

SECTION 3: GRZ COMMUNITY PLAN

3.1: NATURAL AND CULTURAL RESOURCES

Sensitive Water Resources

River Basins and Watersheds. The Eastern Continental Divide (ECD) is the boundary which separates the Gulf of Mexico and Gulf of St. Lawrence drainage basins from the drainage basins that flow directly into the Atlantic Ocean. Until 1763, the official end of the Seven Years’ War (French and Indian War), the ECD represented the boundary between British and French colonial possessions. Those lands to the west of the ECD, claimed by the French, were lost to the British in the war.

The ECD passes through the County and Planning Area (See Map 2, Sensitive Natural Areas (Pg. 62)). This boundary separates two river basins (the land surface drained by streams and creeks flowing into one another, eventually into a single large river). The Planning Area consists of 36,608 acres (99%) in the Broad River Basin and 325 acres (0.88%) in the French Broad River Basin.

The Broad River Basin includes the Green River and Lake Summit Watersheds (See Figure 3.1.1). The Green River Watershed is a heavily forested watershed with excellent water quality and healthy streams. This area of the County has been known for its pristine waters and is the head waters to a number of sub-watersheds (See Figure 3.1.2.) including the drainage basin of the Lake Adger watershed.

Figure 3.1.1. Planning Area Watersheds

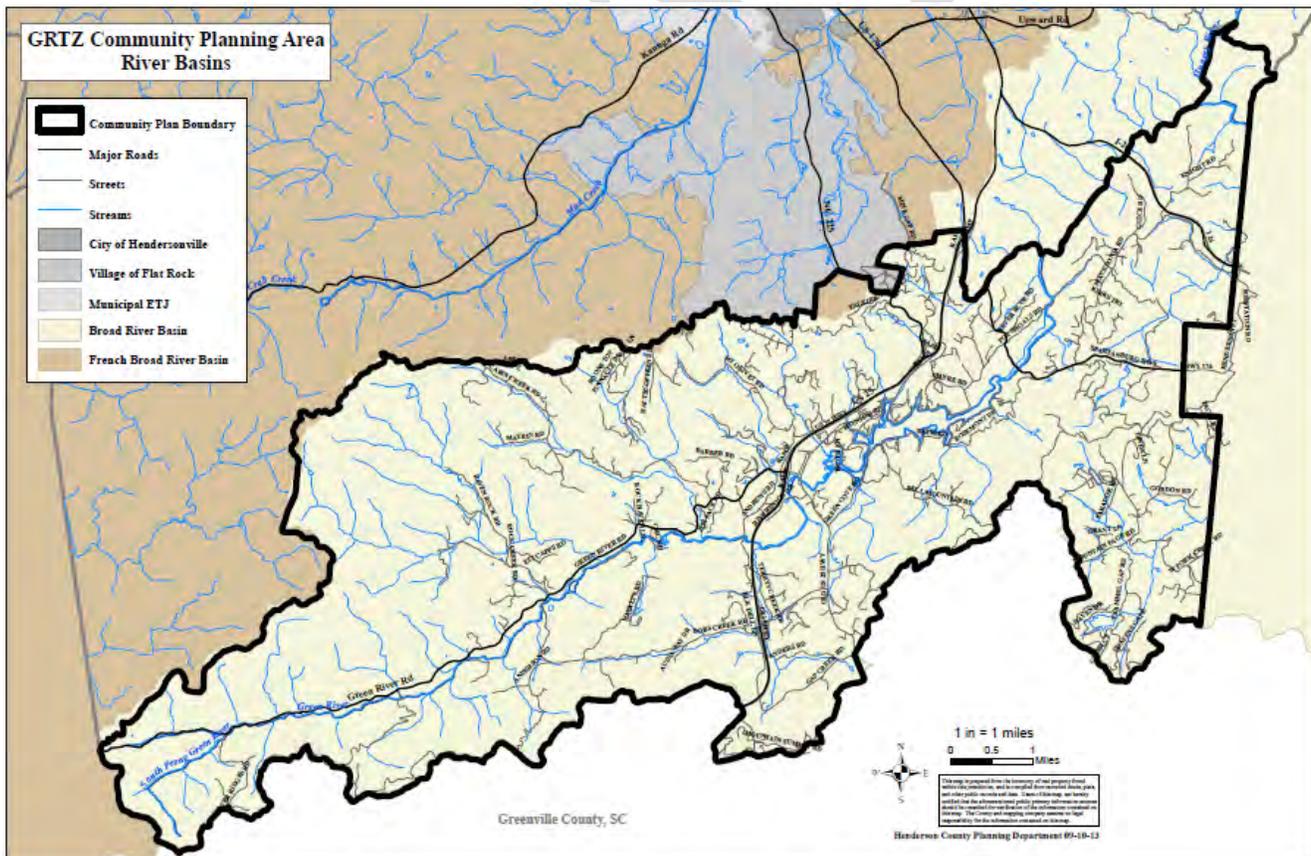
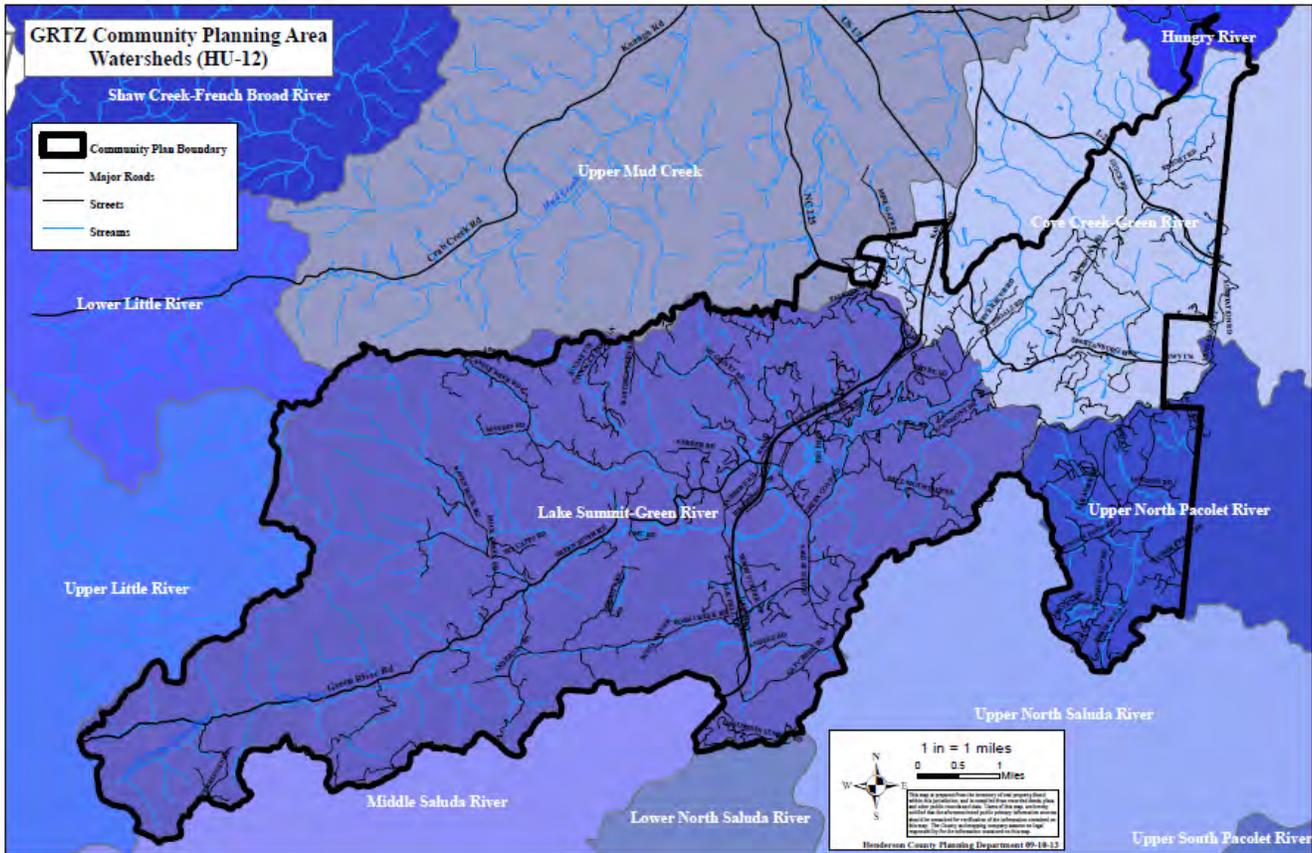


Figure 3.1.2. Planning Area Sub-Watersheds (HU-12)



Stream Classifications. The US Clean Water Act (specifically Section 303(d)) requires states list waters that do not meet established quality standards. The North Carolina Division of Water Quality’s (NCDWQ) 2012 list of North Carolina Impaired Waters due a fair bio-classification for ecological/biological integrity (See Map 2, Sensitive Natural Areas (Pg. 62)).

