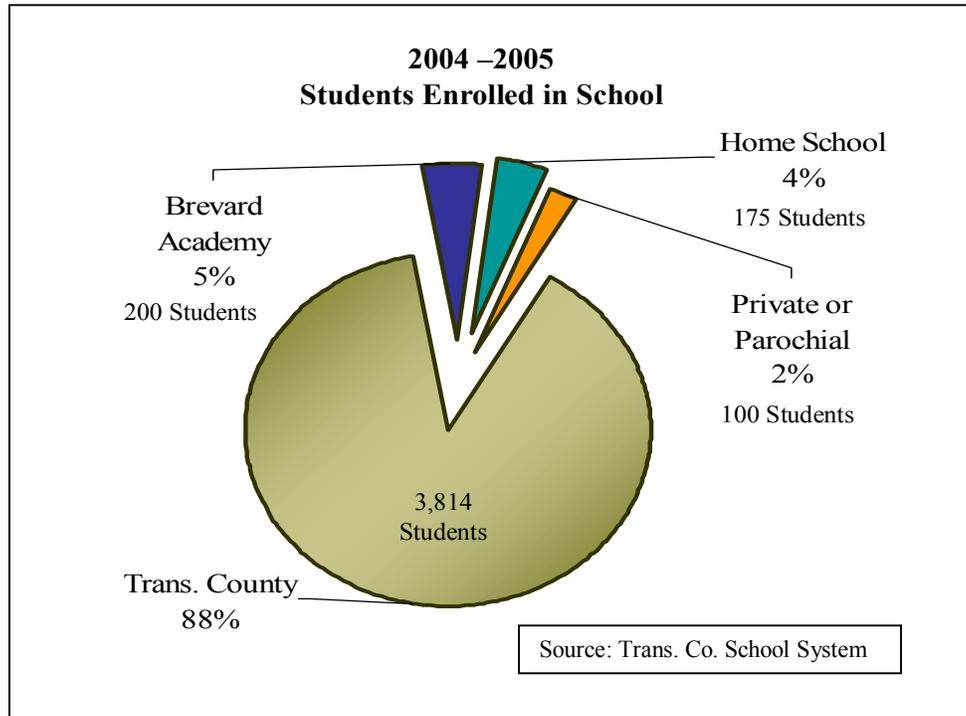
If student enrollment declines, consideration may be given to further consolidate existing schools and facilities. The following chart identifies the Transylvania County 2004-2005 enrollment.

All of the 263 teachers in the system have, at minimum, a baccalaureate degree and North Carolina certification. Salaries range from \$25,000 per year for a first-year teacher with only a

baccalaureate degree to \$49,420 for a teacher with a master's degree and \$52,950 for a teacher with a doctorate after 30 years.

In 2002-03, volunteers from the ranks of retirees, parents and Brevard College students donated 39,268 hours working in the school system. Many volunteers tutor students who need help with reading and math in the elementary schools. The Literacy Council supplies many

of the tutors. Volunteers in all schools help with clerical work. In the high schools many volunteers serve as mentors for students working on senior projects or on one of the senior project presentation/review boards.



SCHOOLS

- Two high schools (9-12) – Brevard and Rosman.
- Two middle schools - Brevard and Rosman
- Four elementary schools (K-5) – Brevard, Pisgah Forest, Rosman and T.C. Henderson
- Davidson River Middle/High – 6-12 (Alternative School)
- One administration office building.
- One maintenance and transportation facility.

2004-2005 Transylvania County School System Enrollment

<u>SCHOOL</u>	<u>ENROLLMENT</u>
Brevard Elementary	561
Brevard Middle	622
Brevard High	788
Davidson River Middle/High	90
Pisgah Forest Elementary	532
Rosman Elementary	368
Rosman Middle	304
Rosman High	370
T.C. Henderson Elementary	179

New additions and renovations have been completed on the following schools:

- Brevard Elementary – converted from pods to self-contained classrooms and built new PE/multipurpose room.
- Rosman Elementary – converted from pods to self-contained classrooms and built new all purpose room.
- Rosman Middle School – new addition and renovation.

- Rosman High School – built new media center.
- T.C. Henderson – built new classroom additions and new activity room
- Davidson River Middle/High – new alternative school.
- Brevard Middle – installed air conditioning and upgraded computer and lab facilities.
- Brevard High School - installed air conditioning and upgraded computer and lab facilities.

Brevard Academy, housed at the Brevard Music Center, was established in 1998 as a charter school for grades kindergarten through eighth. The 2004-2005 enrollment is 200 students.

Blue Ridge Community College

Blue Ridge Community College is a comprehensive institution operating in partnership with the North Carolina Department of Community Colleges. The college provides education, training, and community enrichment activities for individuals and works cooperatively with area businesses and industries to promote economic development.



**Transylvania County Campus
Student Enrollment**

Curricula Enrollment Semester/Quarter	1980	1990	2000
Fall Semester	134	229	448
Winter	117	220	NA
Spring Semester	106	237	409
Summer Semester	70	156	160
Total	427	842	1,071

Brevard College

Brevard College is a private four-year residential college affiliated with the United Methodist Church. Located near the center of Brevard, its 140-acre campus stretches from North Broad Street to Neely Road. It is accredited by the Southern Association of Colleges and Schools, and the North Carolina State Department of Education. The 2004-2005 enrollment is approximately 690 students from 34 states and 20 foreign countries. The goal of the college is to have an enrollment of 1,000 students by 2011. A major fundraising effort began in 2004 to facilitate this goal. The college has an active outreach program to the benefit of the community, and a successful internship program that benefits the students.



PUBLIC SAFETY

- **Communications** – The Transylvania County Commissioners established a Communication Center in 1992 that provides emergency radio communications and 911 services for and between law enforcement, volunteer fire departments, the Rescue Squad, EMS and other county and State agencies. The Communications Center has towers located in Brevard, Rich Mountain, Panther Mountain and Toxaway Mountain. With the expansion of these towers the communication coverage has gone from 30% of the county to over 96%. The Communications Center also has the ability to access state-owned towers on Mount Pisgah, Chambers Mountain, Mount Mitchell and Tryon Peak for mutual aid purposes. The Communications Center also maintains all phone systems for county offices, mobile/portable radio equipment for county offices and emergency services. The Communications Department is responsible for road naming and physical addressing. A county-wide readdressing initiative began in 2004.



- **Sheriff Protection** – The Transylvania County Sheriff's Department has 56 full time and 19 reserve sworn deputies. They operate with 36 marked vehicles and 15 unmarked patrol vehicles. These officers are supported by the State Highway Patrol, State Bureau of Investigation, the Federal Bureau of Investigation, State Game Wardens and State Park Rangers.

