

SECTION 3: ETOWAH AND HORSE SHOE COMMUNITIES PLAN

3.1: NATURAL AND CULTURAL RESOURCES

Water Resources

The French Broad River, crossing under US Highway 64 West (Brevard Road) and bisecting the Planning Area, creates one (1) of seventeen (17) river basins in North Carolina. A river basin is the land surface drained by streams and creeks flowing downhill into one another, forming a single large river. The Upper French Broad River Watershed (WS-IV) District, classified by the North Carolina Division of Water Quality, takes up a large portion of the Planning Area. The Water Supply Watershed Protection Program, enacted in 1989 by the State of North Carolina, requires all local governments with land use planning jurisdiction to administer a Water Supply Watershed Protection Ordinance to protect surface drinking water.



The Henderson County Land Development Code (LDC) WS-IV designation regulates single-family development so as not to exceed one (1) dwelling unit per 20,000 square feet of land with nonresidential/multifamily developments not to exceed 24% built-upon area. With a natural drainage and filtering system bonus, single-family developments can build up to three (3) dwellings per acre and all other residential and nonresidential development cannot exceed 36% built-upon area.

The Flood Damage Prevention section of the LDC identifies Special Flood Hazard Areas, which require evaluation by the County Floodplain Administrator. Within the Planning Area, along the French Broad River and its tributaries, there are approximately 1,532 acres in the floodway, 2,608 total acres in the 100-year floodplain (the floodway is a portion of the 100-year floodplain) and 157 acres in the 500-year floodplain. Specifically, a 100-year floodplain is defined as having a 1% chance of flooding in a given year while the 500-year floodplain is defined as having a 0.2% chance of flooding. While a review by the Floodplain Administrator may allow building in the 100-year and 500-year floodplain, construction or fill is not permitted in the floodway. The floodway includes the stream channel and the adjacent areas that carry the deepest and fastest floodwaters.

Located within the Planning Area are degraded waters which include two (2) tributaries of the French Broad River: Gash Creek and Mills Pond Creek (Map 4). Gash and Mills Pond Creeks were listed as impaired in the 2006 North Carolina 303(d) List prepared by the North Carolina Division of Water Quality (published on June 19, 2007). Section 303(d) of the Clean Water Act requires states to prepare lists indicating waters that do not meet water quality standards or which

have impaired uses. According to the NCDWQ report, the above listed streams were included due to impaired biological integrity.

Land Resources

In addition to sensitive waters, there are several notable sensitive land areas such as protected mountain ridges and wetlands. Protected mountain ridges are located in the eastern and southern portions of the Planning Area (Map 4). The Land Development Code Article VIII, Subpart D (Map 4) addresses protected mountain ridges and was authorized by the North Carolina General Assembly. In this section, all mountain ridges whose elevation is 500 or more feet above the elevation of an adjacent valley floor cannot have a structure with a vertical height of more than 40 feet measured from the top of the foundation. Additionally, the structure cannot protrude at its uppermost point above the crest of the ridge by more than 35 feet.

Conservation Easements

The Super Sod property, currently owned by Patten Seed Company, is protected by a conservation easement held by Carolina Mountain Land Conservancy. This property consists of approximately 343 acres used to farm sod. The property sits along the banks of the French Broad River in Horse Shoe. The Nature Conservancy also holds land in the Planning Area which helps to protect a rare unaltered Southern Appalachian Bog.

Wetlands

While the Planning Area contains several wetland sites (Map 4), only four (4) are designated as Significant Natural Heritage Areas by North Carolina Natural Heritage Program (NCNHP 1992; NCNHP Data 2007). These sites include:

Franklin Bog: A Southern Appalachian Bog home to the largest known population of a Federal and State Threatened animal species in North Carolina.

McClure's Bog: One of the few unaltered Southern Appalachian Bogs. In 1992, two (2) rare plant populations and one (1) population of an endangered amphibian occurred here. This site is owned by the Nature Conservancy, and a portion is also a Dedicated State Nature Preserve.

Etowah Swamp: A small but good quality Swamp Forest-Bog Complex. This site is privately owned.

Costa Swamp: A small privately owned Swamp Forest-Bog Complex. An endangered plant species and a significantly rare plant species have been found on this site.

Using the Natural Heritage Inventories occurrence data, several protected State and Federal plant and animal species have been noted, historically observed, or have habitat in or near the Planning Area. Figure 3.1.1 shows the State and Federal protected species in the Planning Area.

Figure 3.1.1: State and Federal Protected Species in Etowah and Horse Shoe Planning Area

Common Name	Scientific Name	Kingdom	State Protection Status	Federal Protection Status
Bog Jack-in-the pulpit	<i>Arisaema triphyllum</i> ssp. <i>Stewardsonii</i>	Plant	Significantly Rare	
Lobed Spleenwort	<i>Asplenium pinnatifidum</i>	Plant	Significantly Rare	
Marsh Bellflower	<i>Campanula aparinoides</i>	Plant	Significantly Rare	
Beaked Sedge	<i>Carex utriculata</i>	Plant	Significantly Rare	
Timber Rattlesnake	<i>Crotalus horridus</i>	Animal (reptile)	Special Concern	
Hellbender	<i>Cryptobranchus alleganiensis</i>	Animal (amphibian)	Special Concern	Species of Concern
Prickly Ground Pine	<i>Dendrolycopodium dendroideum</i>	Plant	Significantly Rare	
Purpleleaf Willowherb	<i>Epilobium ciliatum</i>	Plant	Significantly Rare	
Lax Mannagrass	<i>Glyceria laxa</i>	Plant	Significantly Rare	
Bog Turtle	<i>Glyptemys muhlenburgii</i>	Animal (reptile)	Threatened	Threatened
Swamp Pink	<i>Helonias bullata</i>	Plant	Threatened	Threatened
Four-toed Salamander	<i>Hemidactylium scutatum</i>	Animal (amphibian)	Special Concern	
French Broad Heartleaf	<i>Hexastylis rhombiformis</i>	Plant	Threatened	
Indian Plantain	<i>Hasteola suaveolens</i>	Plant	Significantly Rare	
Mooneye	<i>Hiodon tergisus</i>	Animal (fish)	Special Concern	
Loggerhead Shrike	<i>Lanius ludovicianus</i>	Animal (bird)	Special Concern	
Common Mudpuppy	<i>Necturus maculosus</i>	Animal (amphibian)	Special Concern	
Paddlefish	<i>Polyodon spathula</i>	Animal (fish)	Endangered	Species of Concern
Mountain Sweet Pitcher Plant	<i>Sarracenia jonesii</i>	Plant	Endangered	Endangered
Small-leaved Meadowrue	<i>Thalictrum macrostylum</i>	Plant	Significantly Rare	
Appalachian Bewick's Wren	<i>Thryomanes bewickii altus</i>	Animal (bird)	Endangered	Species of Concern

Source: North Carolina Natural Heritage Virtual Workroom 2007

Land and Water Resource Trends

Land and water quality could be negatively affected by new development without proper management. The increase in impervious surfaces and clear-cutting practices are known to increase the amount and speed of stormwater runoff. Not only can stormwater lead to increases in flooding, but it can also harm surface and groundwater, wetlands, and plant and animal species by introducing pollutants. Additionally, with increases in development, population, and drought conditions in the Planning Area, it becomes even more necessary to monitor the quality and quantity of water resources. Increased water demands could negatively impact water resources and may require increased water intakes should the Planning Area continue to grow.

Cultural and Historical Resources

As stated in the introduction, the first white settlers to the Etowah and Horse Shoe Communities arrived shortly after the Revolutionary War. Many of the founding families still make their home in this area. While it is difficult to assess the most important cultural and historical resources from over 200 years of history, this section and the related Cultural Resources Map (Map 4) attempt to identify churches, cemeteries, and structures over 100 years old. Some cultural and historical areas that are identified on the map are as follows:

Shaws Creek AME Zion Church: An historical African-American church established in 1865. Several former slaves are buried in the cemetery.

Holly Springs Union Chapel: The site of one of the last remaining one room school houses in the county.

Shaws Creek Methodist Campground Church and Cemetery: Cemetery has soldiers interred from every major war. The first traveling ministers visited the campground church site in the late 1700s.

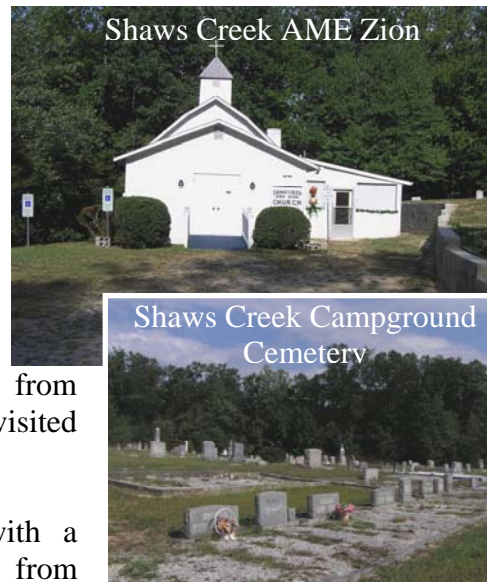
Mallet Cemetery: Private family cemetery with a chapel containing the original windows from Gethsemane, an English Church, operating from the late 1800s to 1923, once located on the site of Beulah Baptist Cemetery.