The Volunteer Water Information Network (VWIN) monitors four (4) sites in the Green River Watershed. Two of those sites (Green River at Terry’s Creek Road and above Lake Summit) show evidence of sediment in turbidity and total suspended solids and have a chemical rating of good. The site downstream of Lake Summit is the only site in Henderson County rating excellent. The may be explained since the sediment has an opportunity to settle out in the lake.

Streams become degraded by altering the stream and surrounding area (removal of riparian vegetation, channelization, dikes, and other alterations); and adding contaminants to the stream including sediment (from disturbed stream banks, unpaved roads, and others), polluted stormwater runoff (primarily in more urbanized areas), wastewater discharges, potential hazardous spills, pesticides, and stream access by livestock.



View of Green River from Old Pace Farm Road.

NCDWQ also classifies streams based on their ability to support trout propagation and survival on a year-round basis (known as “Trout Waters”). There are 139 miles of perennial streams in the Planning Area and 8 miles are classified as trout waters (5.8% of streams). These streams include all or portions of Hungry River and Green River (above Lake Summit and Lake Summit below elevation 2011). The Trout Waters classification protects these streams by applying more stringent water quality standards and buffers (25 foot wide buffer or a sufficient width to confine visible siltation within the 25% of the buffer zone nearest the land disturbing activity is required).

The Soil Erosion and Sedimentation Control Regulations of Chapter 200A, Land Development Code (hereinafter “LDC”), limit land-disturbing activities within 25 feet of classified trout waters. Certain exclusions to these restrictions apply including agriculture, foresting/timbering, and any land disturbing activity over which the State has exclusive regulatory jurisdiction.

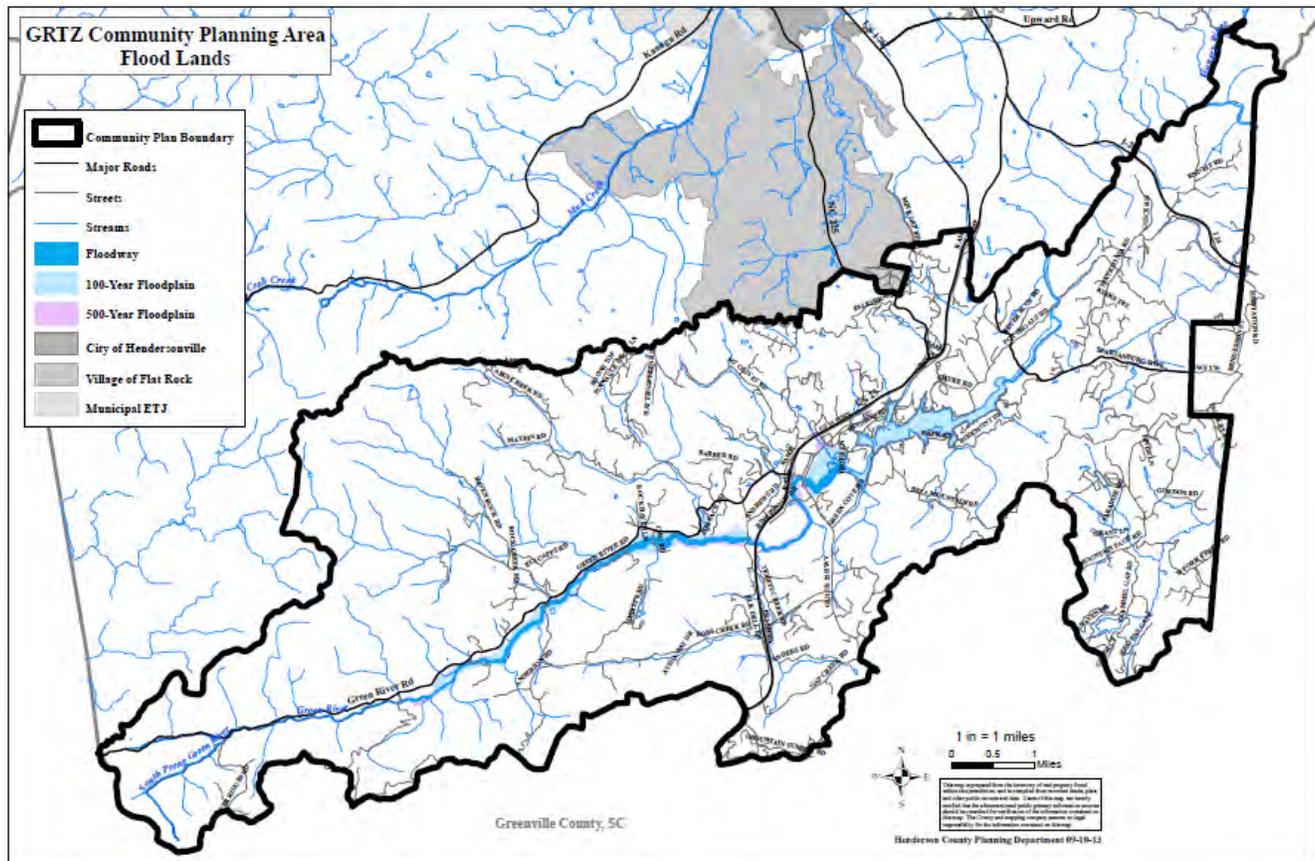
Even with protective measures, sedimentation and the resulting increased turbidity (the measurement of the visual clarity of a water sample) remain a particular concern in trout waters. Trout eggs can withstand only small amounts of silt before the likelihood of hatching is greatly reduced. Water temperature is another concern. Clearing buffers of vegetation exposes stream water to the sun and raises water temperatures threatens trout survival.