The Sheriff's Department's mission is to protect the lives and property of all citizens within the County. The Department also conducts criminal investigation, provides security for the courts, and transports prisoners and mental patients. The Sheriff's Department provides security checks of homes and businesses, maintains the humane control and security of jail inmates, and provides the community with crime prevention and drug awareness educational programs.

A study conducted in 1994 by the County and State concluded that the present jail is inadequate for the number of prisoners housed there and stated that the jail must be expanded or relocated. The County has recently remodeled the old DSS building in order to house the Sheriff's Department. County Commissioners have set aside funds for a new jail. The new jail needs assessment and design planning will begin by the end of 2004.

- **Fire Protection** – Transylvania County has eight volunteer fire departments. Through mutual aid agreements, each volunteer fire department can assist other volunteer fire departments.

The volunteer fire departments are funded through County general funds and Fire Tax Districts, as well as service area contributions. Volunteer Fire Districts are defined by the State Insurance Rating Bureau as being six road miles or less from the station site. Many rural areas in the County are not located within a six-mile fire service district. As a result, residents living outside a fire district have higher fire insurance premiums even though volunteer fire departments provide fire protection.

- **Rescue Squad** – Transylvania County has one volunteer rescue squad. The Rescue Squad serves all of Transylvania County with a total of approximately 35 members. Rescue services include land and water searches and rescues, vehicle extrications and County EMS ambulance backup.

The squad is currently funded through county general funds, the United Way, fund raisers and donations.



- **Emergency Services** – The County provides county-wide emergency services, including Emergency Medical Services (EMS), Emergency Management, Communications and the Fire Marshal's Office. Transylvania County EMS operates at the EMT-Paramedic Level. This Level I involves advanced life support procedures. EMS personnel are backed up by volunteer fire and rescue agencies.

HEALTH CARE

- **Hospital** – Transylvania Community Hospital, a 94-bed facility, offers a wide range of services, including 24-hour emergency care, inpatient and outpatient diagnostic/surgical services, and follow-up care in a transitional care unit. Also offered are a birthing center, cardio-pulmonary rehab center, a comprehensive radiology department, and home care services. Wellness programs and screenings at sites throughout the county are offered regularly. Over 100 active and consulting physicians serve the residents of Transylvania County. TCH strives to be the community's right choice for healthcare, right here at home.



Emergency Room - TCH's emergency room is staffed 24 hours a day by fully-qualified physicians who have specialized training in emergency trauma care, specially-trained emergency room nurses, and support personnel. TCH's emergency room is in county-supplied radio contact with Transylvania County Emergency Medical Service technicians during emergency calls and provides the physician orders needed for emergency care.

Birthing Center - TCH offers a single-room labor, delivery, recovery and postpartum maternity care in a comfortable, home-like environment.

Wellness Programs - TCH's Wellness Department sponsors numerous community education programs on a regular basis. Most of these programs are free of charge or have a minimal fee and include blood screenings for cholesterol, clinics on breast health, and free blood pressure screenings.

Home Care - In 1972, Transylvania County Hospital was licensed by the State of North Carolina and certified by Medicare and Medicaid to operate a home health agency serving residents of the surrounding area. Among the many services

offered by the Home Care agency are physician-directed home health services such as skilled nursing, physical therapy, personal care, and medical social work. These services enable patients to continue recovering from an operation, illness, or accident in the comfort of their own homes; help to delay or even eliminate the need for admission to a hospital or nursing home; and assists people to live independently while enhancing their quality of life. Hospice services are also available for terminally ill patients and their families.

Outpatient Surgery – Surgical capabilities include general surgery, special procedures and diagnostic testing. Blood transfusion, urodynamics, lithotripsy, chronic pain management and stereotactic breast biopsies are available.

Transitional Care Unit – A 10-bed skilled nursing facility offers interim care and rehabilitation to help residents make a smooth transition from hospital to home. Other TCH services include, but are not limited to, diabetes education, a community fitness program, hospice services, nutrition counseling, Rx (prescription) assistance and a sleep lab. TCH prides itself on being the community's *right choice* for healthcare, *right here* at home.

Although the County does not directly fund the Transylvania Community Hospital, efforts should be made to support the hospital as a critical element to the County's economic health and the well-being of our citizens.

- **Health Department** - The Transylvania County Health Department provides a number of health-related services as mandated by county, state and federal regulations. The primary purpose is to protect the community through disease prevention and wellness promotion. Education is an integral part of all health department programs and is available to schools, community groups, food handlers, local industries and the general public. Specific health services include immunizations, diabetic screening, home visits, family planning, child health, nutrition counseling and providing food supplements to women, infants and children. Environmental Health services include food sanitation, insect and rodent control and animal control, drinking water sampling, and permitting sub-surface wastewater disposal (septic) systems.

OTHER COMMUNITY SERVICES

- **Library** - The Transylvania County Library, located in downtown Brevard, is an essential resource for children, families, businesses, community organizations and all citizens. On a typical day, 530 children and adults visit the library, checking out an average of 778 items. At least 60 people use the public computers, often their only connection for Internet access and e-mail. Per capita circulation is the eighth highest in North Carolina and use is growing at a much faster rate than our population.

Recognizing that the current library (built as a post office in 1944) was inadequate for present day usage, the County Commissioners approved the building of a new library. The majority of the funding for the new library is from grants and donations with the County funding the balance. The facility will provide 23,000 square feet of space for collections and public services on the main floor, plus 12,000 square feet for work space and the local

history collections on an upper floor. A large community meeting room seating up to 250 persons will be equipped for teleconferencing, computer use, and multi-media presentations. The meeting room will be available during evenings and weekends when the library is closed. A separate Children's Area will feature an information and service desk, reading and study areas for pre-school and elementary school children, and space for the juvenile fiction, nonfiction and audiovisual collections. This area will also include a separate story-time room to accommodate as many as 50 children for special activities. There will also be ample space for adult collections, periodicals and research materials, and for both leisure reading and deskwork. A local history room will house the County Archives, currently stored (with limited public access) at Silvermont, a historic home owned by the County. These archives contain a fascinating array of manuscripts, photographs, maps and other historic documents.

Reflecting the importance of the library to the community, the County has provided an extraordinary site for the new facility – a full city block close to the center of downtown. An existing arboretum will be nearly doubled in size and a steep slope at the northeast corner of the property will be developed into a hillside amphitheater for outdoor programs. There will be ample room for parking. Construction began in the summer of 2004. The new library will open sometime in 2005. With design flexibility carefully built in, the new facility will be fully serviceable for at least 40 years.

A new library, with better access to resources and technology, will play a key role in community development and economic growth. Our public library plays an increasingly important role in the education of our children and meeting the needs of our expanding population of older adults. This is the only library in Transylvania County; it is the center of information and lifelong learning for all ages.