Bryn Avon: Added to the National Register of Historic places. A private Tudor revival building built in the early 1900s. It currently functions as a residence and farm.

Bowman's Bluff: Former early English settlement with an operating post office until 1856. This is also a site associated with local folklore and myth. French Willow Farms is located on this site along with other agricultural related operations.

Cultural and Historical Resources Trends

Many historical and cultural sites important to the Etowah and Horse Shoe Communities are being lost to decay, lack of knowledge of the site, and development. These sites are important to the history, culture, and identity of the Communities.



Natural and Cultural Resource Goals & Objectives**Goal N1: Protect Water Supply and Quality within the Etowah and Horse Shoe Communities.****N1.1. Develop and adopt an open space plan for the Etowah and Horse Shoe Communities in order to protect wetlands and flood areas, and to further regulate floodplain development.**

Henderson County's 2020 Comprehensive Plan (CCP) Future Land Use Map identified possible conservation areas that include sensitive natural areas. This map should be incorporated into any open space plan in the Planning Area and used as a basis for developing the plan.

N1.2. Prohibit public waterline extensions in the Planning Area in areas designated by the Henderson County 2020 Comprehensive Plan as Rural/Agricultural Areas.

The CCP's Growth Management Strategy established the County's growth and land use policies through 2020. This strategy is intended to direct growth to areas where essential services and infrastructure are present, and protect natural areas and key historic and cultural resources from extensive development. The areas designated as Urban Services Areas are where sewer and water infrastructure should be focused while Rural/Urban Transition Areas should be consistent with the Sewer and Water Master Plan as envisioned in the Sewer and Water Element of the CCP and should coincide with expansions of the Urban Services Areas. Sewer and water development is generally discouraged in the Rural/Agricultural Areas.

N1.3. Support water quality protection and restoration programs in Henderson County, which could include the addition of water quality monitoring stations throughout the Planning Area and the County.

The County should consider funding a new water quality monitoring site in the Planning Area on Little Willow Creek in the Seven Falls subdivision during the development construction with the cooperation of the Seven Falls subdivision, the County, and volunteer water quality groups such as the Volunteer Water Information Network (VWIN). The County should support the efforts of the Soil and Water Conservation District to obtain grant money for the development of a Watershed Restoration Plan and to work with local landowners for the purpose of protecting water quality in the Etowah and Horse Shoe communities.

N1.4. Adopt local storm water regulations.

Encourage the Board of Commissioners to adopt local stormwater regulations. These regulations should address non-point sources of pollution and stormwater runoff. Development incentives could be given to projects that incorporate low impact development into subdivision design.

N1.5. Conduct a feasibility study focused on consolidating the existing wastewater treatment plants.

Five (5) existing private wastewater treatment plants are located on the French Broad River in the Planning Area. Three (3) of the private wastewater treatment plants are in the Upper French Broad River Watershed (WSIV). Privately owned wastewater treatment plants are more likely to malfunction than publicly operated systems resulting in degraded water quality. A feasibility study should be conducted focused on consolidating the existing wastewater treatment plants into one publicly controlled and operated plant.

Goal N2: Protect Land Quality within the Etowah and Horse Shoe Communities.**N2.1. Consider incorporating environmental assessments for major subdivisions into the Natural Resources Section of the Land Development Code.**

These assessments should identify fragile and significant natural areas and state or federally protected animal and plant species. Developers should design subdivisions to avoid and protect significant natural areas and protected species.

N2.2. Consider incorporating stricter steep slope regulations in the Land Development Code for the Etowah and Horse Shoe Communities to limit development on steep slopes.

These regulations should be implemented to fulfill the recommendations of the “Mountain Ridge and Steep Slope Protection Initiative” released by the Mountain Ridge and Steep Slope Protection Advisory Committee of the Land of Sky Regional Council. This study encourages the cooperation of all counties in Western North Carolina to standardize its regulations concerning steep slope, ridgelines, and other environmental issues.

Goal N3: Protect the Planning Area’s historical and cultural resources.**N3.1. Continue to update and maintain a local inventory of historic sites available to all historic and cultural preservation agencies.**

Some of the Planning Area’s historical and cultural resources are identified on the Cultural Resources Map (Map 5). It is likely that more resources exist in the Planning Area. The maintenance of the inventory would be aided by public and private agencies such as the Historic Resources Commission, Cemetery Advisory Committee, the Henderson County Historical and Genealogical Society, and the North Carolina State Historic Preservation Office.

Note: Currently being addressed by the Historic Resource Commission.

N3.2. Conduct further surveys of structures that contain architecture that is historically significant through the State Historic Preservation Office with attention to the Planning Area.

Note: Currently being addressed by the Historic Resource Commission

3.2 AGRICULTURE

A wide variety of agriculture is found within the Planning Area. Recent trends have shown that agriculture is declining throughout the County and the Planning Area. Using the County's GIS farmland data, it is estimated that 7,200 acres of land either are or have been classified as agriculture, horticulture, forestland. Land use classifications, however, indicate that there is approximately 4,159 acres in present use value and 253 acres classified as agriculture-horticulture (see also Section 3.7). According to the local Farm Service Agency (FSA) office, it is estimated that from 2004 to 2007 there was a 25% decline in the total number of farms and a 13% decline in total farmland acres within the Planning Area.

The FSA division of the United States Department of Agriculture (USDA) is responsible for administering and managing farming programs such as conservation, loan, credit and disaster programs. It should be noted that the local FSA office only keeps tract of farmland that participates in USDA programs, so it is possible there are additional farmlands in the Planning Area not known by the Agency. The local FSA office estimates that a wide variety of farming and cultivation operations exists in the Planning Area such as grapes, corn, hay, livestock, nursery operations and bee cultivation.



Some of the largest farming operations in the Planning Area include Super Sod, Red Top Farm, Brannon Farms Inc. and Hillside Nursery. Super Sod, a division of Patten Seed Company, appears to be the largest farming operation in the Planning Area. The farm consists of approximately 343 acres dedicated to growing sod. The Super Sod property is also under a conservation easement held by Carolina Mountain Land Conservancy (see also Section 3.1). Conservation easements are one of the tools used to protect farmland from development and preserve it for future generations.



In 1991 Henderson County adopted the Volunteer Farmland Preservation Program Ordinance which serves as a tool to create awareness about local farms. The County adopted this Ordinance to protect farms from nonfarm development; however, the Ordinance does not regulate the development of farms. The County also uses a present use valuation taxation program which taxes qualified agriculture, horticulture and forestland at rates that reflect the use of the land and not the total assessed value.

Agricultural Goals & Objectives

Goal A1: Continue to promote and expand agricultural programs and practices.**A1.1. Make agriculture appealing to younger generations by creating incentives for these generations to keep farming.**

The local school board should be encouraged to finance horticulture curriculums at the middle and high school levels and give academic credit for participation in programs such as the 4H club or the Future Farmers of America's Career Development Events or Supervised Agricultural Experience Program. The local community colleges should continue programs and classes to assist farmers with business planning, tax and local law, and computer skills. A farmland protection fund could be established gathering contributions for use in conservation, public education, agriculture-related training and economic development activities.

A1.2. Determine the need for and possibly establish a location for a small farmers' market in the Planning Area.

A farmers' market within the Planning Area could serve the needs of local farmers who may not have the means to travel long distances to bring their crops to market and could be incorporated into an agritourism plan to encourage tourists and those within the area to buy local produce.

A1.3. Continue and expand educational efforts for farmers and adjoining property owners in order to create awareness about the impacts of farming on adjoining properties.

Local governmental agencies should partner with local environmental and conservation groups to expand and continue to educate farmers and property owners on sustainable and environmentally responsible farming techniques. Full disclosure of Farmland Preservation Districts should be provided to prospective buyers by real estate agents and attorneys.

A1.4. Encourage schools to buy and use local foods.

Programs such as the "Growing Minds" program created by the Appalachian Sustainable Agriculture Project (ASAP), which encourages local foods in the schools, should be promoted and implemented to incorporate local foods into the school lunch program.

3.3 HOUSING

Types of Housing

Over the past decade, the Planning Area has experienced a dramatic increase in new residential development. This development, mostly in the form of subdivisions, is a major contributor to the increase of housing units in the Planning Area. In 2007, a total of 1,690 lots were preliminarily approved by the County for development. It is anticipated that over the next several years these lots will be built with residential dwelling units, adding new housing to the area. Most of this housing will be in the form of single-family dwelling units, but other types of housing including condominiums, townhouses and multifamily units are becoming more popular.