Flood Lands. Planning Area floodplains and floodway are principally located around Green River and Lake Summit. A floodway includes the stream channel and the adjacent areas that carry the deepest and fastest waters associated with a flood event. 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 in a given year. The Planning Area has 188 acres located in the floodway and 645 acres are in 100-year floodplain, this is about 1.7% of all the land in the Planning Area. There is also 84 acres in the 500-year floodplain – this is about 0.23% of all land in the Planning Area (See Table 3.1.1 and Figure 3.1.3).

Table 3.1.1. Planning Area Flood Lands			
Flood Designation	Total Acreage	Percent of	
		Planning Area (%)	County Flood Lands (%)
Floodway	188	0.51	1.48
100-Year Floodplain	645	1.75	4.83
500-Year Floodplain	84	0.23	4.87
Total	917	2.48	3.56

Source: Henderson County Flood Damage Prevention data (2012).

Figure 3.1.3. Planning Area Flood Lands



The Flood Damage Prevention regulations of the LDC: (1) do not restrict development in the 500-year floodplain, (2) limit development in the 100-year floodplain (in terms of fill and structure elevation), and (3) prohibit fill or placement of structures in the floodway.

Wetlands. Wetlands are defined by soil saturation and plant and animal life. Wetlands include swamps, marshes, and bogs. The Planning Area contains approximately 447 acres of palustrine wetlands (dominated by trees, shrubs, persistent emergents (species that remain standing during the period between growing seasons), emergent mosses, or lichens). These wetlands contain a number of grasslike plants (cattails, bulrushes, saw grass, sedges) and true grasses (reed, manna grasses, slough grass, and whitetop) (See Map 2, Sensitive Natural Areas (Pg. 62)).

Trends. The Planning Area contains significant water resources but water quality is threatened throughout Henderson County. Fertilizers/pesticides, livestock waste, sediment, stormwater, and wastewater are increasingly entering streams because of land development/use practices. Each of these substances degrades water quality. Fertilizers and pesticides cause algae overgrowth, increased cloudiness, and fish kills. Livestock wastes introduce additional nutrients, bacteria, and pathogens. Sediment, the principal pollutant of North Carolina streams, buries aquatic organisms and blocks light to aquatic plants, clogs fish gills, and reduces water clarity. Stormwater and wastewater add more nutrients, bacteria, pathogens, and chemicals.

Developing land can also substantially degrade water quality. Development typically increases impervious surfaces resulting in increased stormwater entering streams and increased flood events. Development that alters stream courses, reduces or removes vegetation, and fills or modifies flood lands can: (1) reduce the ability of a stream to accommodate the increased velocity and force of

floodwaters, (2) damage streambanks, (3) result in scouring or sediment loading of the stream; and (4) result in flooding events that last longer and cover larger areas of bottomland.