➤ **Child Care Facilities**

Transylvania County has 12 full-time day care pre-school programs with a capacity of 444 children; three registered day care homes with a capacity of 18 children; and nine part-time day programs with a capacity of 375 children; five pre-school part-time programs with 256 children. There are also approximately nine non-registered legal providers available through the Transylvania County Child Development office (TCCD). The TCCD program operates the Adventure Center for an average of 72 children and serves both handicapped and non-handicapped children in a main stream setting.

The administration office of TCCD serves as a child care resource and referral agency that provides information and referral for child care; financial assistance for eligible families; consultation and recruitment for the start-up of child care programs for industry and private individuals; ongoing consultation and training for child care providers; promotion of high quality child care within the county; and a loan library of child care equipment and other teacher resource material.

➤ **Recreational Facilities**

For many, the entire county, and certainly the national forests, state forests, and state parks are considered ideal recreational areas with an abundance of easily accessible camping, hiking, biking, fishing, and recreational areas. The table on page 73 and *Map 14* on page

74 identify the major recreational areas and community facilities located throughout the County.

The County has a recreation department that is responsible for providing recreational and leisure opportunities for all Transylvania County citizens and maintaining local parks and recreation facilities. The County's park facilities include Silvermont Park, Champion Park, South Broad Park and two French Broad River access sites for boats.

The Transylvania Activity Center, houses the Recreation Department offices, a gymnasium, activity room, soccer fields and two softball fields. The center is located at 1150 Ecusta Road, Pisgah Forest, NC.

As the County continues to develop, additional recreational facilities will be necessary. Developing new and expanding existing ball fields and building an indoor swimming pool are examples of needed recreational facilities.

Particular attention should be given to the needs and activities of older adults. Although prioritization of recreational facilities may not occur fully, the County should not compete with existing and future private facilities. Attempts should be made to encourage local private and public businesses to open or expand their services.

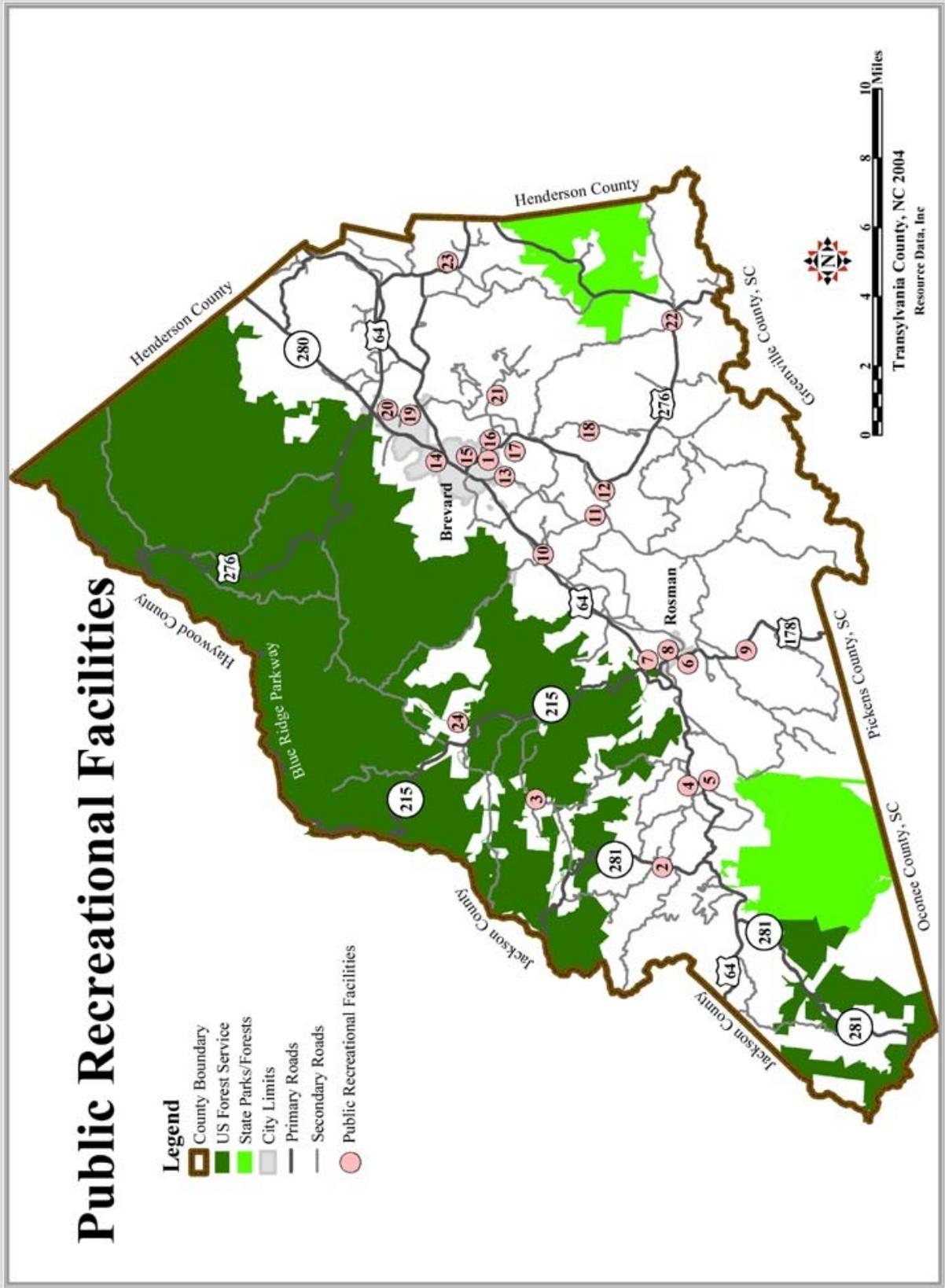
Recognizing this need, the Boys and Girls Club of Transylvania County recently acquired a new facility and currently serves 250 members and is expected to grow to 350 new members in the next two years.

RECREATION AND COMMUNITY FACILITIES	
1. Boys and Girls Club	13. Brevard High School
2. Lake Toxaway Comm. Center	14. Brevard Middle School
3. Silversteen Comm. Center	15. Franklin Park
4. Quebec Community Center	16. Silvermont Park
5. T.C. Henderson School	17. Hap Simpson Park
6. Rosman Elementary	18. See Off Comm. Center
7. Champion Park	19. Pisgah Forest Elementary
8. Rosman High School	20. Transylvania Activity Center
9. Eastatoe Comm. Center	21. Williamson Creek Comm. Center
10. Cathey's Creek Comm. Center	22. Cedar Mountain Comm. Center
11. Island Ford Boat Landing	23. Little River Comm. Center
12. Dunn's Rock Comm. Center	24. Balsam Grove Comm. Center

211 Service

211 is a new non-emergency community service information line that provides the caller with detailed information about health, human services and volunteer opportunities 24 hours a day. The service is also available on-line at www.211wnc.org.