The increase in the number of housing permits issued from 2004 to 2006 helps accommodate recent population growth for the Planning Area. According to housing permit data obtained from Henderson County Building Services, the number of building permits issued increased from 41 permits in 2004 to 163 permits in 2006, a 297% increase in residential building permits (Figure 3.3.1). It appears that the number of manufactured home permits issued fluctuated between 2004 and 2006. From 2004 to 2005, there was an increase in permits from 13 to 18 (a 38.5% increase). In 2006 only six (6) manufactured home permits were issued (a 53.8% decrease since 2004). The increase in total building permits and overall decrease in manufactured housing with very few alternatives to single-family homes may indicate a need for other types of housing.

Total residential structure data in the Planning Area indicates that 86% of all structures are single-family residences (modular and stick-built units) and 10% are manufactured homes. The remaining residential structures are composed of condominiums, apartments, townhomes, and duplexes (Figure 3.3.2).

Housing Value

Affordable housing is housing which is affordable to households with an income of less than 80% of the estimated median household income. The Department of Housing and Urban Development (2005) divides affordable housing into three (3) categories: low (51 to 80%), very low (31 to 50%), and extremely low (less than 30%) income. According to extrapolations from 2006 US census data, the estimated median household income in the Planning Area is \$46,595, and the average assessed total property value in the Planning Area is \$219,081. In the Planning

<i>Year</i>	<i>Manufactured Homes (Double and Singlewides)</i>	<i>Total Residential Building Permits</i>
2004	13	41
2005	18	142
2006	6	163

Source: Permit Center, 2007

<i>Residence Type</i>	<i>Number of Structures</i>	<i>Percent of all Structures</i>
Single-Family	4,238	86
Manufactured Homes	485	10
Condominiums	143	3
Townhomes	62	1
Apartments	7	<1
Duplex	5	<1
Total	4,940	

Source: Tax Assessor Data, 2007

Area, for those considered low income, an estimated housing price of \$94,229 to \$147,936 is considered affordable. For the County, with a median household income of \$41,573 and an average assessed total property value of \$257,171, housing for those with low income is affordable in the range of \$84,136 to \$131,904. The data suggests the Planning Area population has a higher income than the population of the County, but in both the Planning Area and the County, the average assessed total property value exceeds the range of affordability for low income households. This data may indicate need for more affordable housing, especially for those in the 20 to 34 year old age group (See Section 2, Figure 2.8), whose declining Planning Area population may be influenced by the lack of affordable housing combined with few employment opportunities for this group(See Section 3.6).

Housing Tenure

Housing tenure in the Planning Area (Figure 3.3.3) indicates that 87% of the population lives in owner occupied housing, 8% more than the County. The highest population of renter occupied housing is located in the southwestern portion of the Planning Area around the Pleasant Grove Road and Pleasant Grove Church Road area (Census Tract 99.19, Block Group 2.). This area matches the percentage of owner/renter occupied housing in the County.

Figure 3.3.3: 2000 Housing Tenure in Etowah and Horse Shoe			
Place	Total Population in Occupied Housing	Owner Occupied	Renter Occupied
Henderson County	89,173	79%	21%
Planning Area	7,791	87%	13%
Census Tract 99.07, Block Group 3	455	85%	15%
Census Tract 99.07, Block Group 4	140	89%	11%
Census Tract 99.07, Block Group 5	621	90%	10%
Census Tract 99.07, Block Group 6	1,459	87%	13%
Census Tract 99.17, Block Group 1	23	91%	9%
Census Tract 99.18, Block Group 2	1,330	86%	14%
Census Tract 99.18, Block Group 3	441	84%	16%
Census Tract 99.18, Block Group 4	1,130	92%	8%
Census Tract 99.19, Block Group 1	1,322	92%	8%
Census Tract 99.19, Block Group 2	870	79%	21%

Source: U.S. Census 2000

Housing Goals & Objectives

Goal H1: Address affordable housing in the Etowah and Horse Shoe Communities.

H1.1. Consider incorporating affordable housing into new major subdivisions of 100 or more dwelling units.

Affordable housing should make up 10% of housing in new major subdivisions within the Planning Area with 100 or more dwelling units. Alternative compliance can include a fee in lieu of affordable housing being incorporated into an affordable housing fund for the County.

Note: This is often called “inclusionary zoning.” The legality of such a local standard must be carefully reviewed to ensure legality under current state law.

H1.2. Create partnerships between the Residents of the Communities and organizations like the Community Foundation.

Different types of funding and support for affordable housing projects in the Planning Area could be identified in these partnerships.

H1.3. Consider the establishment of a funding stream for affordable housing projects by creating an affordable housing trust fund.

Fund this affordable housing trust fund through County budget appropriations, grants, etc.

H1.4. Highlight and focus attention on examples of exemplary affordable housing projects.

Successful affordable housing projects should demonstrate how one can improve the quality of life for many people (such as Meadow Woods off Brannon Road).

3.4: COMMUNITY FACILITIES AND SERVICES

Public Schools

The Planning Area is served by the Mills River and Etowah Elementary Schools, Rugby and Hendersonville Middle Schools, and West Henderson and Hendersonville High Schools. The capacities for the school districts serving the Planning Area are predicted not to exceed state capacities over the next five (5) years except for Rugby Middle and Mills River Elementary. Both schools are currently exceeding state capacity (per state standards), and Rugby Middle is predicted to continue to exceed capacity (Figure 3.4.1). Etowah Elementary, Mills River Elementary, and West Henderson High School have or are predicted to reach capacities with 48 or fewer students under state capacity.

Figure 3.4.1: Total Capacities and Percentage of State Capacities for School Districts Serving Etowah and Horse Shoe

Schools	State Capacity	Core Capacity	2007-08 20 day Membership	2008-09 20 day Membership	Predicted Growth				
					2009-10	2010-11	2011-12	2012-13	2013-14
ELEMENTARY SCHOOLS									
Etowah	564	578	552 (97.9%)	542 (96.1%)	528 (93.6%)	517 (91.7%)	514 (91.1%)	524 (92.9%)	516 (91.5%)
Mills River	429	649	480 (111.9%)	448 (104.4%)	427 (99.5%)	406 (94.6%)	387 (90.2%)	367 (85.5%)	339 (79.0%)
MIDDLE SCHOOLS									
Hendersonville	586	599	519 (88.6%)	483 (82.4%)	490 (83.6%)	501 (85.5%)	513 (87.5%)	508 (86.7%)	496 (84.6%)
Rugby***	810	554	792 (97.8%)	854 (105.4%)	878 (108.4%)	881 (108.8%)	882 (108.9%)	848 (104.7%)	829 (102.3%)
HIGH SCHOOLS									
Hendersonville	785	514	688 (87.6%)	675 (86.0%)	658 (83.8%)	682 (86.9%)	652 (83.0%)	639 (81.4%)	657 (83.7%)
West Henderson***	1120	544	1086 (97.0%)	1063 (94.9%)	1068 (95.4%)	1084 (96.8%)	1075 (96.0%)	1091 (97.4%)	1156 (103.2%)
Totals			4,117	4,065	4,049	4,071	4,023	3,977	3,993
Green Safely within state capacity			Yellow 48 or fewer students under state capacity				Red Over state capacity		

Red numbers in core capacity indicates deficit in sq. footage in media center or cafeteria
 Projected growth is calculated by the kindergarten growth over the past 8 years
 *** Numbers reflect additional growth projected from the Riverstone Development (2008 - 2012)
 Source: Henderson County Public Schools, October 2008

The only school within the Planning Area is Etowah Elementary located off of Etowah School Road. The first school in Etowah was established in 1872 across from the Oak Forest Cemetery on School House Road. In 1910, a public school was built near the Methodist Church. Later, in 1928, Etowah School was established by merging Rhymer, Horse Shoe, Pleasant Grove, Big Willow, and Boyleston schools. Until 1960, the school served all grades (1st to 12th). Now Etowah Elementary consists of kindergarten to 5th grade. The main building and kindergarten wing for Etowah Elementary are a total of 79,619 square feet.



In 2008, Etowah Elementary school had 542 students and 28 classrooms, averaging 19.36 students per teacher. The state capacity for the school is 564 students while the core capacity, including the cafeteria and media center is 578. The racial composition of Etowah Elementary was 84% white, 0.5% African-American/black, 8.3% Hispanic, 1.3% Asian, 0.37% American Indian, and 5.4% multiracial. Of the total student population, 39% utilized free or reduced lunch. All students had access to the internet with 100% of the classrooms connected. There are approximately 3.96 students per computer.

Figure 3.4.2: 2008 Number of Students Per Grade at Etowah Elementary School

Grade	Number of Students
Kindergarten	98
First	77
Second	92
Third	96
Fourth	96
Fifth	78

Source: Etowah Elementary School, March 2008

In the 2006-2007 year, Etowah Elementary was recognized as a North Carolina School of Distinction by the State Board of Education due to high test scores, with 80 to 90% of the students performing at or above grade level, and an overall positive increase in student academic achievement. Of the available statistics for North Carolina ABC program end-of-grade tests, 86.2% of white students passed math and reading and 81.3% of Hispanic students passed. On average, students at Etowah Elementary faired better than the state and district. In comparison, at the state and district level, 75.9% and 81.3%, respectively, of white students passed math and reading while 52.5% and 62.6% of Hispanic students passed.