The cumulative impact of existing practices and new development pressure will continue to degrade water quality throughout Henderson County. As development continues, monitoring and protecting the quality and quantity of water resources in the Planning Area will be essential to prevent degradation or depletion of water resources.

Sensitive Land Resources and Protected Species

Protected Mountain Ridges and Steep Slopes. Protected mountain ridges and steeply sloping lands are primarily located in the eastern portion of the Planning Area. The North Carolina General Assembly authorized the Protected Mountain Ridge regulations of the LDC. These regulations apply to all mountain ridges whose elevation is 500 or more feet above the elevation of an adjacent valley floor (See Map 2, Sensitive Natural Areas (Pg. 62)). Structures located on a protected mountain ridge cannot have a vertical height of more than 40 feet (measured from the top of the foundation) and cannot protrude at its uppermost point above the crest of the ridge by more than 35 feet.

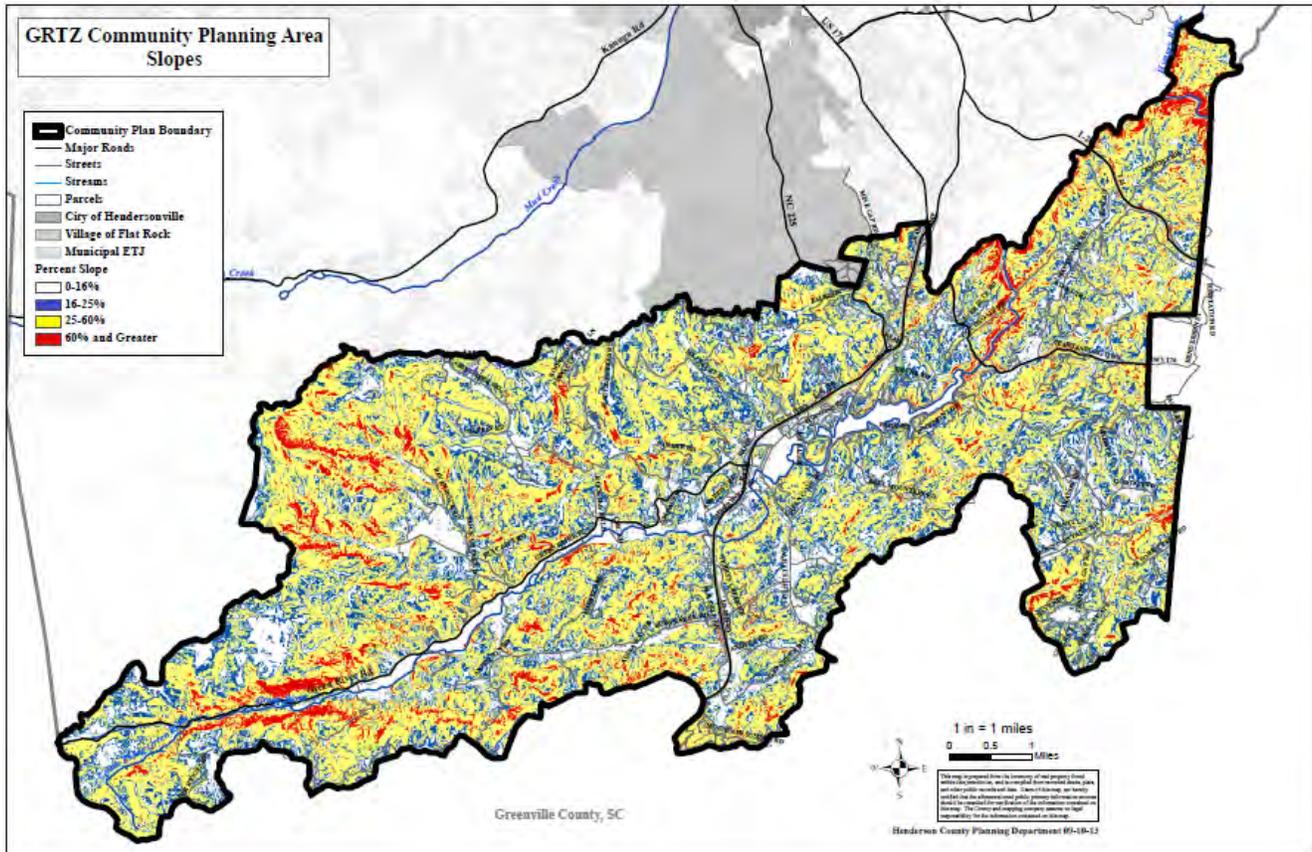
The Planning Area also contains steep slopes (See Table 3.1.2 and Figure 3.1.4). The LDC reduces density by one-half (½) for those portions of a tract with a slope of 60% or greater (where such slope areas of the tract account for 10% or more of the tract).