Map 14



GOAL VI: COMMUNITY FACILITIES

Plan and provide appropriate public facilities and services for County residents and businesses.

Objectives

1. Continue to implement a Capital Improvement Plan (CIP) that coordinates the development and funding of all county facilities and services.
2. Plan and promote adequate public facilities, staffing and services to meet existing and anticipated needs. (i.e., schools, jail, library, courthouse, water and sewer extensions, administration building, recreation facilities, etc.)
3. Maintain and coordinate County emergency services to meet growing rural population needs and future State and Federal requirements (i.e., radio communications, rural fire departments and rescue squads, and Sheriff's Department). County Commissioners and Manager to explore ways to eliminate duplicative services provided within the County and between local governments.
4. Implement a countywide address system to coordinate addresses with the postal system.
5. Actively support and help facilitate communications between all the educational entities in the community.
6. Work to ensure that adequate child and elder care facilities are available for all County residents.
7. County Commissioners and EDAB to continually assist and support Transylvania County Community Hospital as it continues to grow and develop in response to the changing demographic and health needs of our citizens.
8. County Government to work with the City of Brevard, Town of Rosman, Sheriff's Department, Police Department and local citizens to develop a weaponry practice/training facility.
9. Encourage County Government, Town of Rosman and City of Brevard to work with public and private landowners to implement a trail system for motorcycles and four-wheelers utilizing existing logging roads and available land throughout the County.

LAND USE PATTERNS

Transylvania County has a total land area of 380 square miles or 242,988 acres. The existing land use patterns, established over a number of years, define Transylvania County as a predominantly rural, residential county. The US Forest Service is the largest single landowner with nearly 88,312 acres dedicated to forestry, wildlife habitat and recreation. An additional 24,320 acres has been obtained by the State of North Carolina and dedicated as State Parks or Forests. Agricultural lands, excluding forestry and trout farming, are generally found in the valleys located along the County’s numerous streams and rivers. The urbanized areas in the County are the City of Brevard and portions of its Extraterritorial Jurisdiction (ETJ) and the Town of Rosman. With the closure of the major manufacturing facilities, industrial sites are limited, although there are several industries located throughout the County. Most are located near Brevard or Rosman. Interestingly, even though Transylvania County is a rural county, when you exclude public lands the density increases from 78 persons per square mile to over 145 persons per square mile. This perspective clearly shows that the County’s population growth and impact on developable land is significant.

Map 15 identifies the County’s major land use patterns. The classification system used to show the current land uses is based on guidelines from the NC Division of Community Assistance. All property boundaries, including the national forest, were digitized (drawn) from the County’s orthophotography maps after they were reconciled with existing tax maps. Numbers in brackets represent the approximate percentage that each classification occupies of the County’s total land area.

Public Lands (46.3%) – National Forests, State Parks, City of Brevard, Transylvania County and Town of Rosman owned properties.

Urban (1.3%) - Residents are provided with the usual municipal services including public water, sewer, recreational facilities, and police and fire protection.

- City of Brevard

Urban Transition (3.5%) - Land currently developed for partial urban services or additional land necessary to accommodate future urban population and economic growth. These areas may be served by public water, sewer, and other urban services including public streets, and emergency services.

- City of Brevard Extraterritorial Jurisdiction

Community (0.1%) - Land that is limited to partial urban residential and/or commercial land uses and that has historically been a focus for clustered, rural settlement. Community lands are typically developed sufficiently to justify services such as public water, but not requiring public sewer service.

- Town of Rosman

Industrial (0.7%) – Formerly, this category included DuPont/AGFA properties. Lands currently committed to industrial development are very limited. Ecusta Business Development Center currently controls approximately 575 acres. In Transylvania County, very little land is actually dedicated for industrial use.

Generally speaking, ideal industrial sites are found where there is convenient access to public water and sewer, transportation (including railroad) and natural gas. Industries located in the county include:

- Aegis Systems
- America Carolina Stamping
- Ecusta Bus. Dev. Center
- GAIA Herbs
- Genie Products
- Keir Manufacturing
- LBM Industries
- M-B Industries
- PARI
- Penrose Rock Quarry
- PharmAgra
- Pisgah Labs
- Ring Industrial Group
- Smith Systems
- Transylvania Vocational Services
- Vitalie Manufacturing

Subdivisions (12.9%)

Subdivisions with Services - This category primarily includes private residential developments located in the County that have public or private water and/or sewer systems located partially or throughout the development. Generally, these developments have restrictive covenants or deeds that protect individuals and their property from unwanted nuisances. Restrictive covenants often include: building setbacks and size restrictions, house color, road maintenance, restrictions on animals, etc. Major residential developments include:

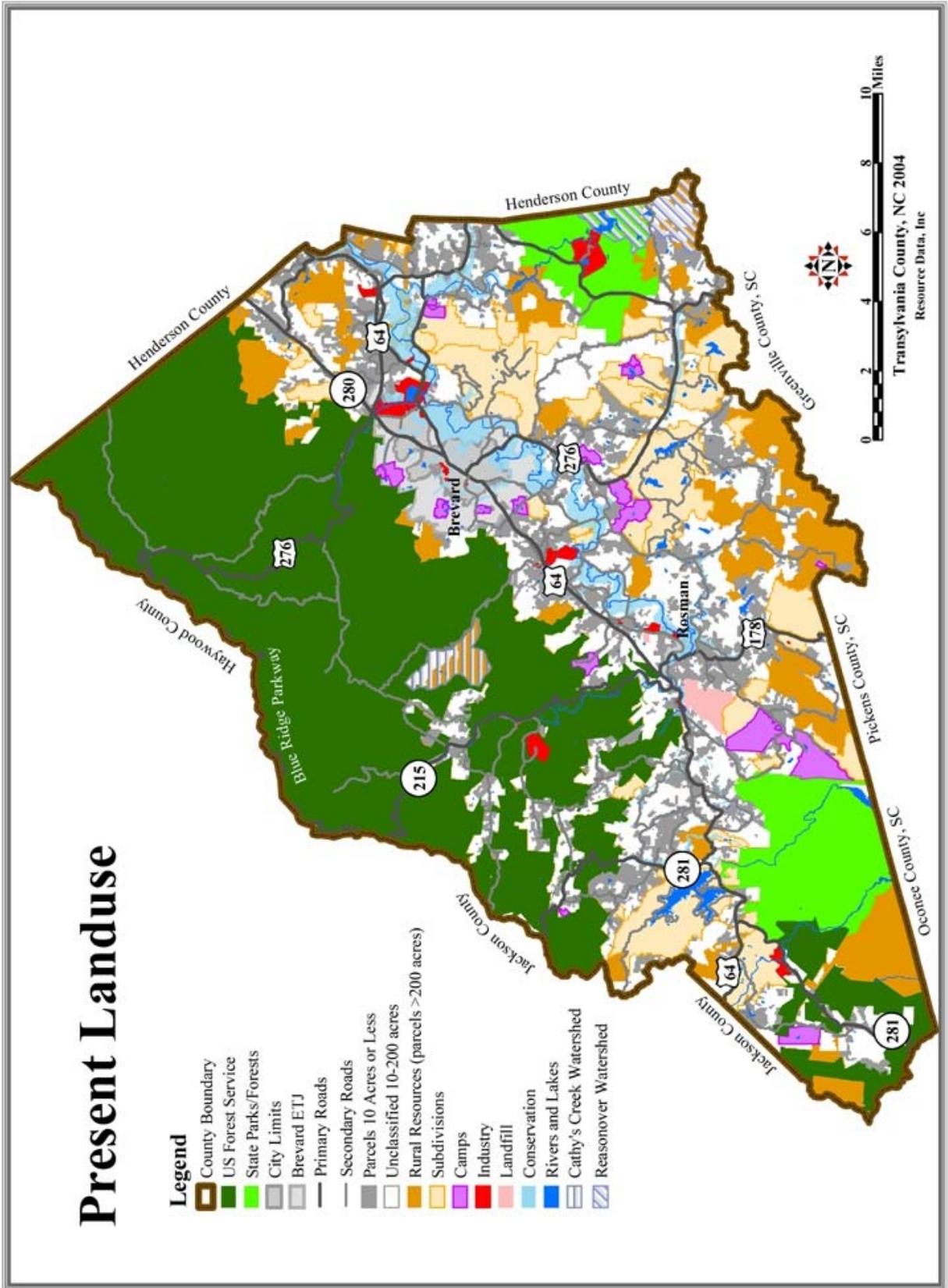
- Conestee Falls
- Knob Creek
- Sherwood Forest
- Toxaway Falls
- Indian Falls
- Catatoga
- Lake Toxaway
- Sapphire Lakes