Parks

The County currently operates one park in the Planning Area. Etowah Lions Park is located on approximately 18 acres of land off of Etowah School Road in the Etowah Community.



According to the Henderson County Parks and Recreation Department, the land for the park was originally purchased by the Etowah Lions Club in 1994 with Etowah Lions Garbage Service proceeds. It was donated to the County in September 1995. The Etowah Lions Club continues to work with Henderson County to develop the park by subsidizing loans, attaining grants, and running the park’s concession stand (where 100% of the profits are reinvested into the park). Prominent features in the park are its

baseball fields where the County holds its youth softball program. The park also includes tennis courts, a basketball court, a shuffleboard court, picnic tables and shelter, a playground, a multi-use field and a half-mile walking trail.

Greenways

The County Comprehensive Plan identifies possible sites for greenways in the Planning Area. These sites were identified by the Apple Country Greenway Commission. The Commission was formed in 1999 and works to promote and facilitate the planning, development and maintenance

of greenways in Henderson County. It should be noted that at this time there are no built greenways in the Planning Area.

One important benefit of a greenway is to serve as an alternate link between communities, recreational areas, commercial centers and open space. The sites for the proposed greenways in the Comprehensive Plan are generally found along railroad lines and streams. For example, one proposed greenway in the Planning Area follows the French Broad River and its floodplain. Another greenway follows the Norfolk-Southern railroad line (not currently in use). This railroad line connects Hendersonville to Brevard and was used to serve the Ecusta paper mill plant in Brevard before it closed in 2002.

Libraries

The new Etowah Branch Library on Brickyard Road opened to the public on February 11, 2008. This replaced the former library also located on Brickyard Road. In 2007, the door count for the library was 60,613 people. Patrons of the library were residents of Etowah, Horse Shoe, Mills River, and Transylvania County.



The new library is 3,600 square feet larger than the old library at a total of 8,100 square feet. It consists of five (5) rooms and one (1) community room that can seat up to 60 people. It has three (3) book stack areas and one office. The County currently has two (2) staff members operating the library. Fifty-two percent (52%) of the new library’s 1.2 to 1.3 million dollar project cost was funded by the estates of Richard J. and Betty A. Scott.

Fire Protection

The Planning Area is predominately served by the Etowah-Horse Shoe Fire & Rescue Department with a small portion served by the Valley Hill Volunteer Fire and Rescue Department. There is currently no fire service tax district in the southwestern portion of the Planning Area. Local fire departments will respond to emergencies in this area.



The Etowah-Horse Shoe Volunteer Fire Department has two (2) locations within the Planning Area, a main station on US Highway 64 West and Morgan Road and a substation on the corner of Cummings Cove Road and Hebron Road. The main station is approximately 9,000 square feet and the substation is approximately 4,000 square feet in size. The fire department consists of four (4) paid personnel, 40 volunteers, and 13 fire trucks that serve an area of approximately 19.67 square miles.

Emergency Medical Services (EMS)

EMS Station #2, located on NC Highway 280 near its intersection with NC Highway 191, serves the Mills River, Fletcher, and Etowah-Horse Shoe Fire Districts. The EMS station is 2,400 square feet in size with approximately 1,200 square feet of living area and 1,200 square feet of bay area. The bay area is composed of a two (2) bay garage and storage area for equipment. There is one (1) ambulance at this location with two (2) personnel on call at all times.

***Sheriff's Department***

There is no satellite sheriff's office in the Planning Area; however, during a 12 hour shift there are two (2) patrolmen in the area. The 911 Emergency Center, servicing the entire County, has four (4) to five (5) people per 12 hour shift.

Public Water

The City of Hendersonville supplies public water to a portion of the Etowah and Horse Shoe Planning Area. The City's water lines mainly run along US Highway 64 West (Brevard Road) and portions of major roads and subdivisions in central areas of both Communities. There are other limited private water systems extending into the Planning Area that usually serve individual subdivisions. In these situations, the infrastructure is generally maintained by private companies and the water is either from community well systems or the City of Hendersonville.

Sewer Services

Public sewer is limited in the area. The Cane Creek Sewer District, operated by Henderson County, serves the northernmost portion of the Planning Area. The privately owned, Etowah Sewer Company, is confined to the areas surrounding Brickyard Road, Holly Springs Road, and Old Highway 64. Additionally, sewer lines are located in the more developed areas such as the commercial district along U.S. Highway 64 West (Brevard Road), the Etowah Golf Course, and subdivisions such as Golf Mountain Estates, Greenwood Forest, Etowah's Reach, Etowah Golf Villas, Moland Drive, The Meadows, Brandy Mills, Brooke Hills, Jonathan Creek, Sunset Ridge, Springfield, Meadow Creek, and North Course Village. Service is also available to the Etowah-Horse Shoe Volunteer Fire Departments and the Etowah Elementary School through private force mains. It is estimated that the Etowah Sewer Company services 327 residential units and 37 nonresidential establishments. Including the Etowah Sewer Company, there are currently five (5) permitted wastewater treatment plants in the Planning Area. These plants are permitted and annually inspected by the North Carolina Department of Environment and Natural Resources.

Solid Waste

There are approximately 30 private municipal solid waste haulers in Henderson County. The County contracts with Waste Management to transfer municipal solid waste and construction

waste from the Stoney Mountain Landfill, off Stoney Mountain Road, to a landfill in Palmetto, South Carolina.

Recycling

The County recently hired a Sustainability Coordinator who is responsible for looking at ways to improve and expand the existing recycling program. Residents in the Planning Area can drop off recyclables at the Stoney Mountain Landfill where the recycling is sent to private companies located in either Charlotte, North Carolina or Greenville, South Carolina. Residents may also pay a private waste collection company to transport certain recyclables to Asheville.

Community Facilities and Services Goals & Objectives

Goal CFS1: Expand local County parks and greenways in the Etowah and Horse Shoe Communities.

CFS1.1. Consider adding corner and/or neighborhood parks at centrally located areas in the Planning Area.

Small parks in the Planning Area can serve the recreation needs of the communities as well as enhance the aesthetic appeal of commercial areas. County owned land, commercial businesses fulfilling landscaping requirements, or subdivisions fulfilling open space requirements could aid in the establishment of parks.

CFS1.2. Consider the establishment of a multifunctional YMCA, governmental or nonprofit full service recreation facility and community center in the Planning Area.

Note: Establishment of a service district (CFS-1.3) is probably necessary to fulfill this recommendation.

CFS1.3. Consider establishing a service district to create revenue to support recreation in the Planning Area.

According to the Tax Assessor's Office a penny per \$100 of value (excluding personal property) applied to the tax rate will generate \$124,500 for the Planning Area. These tax monies should be used to match available grants for the construction of recreation facilities. The service district should not be established until local economic conditions improve and grant funding is available.

CFS1.4. Consider establishing a greenway between Hendersonville and Brevard on the existing Norfolk-Southern railroad line.

The County should consider supporting local government and agency efforts to make this a priority and come up with a strategy to achieve this goal.

Note: State grants and the Service District (CFS-1.3) could provide funding for construction.

CFS1.5. Incorporate pedestrian friendly measures in the core of the Communities.

These measures include sidewalks, trails, traffic calming measures and designated bike routes.

Note: This item is addressed in T-2.5.

Goal CFS2: Improve emergency services in the Etowah and Horse Shoe Communities.

CFS2.1. Increase law enforcement presence and patrol in the Planning Area.

Consider conducting studies to determine the need and possible addition of a satellite patrol office in the Planning Area.

3.5 TRANSPORTATION

Transportation Issues

The Planning Area is connected to Hendersonville and Brevard by US Highway 64 West (Brevard Road) which is a major east/west arterial that forms the central core of the area. Connections to Mills River and Asheville are through NC Highways 191 and 280. The regional transportation network is extremely rural, isolated from a major urban center, under development pressure, and has scarce financial resources. The limited amount of funding available is the most significant regional transportation issue, particularly funding to support roadway operations and maintenance, transit services, and safe bicycle and pedestrian travel access. The list below briefly summarizes major issues for the region:

- Shortfall in revenues to implement an adequate pavement rehabilitation program and to make needed improvements to local roads, State highways and regional bridges.
- Impact of substandard roads on State maintenance funds, when added to the maintained roadway inventory.
- Need for transportation services to ensure mobility and reasonable access for all age and income groups with limited funding sources, extensive travel distances and higher regional operating and fuel costs.
- Desire to improve local economic vitality, supporting livable communities and individual well-being.
- Need for bicycle and pedestrian facilities to provide safer environments and better connectivity for non-motorized travel.
- Need to preserve the rail bed for a trail system which will enhance the livability of the area.