Percent Slope (%)	Total Acreage	Percent of Planning Area Lands (%)
0-16	8,378.31	22.69
16-25	7,641.08	20.69
25-60	18,753.49	50.78
60 and Greater*	2,122.01	5.75

*These slopes are regulated by the County through LDC density reduction standards.

Source: Henderson County slope data (2009).

Figure 3.1.4. Planning Area Slope



Environmentally Sensitive Sites. The Planning Area contains many environmentally sensitive sites, with seven (7) designated as Significant Natural Heritage Areas by North Carolina Natural Heritage Program (See Map 2, Sensitive Natural Areas (Pg. 62)). These seven (7) sites include:

Green River Headwaters/Preserve. The privately owned site is significant due to its good quality of Canada Hemlock Forests with scattered old growth trees. Several ravines are moderately rich in herbaceous species and bogs are found throughout the preserve. Longstalk Sedge (State Special Concern), Green Salamander (State Endangered and Federal Species of Concern), Wood's Sedge (State Significantly Rare), French Broad Heartleaf (State Significantly Rare and Federal Species of Concern), Rough Blazing-Star (State Threatened), Sweet Pinesap (State Special Concern and Federal Species of Concern), and Ash-Leaved Golden Banner (State Special Concern) grown onsite.

Lower Hungry River Gorge. The publicly owned (NC Wildlife Resources Commission) Dedicated State Nature Preserve is a deep tributary gorge to the Green River Gorge. This site is significant due to its good quality White Pine Forest, Carolina Hemlock Forest, and Pine-Oak/Heath. Mountain heartleaf (State Endangered), longstalk sedge (State Significantly Rare), French Broad heartleaf (Federal Species of Concern and State Threatened), and Sweet White Trillium (State Threatened) grow onsite.

Green River Gorge. The publicly owned (NC Wildlife Resources Commission) Dedicated State Nature Preserve is a large (over 7,000 acres total) deep escarpment gorge. This site is significant due to its good quality Pine-Oak/Heath, Rich Cove Forest, Carolina Hemlock Forest, White Pine Forest, and Chestnut Oak Forest. Longstalk sedge (State Significantly Rare) and French Broad heartleaf (Federal Species of Concern and State Threatened) grow onsite.

Laurel Branch Creek Gorge/Buckeye Ford. The privately owned site (Duke Power Company) is a site that harbors an excellent example of a Rich Cove Forest. This site is significant due to the presence one of the best stands of basswood seen in the country. Longstalk Sedge (State Special Concern).

Long Rock. The privately owned site is significant because of the uncommon floristic diversity. This site is well-known for its views and has a large exposed granitic-gneissic dome. Green Salamander (State Endangered and Federal Species of Concern).

Pearsons Falls Glen/Pacolet River Bluffs. The privately owned site is significant because the canopy is rich with over 15 species present and the herb layer is equally diverse. A large Canada hemlock forest is found with a large number of old growth trees. Fort Mountain Sedge (State Significantly Rare and Federal Species of Concern) and Sweet White Trillium (State Threatened).

Pinnacle Mountain. The privately owned site that is significant due to its large and extensive diversity of flora and fauna. This site hosts a high mountain with extensive outcrops, cliffs and boulder fields with a granitic dome. There are large healthy populations of Carolina hemlock, pine-oak, and heaths. Fort Mountain Sedge (State Significantly Rare and Federal Species of Concern), Wood’s Sedge (State Significantly Rare), and French Broad Heartleaf (State Significantly Rare and Federal Species of Concern).

Protected Species. Using the Natural Heritage Inventory 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 (see Table 3.1.3).