Subdivisions without Services - This category primarily includes private residential developments located in the County that have private wells or septic systems. Over the past five years there has been a growing trend to develop residential developments with large lots that exceed 10 acres. These developments are sometimes associated with conservation easements and limit future land divisions.

- Richland Ridge
- Stone Lake
- Steel Creek
- Sylvan Habitat
- The Preserve at Rock Creek
- The Reserve
- Toxaway (portions)

Camps (1.2%) - Summer camps not only support our local economy, they also protect large areas of land. There are approximately 15 summer camps that represent well over 3,000 acres.

Rural Resource (28.5%) - Lands currently committed to rural agriculture, forestry or residential development and not requiring public water or services. The greatest percentage of non-forest land in the County is rural. This category also includes private lands where each



parcel is greater than 200 acres. These lands are identified for natural resource management and have high potential for commercial, agriculture and forestry use. These lands often have one or more limitations that would make development costly and/or hazardous; and lands containing irreplaceable, limited, or significant natural, wildlife, recreational or scenic resources.

- Cascade Power Co.: 1,550 acres
- Champion Cattle & Tree Farm: 7,075 acres
- Conestee Falls, exempt: 1,538 acres
- Lake Toxaway Co.: 2,513 acres

Conservation (5.5%) - Lands that are unique, fragile, or hazardous for development, such as the floodplain and water supply watersheds. These lands have regulations that affect the development type and density.

- Floodplain: 10,974 acres
- Cathey's Creek watershed: 7,295 acres
- Reasonover Creek (Lake Julia) watershed: 2,623 acres

FUTURE PATTERNS

Trying to predict future land uses is an extremely difficult task. However, it is possible to identify historical and existing development trends. Projecting where future land development is likely to occur can help ensure that future growth has access to public services such as water and sewer. Based on historical trends and future growth projections, the County will be in a position to pro-actively encourage responsible development while ensuring the best use of taxpayer's money.

Based on existing trends, the County will remain a predominately rural, residential County. The foreseeable major changes include 1) the future growth of Brevard based on the City's Land Use Plan, (adopted August 19, 2002) the Brevard Comprehensive Water Plan and the *201 Facilities Plan*; and 2) the continued expansion of existing and new residential developments throughout the County.

Public Lands: During the next ten years it is unlikely that there will be significant changes to the amount of national forests or state parks within Transylvania County.

Urban: During the next ten years, Brevard will continue to expand by annexing property in the current one-mile ETJ that become more densely populated or where the city extends public water and sewer service. Annexation can be voluntarily requested by residents desiring to have access to city services or involuntarily imposed upon them by the city. If annexation is not requested by residents, then the city must follow very stringent annexation guidelines set forth in the NC General Statutes.

The Pisgah National Forest and the French Broad River (and floodplain) will act as future barriers to Brevard's expansion to the West and East. Another factor that will influence Brevard's annexation abilities is that within a two-year period of annexing a new area, the city must provide water and sewer services to the newly-annexed residences.

Urban Transition: As Brevard annexes additional property, it is likely that the city will also extend the one-mile ETJ. It is likely the annexations and the ETJ will extend toward Asheville along NC 280 to the foot of Little Mountain and toward Rosman along US 64 west to approximately SR 1110 (Island Ford Rd). As the ETJ is extended, the property within this area will be within the city's planning jurisdiction and its zoning ordinance.

Community: The Town of Rosman is the only area in the County that would be considered eligible for this classification. In 2003, Rosman annexed 24 acres. It is likely that Rosman will continue to grow during the next ten years but would remain in this classification.

Industrial: Identifying future industrial sites or general industrial areas is difficult. The primary reason for this difficulty is that there is no zoning in the County. Nevertheless, the most suitable future industrial locations in the County will focus around existing industry and/or commercial areas or land that can have access to public water and sewer, natural gas, major road access and relatively flat land not located in the floodplain. General land areas in the County that are (and can be) most suited for future industrial development include:

- Land owned by Ecusta. Additional land owned by Ecusta could be used for future industrial development.
- Land located along US 64 west near the Cathey's Creek area south toward Rosman if public water and sewer can be extended.
- Land located along US 64 east in the Little River area. Land in this general area has immediate access to railroad, natural gas and US 64.

Subdivision with/without services: Undoubtedly, new residential subdivisions will be created during the next ten years and existing subdivision developments currently providing water and/or wastewater services will continue to grow. In addition, growth of South Asheville and the Mills River area and easy access to I-26 via NC 280, will promote accelerated residential development in the Boyd and Little River townships.

Camps: It is unlikely that there will be a significant change in the number or acreage of camps, however, as privately owned large parcels, these properties are potential candidates for residential development.