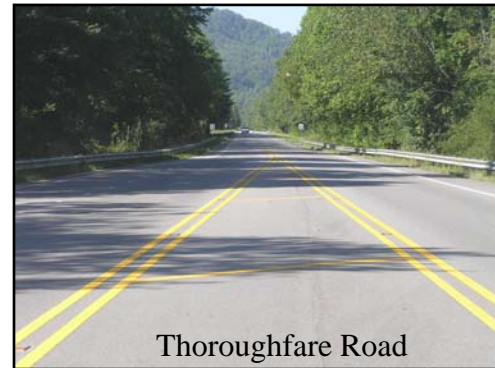
The Regional System and Planning Process

The North Carolina Department of Transportation (NCDOT) still maintains the majority of public roads unlike other Departments of Transportation in the United States. The state maintained road system in North Carolina includes over 79,000 miles of roadway which is 77% of the entire public roadway system. Henderson County is part of the French Broad Municipal Planning Organization (MPO) which is also comprised of Buncombe and Haywood Counties. Local governments within the area participate in preparing and prioritizing project listings for comprehensive, long range, and the transportation improvement program. Henderson County works directly with the district and local county NCDOT engineers to receive updates and provide feedback on necessary projects. Henderson County also has a Transportation Advisory Committee, comprised mostly of local government MPO representatives. These board members convene to discuss local transportation issues and to hear updates from the district engineer regarding progress on Transportation Improvements Projects (TIP) and Secondary Road projects. They also accept input from local citizens who want to voice concerns about transportation issues. Roadway facilities are generally classified in the following manner:

Freeways or Interstates Those roads that form the principal avenue for communication between major regions of a country, including direct connections between capital cities. They operate with restricted access.

Expressways Those roads, not classified as interstates, whose main function is to form the principal avenue of communication for regional movements between an urbanized area and adjoining communities. An expressway normally has restricted access.

Major Arterial or Boulevard Those roads whose main function is to form an avenue of communication for movements: between important centers and interstates or regional roads and/or key towns and commercial areas; between important centers; or of an arterial nature within a rural area.



Minor Arterial A safe all weather surface for moderate volumes of predominantly through traffic with a high seasonal heavy vehicle component. The main function of these roads is to provide access to abutting property. This is the minimum standard for tourist and high volume heavy vehicle developments.



Collector A safe all weather surface for moderate to low volume and high accessibility and serve as a link between through-roads and local roads.

Local Local roads are generally designed to provide final access to properties rather than through movements.

The important roads in the Planning Area are Major and Minor Arterials. Variations in traffic depend on time of year and local driving conditions. Traffic volumes are higher throughout Henderson County during summer months with added recreational and seasonal travelers. Over the last three (3) years, traffic volumes on major roads generally declined in the outlying portions of the County, and increased around the urban center. Because of its sparse population, the region is generally free of traffic congestion.

Potential Improvements

The recently completed NCDOT Comprehensive Transportation Plan for the French Broad River MPO and Rural Areas of Buncombe, Haywood, and Henderson Counties (NCDOT Comprehensive Plan) recommends potential improvements to regional and major roadway facilities which affect the Planning Area.

US Highway 64 West (Brevard Road)/South Rugby Road (SR 1312) to Banner Farm Road (SR 1314)

This segment of US Highway 64 West (Brevard Road) experiences heavy turn conflicts due to the confluence of a number of elements, including several intersecting roadways, two (2) significant curves, an at-grade railroad crossing, and roadside development with multiple driveways. The 2005 traffic estimate of 14,400 vehicles per day (vpd) already exceeded the desirable capacity of 11,400 to 13,900 vpd for this roadway, and as development and traffic volumes increase, so will delays and crashes. This segment of US Highway 64 West is targeted as the location for a commercial center in Henderson County long range plans. The recommendation is to widen the facility to four (4) or five (5) lanes with medians where feasible; maintaining access management; and upgrading intersections and traffic control as warranted, including at the railroad crossing.

US Highway 64 West (Brevard Road)/Buncombe Street to Brickyard Road (SR 1424)

Large portions of this two lane segment of US Highway 64 West (Brevard Road) (interrupted by the above referenced segment) already carry more traffic than their desirable capacity of 11,400 to 15,800 vpd, and these volumes are forecast to increase from 16,500 vpd in 2005 to 19,100 vpd by 2030. Henderson County plans identify commercial areas along this portion of US 64, near Etowah, Horseshoe and Laurel Park. Several intersections in the eastern portion of this project have been averaging at least ten (10) crashes per year. Frequent driveways and speed limits that vary from 35 mph to 55 mph already contribute to both crashes and congestion. The ability of widening the cross-section within this corridor is severely constrained by existing development, a rail line, steep slopes, streams and cultural resources.



Given the standards of the corridor, the addition of a two-way left turn lane seems the most viable solution to existing and anticipated deficiencies. Current plans indicate that a multilane cross section for some or all of the project length may be desirable in many areas. Access management (especially driveway consolidation) and some geometric and intersection improvements are also desirable and feasible. This project has been identified in both the Comprehensive and Long Range Plan.

Cummings Road (SR 1171 – US Highway 64 West (Brevard Road) to Hebron Road)

This road serves a large area of low-density residential development. Although forecast volumes do not appear to exceed practical capacity of 8,000 vpd for a typical 2-lane rural/suburban road such as this, Cummings Road lacks the pavement/shoulder width and clear sight distances necessary for a safe and efficient roadway. In addition,

given the large and relatively undeveloped area served by this road and the roads feeding into it, a slight increase in anticipated residential growth could result in traffic that is

significantly higher than current forecasts. Long term recommendations for this road are to add turn lanes, widen shoulders and improve intersection geometrics and traffic control as appropriate. The project, under construction with an estimated completion date of July 15, 2010, currently appears in the NCDOT Long Range Transportation Plan for the MPO and the Transportation Improvement Program (TIP).



NC Highway 191/280 to Balfour Parkway

The NCDOT Comprehensive Plan recommends a two-lane radial facility serving the wedge of rapidly developing land north of Hendersonville and north of the Planning Area. The corridor will extend between US Highway 25 and US Highway 64 (Brevard Road) and will provide more of a direct connection between Mills River and Hendersonville. There are three (3) significant commercial areas along the corridor which would directly influence the Planning Area. Specifically these include a portion of NC Highway 191, at Mountain Road, Rugby Road and NC 280. Traffic volumes have been increasing steadily with 14,400 vpd in 2005. Desirable capacity in 2006 for this road was estimated at 15,200 to 15,900 vpd. Forecasts of 27,600 vpd by the year 2030 far exceed existing capacity. There are additional concerns regarding safety. The intersection of NC Highway 191 with NC Highway 280 is the fourth highest crash location in the County.

NCDOT has put forth a recommendation to widen NC Highway 191 and NC Highway 280 to the Balfour Parkway. The project would be comprised a four-lane roadway with a median. The project was previously identified in the NCDOT Long Range Transportation Plan and will be updated to include a recommendation for the project to move ahead. However, the timeline on such a project likely will have a 20-year horizon because of financial constraints.

Connection of McKinney-Morgan Streets (not currently included in any NCDOT plans) McKinney Road is a minor arterial which forms an east-west connection through the Etowah Community on the north side of US Highway 64 West (Brevard Road). A

crossing over the existing rail bed is recommended in order to reduce traffic on Brickyard Road and to provide an alternative outlet for trucks and heavy vehicles to Morgan Road. This would be supported by many members of the Community; however the local residents living in the vicinity of Cheerful Circle have voiced concern in the past to this alternative.

Public Transportation

Henderson County operates a three (3) vehicle fixed-route service between the hours of 6:30 am and 6:30 pm during weekdays between the municipalities of Fletcher and Hendersonville. No expansions of the system are planned at this time and when and if expansions are made, they are likely to be realized within Hendersonville before moving into other rural areas. The transit system is operated largely on federal and state grants, as well as by contributions from the municipalities and the County. Rural van service is available for seniors and disabled persons throughout all areas of Henderson County, operated by Apple County Transit. This service runs during the same hours as the fixed route and is available upon request to eligible citizens.

Bikeways

Etowah has a network of bikeways which include designations on US Highway 64 West (Brevard Road), Cummings Road and South Rugby Road. In many cases, most two-lane roads in the Planning Area are extremely rural in nature and where there is not a high volume of traffic, the roads lack adequate shoulders, have poor geometrics, and no dedicated bike facilities even though they may be called “bikeways”. The potential improvements should enable roadways to accommodate automobiles and cyclists, while providing a safer facility for the cyclist. Many communities often work toward improvements which include placement of painted bike lanes along road shoulders. Typically, this is accomplished when roadways are widened, the geometrics are improved, and resurfacing is scheduled. It is important for the community to outline which major or secondary roads need improvement and to emphasize the potential of the roadway as a bike facility. The designation as a bike facility should take place during the design phase when improvements are planned.



Funding Policies

Transportation plans typically focus on alternatives that vary by travel mode, such as highway versus transit improvements. Such comparison-by-modes approach is not relevant in the Etowah Area due to: (1) limited changes in population and travel demand, (2) density that would support transit and (3) funding shortfalls for maintenance of existing roadways. Instead of comparing alternatives according to travel modes, discussion on transportation policy and funding sources has focused on roadway maintenance versus roadway improvements because of the lack of control over major and minor arterials.

Spending on transportation projects in Western North Carolina is currently best described as a hybrid of limited capital improvement and maintenance of the status quo. Under this “make do” alternative, the State and regional entities continue to prioritize programs and to receive/use revenues consistent with past practices. STIP regional shares are used to the maximum extent possible for regional road rehabilitation projects, for State matching funds with federal programs and for interregional projects where justifiable. The State is exploring new ways to fund projects which may in the future involve turning some of the roadways over to the counties. Infrastructure will deteriorate unless additional funding sources are identified to support proper maintenance of the regional system. Currently, some state and local funding sources and programs may be available to fund transportation improvements in the French Broad MPO.

Transportation Goals & Objectives

Goal T1: Study and implement needed improvements such as the addition of traffic signals or improvements in road geometry at specified intersections in the Planning Area.

T1.1. Ask NCDOT to consider reviewing the following intersections for reconfiguration and/or signalization:

- Cummings Road and US Highway 64 West (Brevard Road)
- Etowah Park Road and US Highway 64 West (Brevard Road)
- Battle Creek Road and US Highway 64 West (Brevard Road)
- Broyles Road and South Rugby Road

Goal T2: Improve the transportation network in the Etowah and Horse Shoe Communities.

T2.1. Consider improving safety and capacity within the Planning Area.

- Consider widening the travel lanes and straightening Brickyard Road, from NC 280 to McKinney Road (Map 8)
- Consider lowering the speed limit along US Highway 64 West (Brevard Road) from 45 MPH to 35 MPH from Morgan Road at the fire station to the Etowah Valley Golf Course

T2.2. Consider the creation of a new connector road between Morgan Road and McKinney Road.

T-2.3. Implement better access management standards at the following locations:

- Along US Highway 64 West (Brevard Road)
- Along Brickyard Road from US Highway 64 West (Brevard Road) to intersection with McKinney Road

T2.4. Avoid and correct situations where road names change multiple times. Specifically address the road name change at Holly Springs Road and Ray Hill Road.

T2.5. Consider incorporating pedestrian friendly measures in the core of the Etowah and Horse Shoe Communities.

These measures include sidewalks, trails, traffic calming measures and designated bike lanes/routes.

Note: Encroachment agreement with NCDOT would be required. Sidewalk maintenance would be required by the County or business. Recreation service district may possibly be used to fund construction or maintenance of the sidewalks. The County should consider developing a plan to show the location of planned sidewalks for access to open space and recreational uses.

3.6 ECONOMIC DEVELOPMENT

Occupational Trends

Outside factors have a great influence over local market trends and industry change. These factors can play a large role in determining the economic direction of the County and the Planning Area.

As shown in the demographics portion of the Community Analysis Section, there has been a considerable decline in the population of younger working age residents in the Planning Area. This may be a result of low paying jobs, lack of jobs and/or high cost of living. Attracting new industry and higher paying jobs may be difficult for the Planning Area because of its proximity to major interstates and lack of adequate public utilities.

Although there is a disparity between income and cost of living in the County, overall it appears that most occupations and related wages have grown in the County. Figure 3.6.1 shows wages for major industries in the County. As shown in this Figure, the average employee wage is increasing but at varying rates.

Figure 3.6.2 breaks down major industries in Henderson County. This gives an overall perspective of occupational trends from 2000 to 2007. As shown, construction occupations have increased the most followed by education and health services. Manufacturing jobs had the largest decline.

Figure 3.6.1: Occupational Trends by Average Employee Wages for Henderson County

Major Industry Group	2000	2007	% Increase
Total Federal Government	32,084	47,736	49%
Total State Government	23,816	31,096	31%
Public Administration	28,298	36,712	30%
Professional and Business Services	22,494	28,072	25%
Information	30,248	37,562	24%
Natural Resources and Mining	18,473	22,802	23%
Total Local Government	29,224	36,088	23%
Education and Health Services	28,981	35,271	21%
Financial Activities	35,832	42,885	20%
Other Services	17,992	21,625	20%
Service-Providing Domain	25,035	29,928	20%
Construction	28,590	33,799	18%
Manufacturing	37,966	44,595	17%
Goods-Producing Domain	34,438	39,451	15%
Trade Transportation and Utilities	26,427	30,295	15%
Leisure and Hospitality	13,903	14,942	1%

Source: North Carolina Employment Securities Commission, 2008

Figure 3.6.2: Occupational Trends by Total Employment for Henderson County

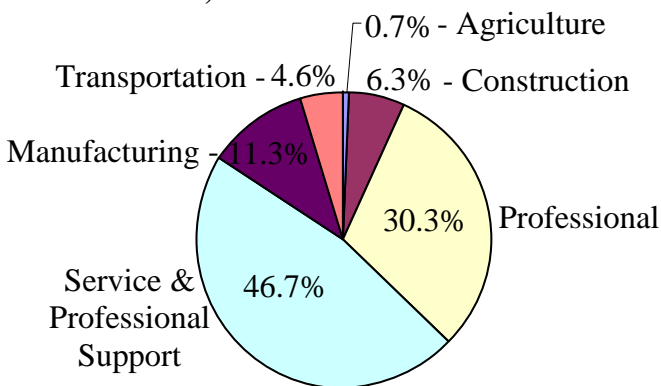
Major Industry Group	2000	2007	% Change
Construction	2,184	3,130	43%
Education and Health Services	6,819	8,455	24%
Financial Activities	981	1,135	16%
Leisure and Hospitality	3,492	4,060	16%
Public Administration	1,261	1,433	14%
Total Local Government	4,011	4,529	13%
Service-Providing Domain	23,857	26,695	12%
Other Services	978	1,063	9%
Total State Government	616	673	9%
Information	363	393	8%
Trade Transportation and Utilities	6,996	7,029	<1%
Professional and Business Services	2,969	2,957	>-1%
Goods-Producing Domain	11,137	10,000	-10%
Natural Resources and Mining	965	812	-16%
Total Federal Government	283	224	-21%
Manufacturing	7,988	6,059	-24%

Source: North Carolina Employment Securities Commission, 2008

Occupations in the Planning Area

Figure 3.6.3 indicates that the largest percentage of the Planning Area’s workforce (approximately 47%) is found within the service and professional support employment sector. Service and professional support includes health care support occupations, protective services such as law enforcement and fire fighters, food service, building and grounds maintenance, personal care, maintenance services, installation services, repair services and retail services. The second largest employment sector is titled professional. Some of the occupations in this category

Figure 3.6.3: Occupations in the Planning Area – Census, 2000



are business and financial operations, management, professional and related services such as engineering and surveying, health care practitioners, social services, entertainment, education, and computer occupations. Agriculture has the lowest occupation level with less than 1% of the total population of the Planning Area. Agriculture includes farming, fishing and forestry. Construction includes supervisors and workers. Production operations

make up the majority of manufacturing. Transportation consists of supervisors, transportation industry workers and material moving workers.

Projections

Projections from the Employment Security Commission of North Carolina indicate that professional and business services are expected to grow the most over the next ten (10) years. According to these projections, the manufacturing industry will continue to decline. In the last few years, manufacturing has become more sophisticated as new industries like renewable energies and advanced manufacturing practices have caused industries to require higher skilled laborers. A weakening U.S. dollar is also making it less profitable to locate overseas.

Figure 3.6.4: Projected Occupational Trends by Total Employment for Henderson, Buncombe, Madison and Transylvania Counties

Major Industry Group	2006	2016	% Change
Professional and Business Services	15,390	21,230	38%
Leisure and Hospitality	20,460	26,180	28%
Education and Health Services	38,910	48,950	26%
Construction	10,190	12,710	25%
Services-Providing	132,390	161,370	22%
Financial Activities	5,590	6,690	20%
Other Services (Except Government)	7,650	8,870	16%
Trade, Transportation, and Utilities	31,540	35,590	13%
Government	10,760	11,780	9%
Goods-Producing	31,570	32,490	3%
Information	2,090	2,080	-0.50%
Natural Resources and Mining	1,650	1,610	-2%
Manufacturing	19,730	18,170	-8%
Source: North Carolina Employment Securities Commission, 2008			

These changes in manufacturing operations may cause industries to choose to relocate to this region. The County also benefits from local community colleges like Blue Ridge Community College, with campuses located in both Hendersonville and Brevard, which offer a wide range of education and training for professional advancement. This enables local residents to obtain higher skilled jobs and professional occupations.

New development in the Planning Area is expected to create new jobs and cause growth in commercial businesses in the Planning Area, along US Highway 64 West (Brevard Road) and surrounding area. These jobs, typically in the form of service industry jobs, usually have a lower pay than higher skilled jobs. However, competition from the increase in service industry jobs will hopefully result in higher wages for the Planning Area.

Economic Goals & Objectives

Goal E1: Address economic development in the Etowah and Horse Shoe Communities.