Rural Resource: Large rural resource holdings are privately owned and are subject to being divided and sold at any time. As of June 2004, there were 14 tracts of undeveloped property with 500 or more acres. The larger private land holdings are typically located in the floodplain or in very steep, if not unaccessible locations. Major holdings with 1,000 acres or more include:

- Cascade Power Company – This private property is ideally suited for future residential development.
- Champion Cattle and Tree Farm – Much of this property is currently managed for timber. Although there are some areas that are well suited for residential development, it is unlikely that all 7,075 acres would be developed during the next ten years.

- Connestee Falls – This property is currently identified as “green space” for recreational and aesthetic purposes. Significantly, this property is virtually undevelopable due to severe slopes and water impoundments. The likelihood for future change is negligible.

The County’s rural characterization will continue to prevail during the next ten years.

Conservation: The FEMA-identified floodplain and Cathey’s Creek water supply watershed will probably not change much during the next ten years; however, there is a strong possibility that additional water supply watersheds will be identified or expanded by the State. The French Broad River could be designated as a WS-V watershed (this classification does not have land use restrictions) if the State expanded the definition of a water supply. As Brevard continues to grow or if another municipality outside of Transylvania County decides to use the French Broad River and its tributaries as a drinking water supply source, the County will have to implement land use regulations to protect that source from possible contamination.

GOAL VII: LAND USE

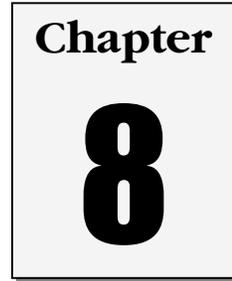
Promote the best use of land while protecting citizen’s property rights.

Objectives

1. Continue developing the County’s geographic information system (GIS) that shows where existing resources are located in relation to floodplain, steep slopes, existing roads, etc.
2. Update and promote through aggressive outreach and education, the County’s Best Management Practices for Corridors.
3. Staff to collect and Planning Board to review different land use practices from other rural jurisdictions.

IMPLEMENTATION TOOLS

The North Carolina Constitution and State statutes provide both mandate and permission for cities and counties to engage in land use planning. The General Statutes also provide implementation tools for planning and include public policy measures and regulatory measures. Public policy measures include adoption of comprehensive plans, capital improvement plans, utility extension policies and taxing policies. Regulatory measures, for example, include subdivision regulations, building and housing code enforcement, and ordinances for water supply watershed protection.



POLICY MEASURES

Affordable Housing Programs – Transylvania County participates in several affordable housing initiatives. As a member of the Asheville Regional Housing Consortium, Transylvania County obtains and implements community development block grants to improve the supply and quality of affordable housing for low-income people. Low-income first-time homebuyers are assisted with home financing through the HOME program.

Best Management Practices – As an example, in May 2001, the Transylvania County Planning Board developed the “Best Management Practices”, which is a guideline for blending your business and home into our community. The purpose of the guideline is to establish best management practices for property owners and developers in order to promote sound economic development, growth and road safety while protecting the county’s natural beauty.

Capital Improvement Plan – Units of local government carry out a variety of capital improvement projects that involve large investments of public funds. These projects often provide for the construction of physical facilities and services such as water and sewer lines, and schools. All too often, such projects are prioritized in response to public pressure or to requirements of state and federal mandates or grant programs. A Capital Improvement Plan inventories, analyzes and prioritizes all major projects to be acquired or funded. A capital improvement plan affords the County Commissioners and manager the opportunity to coordinate projects as to timing, location and financing. Ideally, the Capital Improvement Plan should be adopted by the Commissioners along with the regular fiscal budget.

Comprehensive Plan – The Comprehensive Plan must be formally adopted by the Transylvania County Board of Commissioners to become an official policy statement to guide future development decisions regarding matters such as providing and locating public services and community facilities.

Community Acceptance and Cooperation – Citizen participation is the most important factor determining the success of the Comprehensive Plan. When the citizens are informed about, and are involved in, the planning process, they are more likely to accept the goals and recommendations of the Comprehensive Plan and be willing to work toward them.

Successful citizen participation can be achieved through public education programs regarding the planning process. Education programs should include newspaper articles and radio programs to

provide a general background to the largest possible audience. Meetings between the Planning Department, the Planning Board, and local civic organizations and community clubs should be encouraged as a mechanism for public education and citizen input. Surveys are also an important tool for obtaining citizen input.

Strategic Planning – The purpose of a Strategic Plan is to focus on major issues that can be affected in a relatively short time frame (3-5 years) as opposed to the time frame of a Comprehensive Plan (10 or more years). Future strategic planning efforts should be initiated to help identify new issues and concerns to be addressed by the County. The City of Brevard has initiated a planning process known as FOCUS 2020 and the County has developed a strategic economic development process in response to the economic changes that occurred following the closure of Ecusta, AGFA and Coats America.

Taxing Policies – The property tax influences land use patterns. According to existing statutes, property assessments are to be based upon the “true market value” of the land. This “true market value” will vary according to land uses. Prime agricultural land and forest lands near urban areas may be assessed as agricultural land or as urban land that will be developed. Assessment as urban land may result in higher taxes, which makes continued use of the land for farming impractical. Assessment done in conformance with the Comprehensive Plan would encourage designated lands to remain agricultural and forest lands while encouraging suitable lands to be converted to urban uses.

Thoroughfare Plan and Official Map – The County’s Thoroughfare Plan and map were developed by the North Carolina Department of Transportation with assistance from the Transylvania County Transportation Committee. The Thoroughfare Plan identifies the current and future network of roads needed for travel in and around Transylvania County. The plan also identifies measures that the County should take to ensure that existing and future development plans and changing land use patterns are consistent with the adopted Thoroughfare Plan.

Utility Extension Policies – A utility extension policy is a written policy statement or agreement between the County and both local municipalities regarding the extension and/or coordination of public utilities, such as water and sewer, to previously unserved areas. Such policy should define the roles of the County, municipalities and of the developer regarding financial responsibility. The extension of these public services increases the desirability of land for future development and, in the case of sewer service extensions, also helps protect the County’s streams from pollution. In addition, a utility extensions policy may help reduce the cost of extending utilities through unincorporated or sparsely populated areas to serve future private industrial, commercial or residential developments. Transylvania County, the City of Brevard and the Town of Rosman have a joint policy in place.

REGULATORY MEASURES - Adopted

Building Code Enforcement – Transylvania County follows the International Building Code with NC Amendments. Building codes are governmental requirements placed on private and public structures to protect the occupants from the hazards of living and working in unsound, unhealthy, or otherwise dangerous structures. Building and other construction codes such as

plumbing and electrical codes establish standards for materials and methods for new construction.