E1.1. Continue to support small local manufacturing operations by avoiding regulations that would inhibit these types of businesses.

3.7: LAND USE AND DEVELOPMENT

Existing Land Use and Development and Current Zoning

The Planning Area contains a variety of land uses as classified by the Henderson County Tax Assessors office (see Figures 3.7.1, 3.7.2, and 3.7.3). Classified lands include those located outside of the right-of-way and are on record with Henderson County. Figures 3.7.1 and 3.7.2 include information regarding those properties identified by the tax assessor as participating in the present use value program. This program allows lands to be taxes based on the value of the lands in its current use as agricultural land, horticultural land, or forestland instead of based on the market value of the land. While present use value and agricultural-horticultural land use take up 24% of the total land, the principal use of land in the Planning area is residential.

Residential Land Uses

Residential land consists of approximately 39% of the total land use within the Planning Area. Single-family dwelling units are the most prominent residential use with approximately 4,238 single-family dwelling units on approximately 7,537 acres of land. The average acreage of a residential parcel of land is 1.6 acres.

Manufactured housing is the second most common type of residential structure with approximately 485 units in the Planning Area. Manufactured housing is scattered throughout both Communities but is most common in the Residential Zoning District Two, Rural (R2R), and the Residential Zoning District One (R1).

In the Planning Area, most parcels are zoned for residential uses with the majority of the zoning currently R2R. Approximately 7,336 acres comprise the R2R Zoning District. The R2R district is intended to allow for low to medium density residential development. This district permits most residential uses including single-wide manufactured housing and manufactured home parks.

Figure 3.7.1 Acreage by Land Use		
General Land Use	Approximate Acres of Land	Percent of Total Acreage
Present Use Value (Agricultural-Horticulture)*	4,159	23
Residential	7,039	39
Vacant	4,689	26
Other**	1,338	7
Agriculture-Horticulture	253	1
Recreational (Includes Golf Courses)	362	2
Commercial	181	< 1
Government	76	< 1
Religious	53	< 1
Industrial	23	< 1
Conservation	15	< 1
Educational	12	< 1

Source: County Tax Assessor's Data, October 2007

* Those lands which participate in the present-use value program are classified by the Henderson County Tax Assessor into the land use classification system (See Figure 3.7.2)

** The **Other** category includes parcels where the land use has not been assigned, land within cemeteries, utility lots, cellular towers and land used for auxiliary structures.

Figure 3.7.2 Present Use Value Acreage by Land Use		
General Land Use	Approximate Acres of Land	Percent of Total Acreage
Residential	1,377	33
Vacant	2,267	55
Other	171	4
Agriculture-Horticulture	344	8

Commercial Land Uses

Only 181 acres of land is currently designated as commercial and 23 acres of land as industrial. Commercial uses are mostly found along US Highway 64 West (Brevard Road) in the core of both the Etowah and Horse Shoe Communities. A small amount of existing commercial uses are also scattered throughout the Planning Area.

Figure 3.7.3 Existing Structures by Land Use		
General Land Use	Number of Structures	Percent of all Structures
Residential	4,940	97
Commercial	98	2
Industrial	8	<1
Community/Cultural	32	<1
Other*	21	<1
Source: County Tax Assessor's Data, October 2007		
* The Other category includes parcels with only garage, recreational or miscellaneous structures.		

In Etowah, the majority of existing commercial uses are located between the Etowah Valley Country Club (along US Highway 64 West (Brevard Road)) and Morgan Road. This area has been recently rezoned to the Community Commercial (CC) Zoning District with the adoption of the Land Development Code (LDC) on September 19, 2007. It is intended that the CC district will provide a variety of retail sales and services, public and private administration offices and other uses done primarily for sale or profit on the local and community commercial levels. Many existing commercial uses at the local and community scale are located in this area. These uses include retail stores, restaurants, the Etowah Valley Veterinary Hospital, various business and professional offices, Ingles Market, gas stations and conveniences stores and banks among others. The Etowah Shopping Center located off of US Highway 64 West (Brevard Road) consists of approximately 45,000 square feet of retail sales and service space. It currently contains nine (9) businesses.

A second CC district lies in the Horse Shoe Community between Banner Farm Road and Hunters Glen Lane and at the intersection of South Rugby Road and US Highway 64 West (Brevard Road). The Plaza of Horse Shoe is located here. The Plaza of Horse Shoe is the site of 14 various retail sales and service businesses. Also located in this commercial node is The Horse Shoe Crossing shopping center. Commercial uses extend along both sides of US Highway 64 West to Battle Creek Road and along the north side of US Highway 64 West (Brevard Road) to Banner Farm Road. Another CC District is found at the intersection of Windsor Drive and US Highway 64 West (Brevard Road). This is the site of the Laurel Park Animal Hospital.

Three (3) existing commercial areas within the Planning Area were rezoned to the Local Commercial (LC) Zoning District with the adoption of the LDC. Horse Shoe Gap Village located near the intersection of Allstar Lane and US Highway 64 West (Brevard Road) in Horse Shoe, is

one such area. Another is located between Horse Shoe Mountain Road and Heartstring Court. Commercial uses here include Budget Appliance, Appalachian Floor Covering, Brogden Drywall and McCraw's Inc. A martial arts studio is situated just to the west of these businesses, but is located in the R2R Zoning District. A final LC district is located to the west of Morgan Road and includes the commercial uses of Mountain HBOT, Blossman Propane Gas and Boondocks Manufacturing.

Industrial Land Uses

Industrial uses are found mostly in and around the Etowah Industrial Park located off Morgan Road. Industrial uses in this area include Advance Technical Welding, Inc., T & T Machine Shop, Inc., and Accu-Grind of NC. The Etowah Industrial Park along with surrounding parcels were rezoned as an Industrial (I) Zoning District with the adoption of the LDC. The purpose of the district is to allow for industrial and heavy commercial development that is compatible with adjacent development and the surrounding community. It is also intended that this area will minimize conflict between land uses and is sensitive to its impact on surrounding land uses and the environment (natural and man-made).

Vacant Land and Development

Undeveloped parcels of land are located throughout the Planning Area with some of the largest tracts of land remaining undeveloped. Some of these tracts, situated to the north and south of US Highway 64 West (Brevard Road), have recently been approved for development as part of subdivisions. In 2007 a total of 1,690 lots were preliminarily approved by the County for development within the Planning Area by the County. These subdivisions are found mainly in the Etowah Community. This trend reflects a dramatic increase in residential subdivision activity throughout Henderson County occurring from 2005 through 2007.

Vacant land comprises 38% of the total land within the Planning Area. Most of the vacant land in the Planning Area is in the Residential Zoning District Three (R3). Approximately 50% of the R3 Zoning District is classified as vacant land. The R2R Zoning District has the second most vacant land at 34 percent (see Figure 3.7.4).

Zoning District	Total Acreage Zoned	Total Acreage of Vacant Land in Zoning District	Percent Vacant Land
Residential District Three (R3)	3,008	1,508	50
Residential District Two Rural (R2R)	7,336	2,459	34
Industrial	80	23	29
Residential District Two (R2)	3,157	892	28
Estate Residential District (R-40)	2,016	332	16
Residential District One (R1)	2,269	247	11
Community Commercial	104	9	9
Local Commercial	7	0	N/A
Office-Institutional	7	0	N/A

Source: County Tax Assessor's Data, October 2007

Land Use Trends

Historically, much of the land in the Planning Area has been in large tracts used for rural or agricultural land uses. In recent years, land is being developed at a faster rate. This land is being converted from open space and agricultural land to predominantly residential land uses. As land continues to be developed for residential purposes, it is expected that commercial uses and other supporting infrastructure will follow to accommodate this residential growth.

The core of the Planning Area, including many areas along US Highway 64 West (Brevard Road), is served by public water provided by the City of Hendersonville. The Etowah Sewer Company, a private sewer service, serves a portion of the Etowah Community. These areas have the highest density residential development and the majority of the commercial development in the Planning Area. Most of the vacant land is found in the rural areas of the Planning Area where there is no water and sewer infrastructure.

According to the Growth Management Strategy of the Henderson County 2020 Comprehensive Plan, new development should be directed toward areas with essential services and infrastructure. This protects sensitive natural areas and agricultural lands from extensive development. It also allows for mixing of residential and commercial uses which may reduce dependency on automobile travel. The density and dimensional requirements of the current zoning districts match this recommendation.

Although water and sewer infrastructure is located in the Planning Area, development of new commercial, industrial and residential uses is limited by the availability of water and sewer services. As water and sewer services and capacities expand, so will the ability for these land uses to expand. Both communities have limited industrial development. Industrial land in the Planning Area is not only limited by infrastructure but also by zoning. The most intensive industrial uses are only allowed in the I district which consists of less than 1% of the zoned portion of Planning Area.

Build-Out Scenario

A build-out scenario was created using the maximum residential and standard densities allowed within the current zoning districts and 2006, 2000, and 1970 household and population data. According to this scenario, Figure 3.7.5 shows the maximum number of allowable residential units in each zoning district. Using recent growth rates, zoning district build-out using maximum densities allowable could be reached by the year 2067, at a population of approximately 82,234 people. Using standard build-out

Figure 3.7.5: Estimated Maximum Number of Units in the Etowah and Horse Shoe Planning Area		
Zoning	Maximum Units*	Standard Units**
R1	29,260	8,293
R2	8,424	3,435
R2R	16,541	8,457
R-40	4,386	2,193
R3	8,070	2,063
Local Commercial	46	23
Office-Institutional	110	91
Community Commercial***	1,050	
Total	67,887	24,555
*Includes multi-family, special use, special subdivisions, and accessory residential		
**Standard densities only		
***Residential by special use permit only		

densities, the maximum build-out would be reached by 2043 with a population of 36,451. This information suggests that the Planning Area may continue to grow faster than the County. However, this is a rough estimate for informational purposes only. This scenario will not accurately predict true population growth and build-out of the Planning Area. This information does not take into account current steep slope regulations and assumes that land use regulations and zoning district boundaries will not change. Transportation networks must also expand alongside population growth. Additionally, environmental, social and economic factors could drastically impact the development of the Planning Area.

Figure 3.7.6: Build-Out Scenario for Etowah and Horse Shoe

Place	2006	2043 (Standard)	2067 (Maximum)
Henderson County	100,107	100,107	367,629
Etowah and Horse Shoe PA	10,396	36,451	82,234

Land Use and Development Goals & Objectives

Goal LUD1: Residential Zoning District Map Amendments

LUD1.1. Maximum Residential Density: Consider eliminating the maximum densities allowed for multifamily development from all residential zoning districts in the Planning Area with the exception of the R1 Zoning District.

LUD1.2. Incorporate the following zoning map changes: (Refer to Maps: 9; 9a; 9b; 9c)

- Replace R-40 in the southernmost portion of the Planning Area with R3.
- Replace all R2R and remaining R-40 area with the R2 Zoning District.
- Replace the R2R zoning that surrounds the north course of the Etowah Valley Country Club with R1 zoning. This includes land adjacent to the Etowah Valley Country Club and Turnpike Road and west of Holly Springs Road.

Goal LUD2: Commercial Nodes and Zoning District Map Amendments (Appendix 1, Maps 9a-9c)

LUD2.1. Local Commercial (LC). LC zoning should be located in the following areas: (Refer to Maps: 9; 9a; 9b; 9c)

- Between Old Highway 64 (Brevard Road), Sunset Hill Drive and Oakland Hill Drive.
- Along both sides of Morgan Road between its intersections with US Highway 64 West (Brevard Road).
- Along the south side of US Highway 64 West (Brevard Road) from the Horse Shoe Gap Village Local Commercial District to the existing Community Commercial Zoning District in Horse Shoe.
- Along Brickyard Road from US Highway 64 West (Brevard Road) to its intersection with McKinney Road.

LUD2.2. Community Commercial (CC). CC zoning should be located in the following areas: (Refer to Maps: 9; 9a; 9b; 9c)

- Add a community commercial zoning district node to the south side to the south side of US Highway 64 West (Brevard Road) between the County border and Old US Highway 64.
- Expand areas around the existing Community Commercial Zoning District in Etowah to include additional commercial uses and property.

Goal LUD3: Provide Regulations that Protect Open Space and Rural Character**LUD3.1. Protect rural character through open space regulations in the Etowah and Horse Shoe Communities.**

Add open space requirements to the Subdivision Regulations in the Land Development Code for the Etowah and Horse Shoe Communities. All major subdivisions with 30 or more lots would be required to comply with the Conservation Subdivision regulations, requiring 25% of the total land, excluding land in floodplain, to be left as open space. Alternatively, a developer may be permitted to pay a fee in lieu of open space at fair market value to the County. This fee would be invested within a three mile radius towards parks, recreation, open space, or as conservation easements.

Note: This item mostly accomplished with recent Land Development Code amendments.

3.8: COMMUNITY CHARACTER AND DESIGN

Community Character

The Planning Area was historically dominated by agriculture and rural commercial businesses. In the past decade, the communities, however, have transitioned towards residential and commercial businesses dominated by restaurants, shops, and services. Commercial uses, located principally along US Highway 64 West (Brevard Road), are a mix of strip developments, rustic wood framed shops and restaurants, gas stations, converted residences, and warehouses. The signage for these commercial businesses varies from wood lettering to painted signs to prefabricated signs. There are also several billboards along US Highway 64 West (Brevard Road).



Horse Shoe Crossing, 2008

Sign Standards

Signs must comply with the requirements under Article VII (Sign Regulations) of the Land Development Code. The following signs are prohibited under the current regulations. Signs: (1) placed in the right-of-way (except as erected for governmental purposes); (2) resembling and/or obscuring traffic signals; (3) obstructing access to drives, doors, walks, windows, fire escapes or fire escape routes; (4) which are animated and/or flashing; (5) on the surface of lake/river water (except those navigation and warning signs); (6) on vehicles parked and located for the purposes of displaying such sign, where such vehicle is either a part of the sign or sign structure; and (7) billboards (an outdoor advertising sign 380 feet in area or greater).



US Highway 64 West, 2008

Signs which do not require sign permits provided they comply with applicable sign standards include: (1) agricultural produce signs; (2) commemorative signs; (3) construction signs; (4) directional signs; (5) flats/insignia; (6) governmental signs; (7) home occupation sign; (8) outdoor advertising signs; (9) political signs; (10) property identification signs; (11) real estate signs; (12) regulatory signs; (13) religious institution signs; (14) temporary event signs; (15) temporary signs; and (16) private vehicle sale signs. For signs requiring permits, area

determinations and height restrictions are based on the type of sign and its location in a zoning district.

Landscaping and Buffering

Under the Land Development Code, Article V (Landscape Design Standards), landscape buffers are required to separate industrial, commercial, and residential uses. Additionally, plant material must be placed for every five (5) spaces when a parking lot is made up of more than ten (10) spaces. When no buffer is required along the front, side, and rear property lines of a development and parking is proposed within 20 feet of the property line, a planting strip is required.

Furthermore, commercial businesses may be required to meet major subdivision standards such as the planting of street trees and, in some cases, vegetated screens. For commercial businesses with major subdivision requirements, tree credits may be used in lieu of street trees by preserving existing onsite trees.

While many existing business in the Planning Area were developed prior to the adoption of these regulations and do not conform to these requirements, any new or proposed business must comply with the requirements outlined in the Land Development Code.

Surrounding Communities

Municipal jurisdictions surrounding the Planning Area include Mills River, Hendersonville, and Brevard (located in Transylvania County). Hendersonville and Brevard are known tourist destinations, incorporating design elements into their downtowns such as flowers and trees, brick facades, limits on building heights, and maintenance of historic buildings. Mills River is a small town maintaining a rural landscape with large tracts of open space and agricultural areas.



Community Character and Design Trends

Community character is being influenced by commercial businesses and large developments. It is important to incorporate design elements into future planning for the Planning Area. The public input session reflected a particular desire for the Communities to maintain their rural character, protect the value of the land, have appealing commercial businesses, prohibit billboards, have more parks and green spaces, and to have design standards specific to their communities' needs.

Community Character and Design Goals & Objectives

Goal CCD1: Establish a Planning Area Overlay District.

CCD1.1. Consider establishing design standards for nonresidential uses in the Planning Area Overlay District.

Design standards should prohibit unfinished steel or aluminum roofing and aluminum siding material and vinyl siding, and require at least 30% masonry fronts which includes stone or brick (log or timber materials may be acceptable). Where buildings are visible from the side, appropriate evergreen plantings shall be used to obscure the view from adjoining streets.



CCD1.2. Require sidewalks for all new commercial businesses along Brickyard Road to McKinney Road and along any new road frontage in areas zoned commercial.

Sidewalks and walkways should take advantage of, and give access to views, open space and environmental features of the area. Whenever possible, sidewalks should be incorporated into road work or expansion. Maintenance would be the responsibility of the property/business owner through an LDC amendment.

Note: Encroachment agreement with NCDOT would be required. Sidewalk maintenance would be required by the County or business. Recreation service district may possibly be used to fund construction or maintenance of the sidewalks.

CCD1.3. Create new sign requirements for the Planning Area.

Restrict sign height for commercially zoned areas to a maximum of eight (8) feet. Require adequate landscaping around signs to improve aesthetics of signage.



CCD1.4. Reduce front and side setbacks.

Reduce front and side setbacks to zero (0) feet along Brickyard Road, from US Highway 64 to McKinney Road (or other suitable roads). Place parking along the side and rear of new commercial buildings when feasible. Note that only the standard zoning district setbacks would be reduced. Buffers (such as stream buffers and setbacks for certain types of adjacent uses and zoning districts as specified in the Land Development Code) will still be required.

CCD1.5. Incorporate standards to limit light pollution.

Incorporate standards that require semi-cutoff or full-cutoff lighting for major subdivisions and commercial developments within the Planning Area.

Section 4, Maps