Farmland Preservation Ordinance – The purpose of a farmland preservation ordinance is to recognize the economic, environmental and cultural importance of agriculture to Transylvania County and would encourage the voluntary preservation and protection of farmland preservation districts where landowners would not be required to connect to water and/or sewer systems, or be assessed water and sewer charges until that property is connected to such service. Farmland protection district members would also have increased protection from undesired non-farm developments and other negative impacts on farming. This ordinance was adopted in March of 1996 and is overseen by the Transylvania County Cooperative Extension Office and the Agriculture Advisory Board.

Flood Damage Control Ordinance – The County Commissioners adopted this Ordinance in March 1995. The purpose of this ordinance is to promote the public health, safety, and general welfare and to minimize public and private losses due to flood conditions in specific areas. Concerns about continued filling and building in the 100-year floodplain as well as increased stormwater run-off need to be addressed jointly by county, municipal, state and federal agencies. Left unchecked, increased filling and run-off will result in increased flood levels.

Manufactured Home Park Ordinance – The Manufactured Home Park Ordinance was adopted in 1974 and has been revised several times since. The intent of a manufactured home park ordinance is to ensure that residents and emergency personnel can safely access manufactured homes in a timely and safe manner.

Sign Control Ordinance – The County adopted a Sign Control and Scenic Corridor Ordinance in 1991. As the County continues to grow, this ordinance is reviewed periodically to ensure that it meets the County's needs. In time, it may become desirable to revise the Sign Control Ordinance to provide for the amortization (eventual removal) of existing signs and increase the number of scenic corridors where off-premise signs would not be allowed.

Subdivision Regulations – In February 1991, the County Commissioners adopted a Subdivision Ordinance. The primary purpose of this Ordinance is to ensure that roads are built to minimum standards to provide emergency vehicle access to new developments. This ordinance is reviewed periodically to ensure that the ordinance meets the County's needs.

Telecommunications Tower Ordinance – The Telecommunications Tower Ordinance was adopted in October 1996. The purpose of this Ordinance is to regulate the construction of telecommunications towers to avoid potential damage to adjacent properties from tower failure and falling ice, to maximize the use of existing and new towers in order to reduce the number of towers needed, to minimize potential hazards to low-flying law-enforcement and medical helicopters, to restrict towers that adversely detract from the natural beauty of the mountains by discouraging visual eyesores as stated in the County's *Comprehensive Plan* and to minimize the negative economic impact on tourism and scientific research.

POTENTIAL REGULATORY MEASURES

Automobile Junkyard Ordinance – During 1990 and again in 1994, the Planning Department was asked by the County Commissioners to develop a draft Automobile Junkyard Ordinance. The proposed ordinance's stated purposes included protecting human health, promoting economic interest, and protecting the natural environment – specifically surface and ground water. However, this ordinance was never adopted. The County may want to consider this Ordinance sometime in the near future.

Environmental Policy Ordinance – In North Carolina, local governments are authorized to adopt an environmental policy ordinance for their area of jurisdiction. An environmental policy ordinance would require a developer or builder to submit a statement identifying the effects the proposed development would have on the environment, including potential for erosion, destruction of rare plants and animal habitats, and degradation of water bodies as well as socioeconomic effects. This statement alerts the County to potential environmental damage and enables the appropriate departments to monitor these activities more closely. Although the County does not have this type of ordinance, the County Commissioners recently created a Natural Resources Advisory Board (Spring of 2004) to monitor environmental issues and make recommendations to the County Commissioners.

Erosion Control – Presently the State enforces erosion control in Transylvania County. In time, the County may want to consider adopting and enforcing its own Erosion Control Ordinance. This could allow the County to more closely monitor development and prevent water pollution for sedimentation. Counties in Western North Carolina that have their own erosion control ordinances include: Buncombe, Haywood, Jackson, Swain, Avery and Macon.

Stormwater Control Measures – During the next ten years, the County will likely be responsible for implementing stormwater control measures as mandated by the Federal government. Such measures will include diverting storm water run-off from directly entering streams by building wet detention ponds or settling basins. Updating the Flood Damage Control Ordinance to reflect new growth patterns and encroachment on the floodplain may be one measure to control stormwater problems. Another measure might include developing a Low Density Development Ordinance or management guide. The purpose of this would be to promote sustainable growth, but minimize the adverse impact that impermeable surface areas have on stormwater run-off and floodplains. Water quality will benefit from low impact development practices because 90% of pollutants are delivered in the run-off from the first inch of rainfall.

Zoning – Zoning is a tool that provides a means of coordinating land use planning, infrastructure planning and environmental protection. Zoning can help guide growth and development in the County in a manner that is consistent with the County's vision and goals. The purpose of zoning is to help prevent inconsistent and unpredictable development by dividing the county into districts with corresponding land uses. Each district would allow only those uses that are compatible with the stated purpose and existing land uses. To accomplish this goal, zoning can restrict the location, height, bulk, and sizes of future buildings and structures.

According to 2004 data from the NC Department of Commerce, Division of Community Assistance, 70 of the 100 North Carolina counties had some form of zoning. Of the remaining counties, 17 had subdivision regulations only and 13 counties had no zoning or subdivision regulations.

Transylvania County can adopt zoning county-wide or on any contiguous land area that contains at least 640 acres and where there are at least ten separate tracts of land in separate ownership (G.S. 153-A-342) when requested by the residents of that area. One interesting note is that a municipality cannot extend its ETJ into an area where a county enforces (1) zoning, (2) a subdivision ordinance, and (3) State Building Code.

APPENDIX A

MAJOR ROCK FORMATIONS

- **Biotite Gneiss** – Generally, the biotite gneiss is light to dull gray or yellowish brown. Biotite gneiss is resistant to weathering and forms mountain ridges in the area, including the northern portion of Pisgah Ridge.
- **Biotite–Injection Gneiss** – This rock type consists of alternating layers of biotite gneiss and granitic rock. Composition layers are commonly contorted and are generally less than one inch thick. The granitic layers are coarser grained than the biotite gneiss layers. Biotite-injection gneiss is resistant to weathering and forms mountain ridges.
- **Hornblende Gneiss** – Hornblende gneiss is black to dark green on fresh surfaces and weathers to dark reddish brown. Generally, the rock is fine to medium grained and foliated, but locally may be coarse grained. Generally, hornblende gneiss is deeply weathered and forms topography of moderate relief. Where hornblende gneiss occurs in mountain ridges, it is associated with biotite gneiss or granite.
- **Granite Intrusives** – Small granite intrusives, which include small stocks and many coarse and fine grained granite dikes, occur in the biotite gneiss, hornblende gneiss, and garnet – muscovite schist units. Granite – gneiss intrusives form cores of mountain ridges in areas that are underlain by muscovite-garnet schist and hornblende gneiss.
- **Whiteside Granite** – This rock type crops out in western and southeastern Transylvania County. Whiteside granite is of white or light gray color and weathers to a light gray color, except where weathered inclusions of hornblende gneiss cause a reddish brown stain. The massive variety forms sheer cliffs and peaks that may correspond to the centers of intrusion.
- **Henderson Gneiss** – The Henderson gneiss is of medium gray to dark gray color and weathers to a light gray or yellowish to reddish brown color. The light colors are most common in the weathered rock. The broad floodplain of the French Broad River in Transylvania County and mountain ridges southeast of the French Broad River have developed upon the Henderson gneiss.
- **Brevard Schist** – The Brevard schist is generally dark bluish gray, except for lenses and layers of light gray quartzite and marble, and weathers to dull gray or brown. The Brevard schist is bounded on the southeast by the Henderson gneiss and on the northwest by biotite gneiss and coarser grained garnet muscovite schist. From the South Carolina line northeastward, the northwest edge of the Brevard schist is in sharp and grooved and striated surfaces along this contact suggest fault movement. Most of the Brevard schist rocks weather readily and the resulting topography varies from nearly flat to moderately rugged.

APPENDIX B

SOIL ASSOCIATIONS

U.S. Department of Agriculture Soil Conservation Service – January 1974

1. **Rosman-Toxaway-Transylvania Association** – Well drained to very poorly drained, nearly level soils that are underlain by loam and fine sandy loam or that have a subsoil dominantly of silty clay loam; on floodplain.

This association occupies about 8% of the land in the County, mainly along the French Broad River and its larger tributaries. The association is characterized by nearly level stream floodplain that are subject to very frequent flooding of very brief duration.

Rosman soils make up about 32% of this association and are well drained to moderately well drained. They occupy slightly elevated positions on floodplain near the stream.

Toxaway soils make up about 27% of this association and are very poorly drained. They occupy low places and depressions on floodplain that are away from the stream in most places.

Transylvania soils make up about 8% of this association and are well drained and moderately well drained. They are in slightly depressional areas on floodplain and near the stream.

Minor soils make up 33% of this association. They are mainly the Augusta and Delanco soils on stream terraces, the Ponzer and Suncook soils on floodplain, and the Brevard soils on toe slopes, in coves, and on stream terraces.

Most of the acreage in this association has been cleared for farming. The rest is in forest, mainly yellow poplar, red maple, sycamore, white pine and river birch. A few large commercial farms are in this association, but most of the farms are small and are operated by part-time farmers. The principal crops grown are corn, hay, sod and truck crops. These soils can be farmed intensively and, with proper artificial drainage and other measures for flood control, are well suited to most locally grown crops. They are generally not suitable for residential or industrial development, because of the flood hazard.

A seasonally high water table and very frequent flooding are the chief limitations of these soils.

2. **Chaster-Edneyville-Hayesville Association** – Well drained, rolling to steep soils that have a subsoil of fine sandy loam to clay; on broad, smooth ridge tops and side slopes.

This association occupies about 20% of the County and is characterized by broad ridge tops and smooth, moderate to steep side slopes.

Chaster soils make up about 50% of this association; Hayesville soils, about 8%; and Edneyville soils, about 10%. These are all well drained soils.

Minor soils make up about 32% of this association. They include Brevard, Tate, Tusquitee and Ashe soils. The Brevard, Tate, and Tusquitee soils are in coves, on toe slopes, and on stream terraces throughout the association. The Ashe soils are on the rougher and steeper areas within the association.

Most of this association is wooded. The more common trees are oaks, hickory, yellow poplar, and white short-leaf, and pitch pines. The understory is dogwood, huckleberry, mountain laurel and rhododendron. The more gently sloping soils are well suited to most locally grown crops.

The steep slopes and surface stones are the chief limitations of these soils.

3. **Ashe-Edneyville Association** - Somewhat excessively drained and well drained, moderately steep to very steep soils that have a subsoil of sandy loam to clay loam; on mountains.

This association occupies about 37% of the County and is characterized by narrow ridge tops and rough, steep side slopes.

Ashe soils make up about 35% of this association and include the Brevard, Tate, Tusquitee, Chaster and Chandler soils. The Brevard, Tate and Tusquitee soils are in coves and on toe slopes throughout the association. The Chaster soils are on the smoother ridges and side slopes, and the Chandler soils are in areas underlain by mica gneiss.

Practically all of the acreage in this association is in forest, commonly scarlet and chestnut oaks, pitch pine, black gum and sourwood trees with an understory of dogwood, huckleberry, mountain laurel and rhododendron. The more moderately sloping soils are fairly well suited to well suited for most locally grown crops.

4. **Chandler-Fannin-Watauga Association** – Somewhat excessively drained and well drained, rolling to very steep, micaceous soils that have a subsoil of fine sandy loam to clay loam; on narrow ridge tops and side slopes.

This association occupies about 21% of the County and is characterized by narrow ridge tops and steep side slopes.

Chandler soils make up about 30% of this association. These are somewhat excessively drained, micaceous soils. Fannin soils make up about 25% of this association and Watauga soils, about 12%. These are well drained, micaceous soils.

Minor soils make up about 33% of this association. They include the Brevard, Tate, Tusquitee, Edneyville, and Ashe soils. The Brevard, Tate and Tusquitee soils are in coves and on toe slopes throughout the area. The Edneyville and Ashe soils are in areas underlain by granite and gneiss.

Practically all of the acreage in this association is wooded. The more common trees are oak, hickory, and short-leaf and pitch pines. The understory is dogwood, huckleberry, mountain laurel and rhododendron. The more moderately sloping soils are fairly well suited to well suited for most locally grown crops. The steep slopes, stoniness and dryness are the chief limitations of these soils.

5. **Brandywine-Porters-Burton Association** - Well drained and moderately well drained, moderately steep to very steep soils that have a subsoil of sandy loam to clay loam; on the higher mountains.

This association occupies about 8% of the County and is characterized by narrow ridge tops and steep side slopes, mostly at elevations above 3,000 feet.

Brandywine soils make up about 55% of this association and Porters soils, about 25%. These are well drained soils. Burton soils make up about 5% of this association and are well drained or moderately well drained soils.

Minor soils make up about 15% of this association. These include Tusquitee and Haywood soils. Stony land also makes up part of this association. The Tusquitee and Haywood soils are in coves throughout the area, and stony land is on the roughest mountain sides.

Practically all of the acreage in this association is in forest. The more common trees are oak, and beech and, at the highest elevations, red spruce and fraser fir. Only a limited acreage of this association is suited to cultivation.

The steep slopes, stoniness and depth to bedrock are the chief limitations of these soils.

6. **Talladega-Fletcher-Fannin Association** – Well drained, rolling to very steep soils that have a subsoil of channery silt loam to silty clay loam; on ridge tops and side slopes.

This association occupies about 6% of the County and is characterized by narrow, sloping ridge tops and very steep side slopes.

Map 16