Table 3.1.3. State and Federal Protected Species Located within the Planning Area				
Common Name	Scientific Name	Kingdom	Protection Status*	
			Federal	State
Cherokee Sedge	Carex Cherokeeensis	Plant		Endangered
Showy Aster	Eurybia Spectabilis	Plant		SR
French Broad Heartleaf	Hexastylis Rhombiformis	Plant	FCS	SR
Closter’s Brook-Hypnum	Hygrohypnum Closteri	Plant		SR
Pringle’s Water Feather Moss	Oxyrrhynchium Pringlei	Plant		SR
Green Salamander	Aneides Aeneus	Animal	FCS	Endangered
Longstalk Sedge	Carex Pedunculata	Plant		SC
Wood’s Sedge	Carex Woodii	Plant		SR
Rough Blazing-Star	Liatris Aspera	Plant		Threatened
Sweet Pinesap	Monotropis Odorata	Plant	FCS	SC
Ash-Leaved Golden-Banner	Thermopsis Fraxinifolia	Animal		SC
Mountain Heartleaf	Hexastylis Contracta	Plant	FCS	Endangered
Sweet White Trillium	Trillium Simile	Plant		Threatened
Fort Mountain Sedge	Carex Communis var. Amplisquama	Plant	FCS	SR
Bog Jack-in-the-Pulpit	Arisaema Triphyllum ssp. Stewardsonii	Plant		SR
Pennsylvania Ground-Pine	Dendrolycopodium Hickeyi	Plant		SR
Mountain Sweet Pitcher Plant	Sarracenia Jonesii	Plant	Endangered	Endangered
Walter’s Crownbeard	Verbesina Walteri	Plant		SR

*SC: Special Concern; SR: Significantly Rare; FCS: Federal Species of Concern.
 Source: North Carolina Natural Heritage Program (2012).

Green River Game Lands. The game lands, owned and managed by the North Carolina Wildlife Resources Commission, contain 14,308 acres across Henderson and Polk Counties. The purpose of the game lands is wildlife conservation and management. Hunting, fishing, and trapping are permitted. Trails are also available to hikers throughout the year (they should only be used on Sundays during hunting season (mid-September through mid-May)). Henderson County contains 2,850 acres (approximately 20%) of the game lands. The Planning Area contains 38.65% (1,101.41 acres) of the Henderson County portion of the game lands (See Map 2, Sensitive Natural Areas (Pg. 62)).

Conservation Easements. The Planning Area contains conservation easements held by a variety of private organizations, non-profit organizations, and state agencies. The Carolina Mountain Land Conservancy holds 11 conservation easements within the Planning Area that contains approximately 3,808 acres. The Planning Area also includes 20 easement sites under the Land Trust Conservation category that contains approximately 13,247 acres. The Land Trust Conservation and Carolina Mountain Land Conservancy sites indicate that a private or non-profit organization holds property with the intent to conserve and preserve the land from any form of future development. Additionally, 27 easement sites within the Planning Area fall under the category of Managed Sites and represents approximately 22,031 acres. The Managed Sites includes properties that are held by either private, non-profit, or state agencies to control the principal application that the site is preserved for (e.g. mining, logging, environmental significance, etc.).

Within the Planning Area 34 sites are under the Conservation Tax Credit category that contains approximately 12,780 acres. The Conservation Tax Credit category provides incentives for landowners to place a conservation easement over their property for preservation. The Planning Area has a number of conservation easement areas to protect or preserve a variety of natural resources for future generations. A significant number of the easements held are sites that allow harvesting of the resources, but are managed to limit over harvesting and permanently damaging the land for future uses. Conservation Tax Credit, Land Trust Conservation, Carolina Mountain Land Conservancy, and Managed Sites categories have overlapping boundaries. The information presented above represents the total acreage contained per category and should not be combined for total easement evaluation purposes.

Trends. Land resources in the Planning Area are limited. Approximately 13,144 acres of the Planning Area's 36,933 acres (35.6%) are vacant. Development trends and future pressures, if not properly managed, could negatively affect these limited resources.

Cultural and Historical Resources

Native Americans were among the first settlers in the Planning Area. Settlement of Henderson County and the Planning Area increased following the American Revolutionary War. Many of these early colonial families still make their home in the area. A number of important cultural and historical resources from over 200 years of colonized history are within the Planning Area (See *GRTZ Community Plan Supplemental Materials* for a full Cultural and Historic Sites Inventory). Included are the following sites:

Zirconia Missionary Baptist Church Cemetery. This cemetery contains several decorated veterans from WWII and the Korean War. It is located along Highway 1860 off of Highway 25 and contains sixteen (16) grave sites. Several grave sites have markers missing and were unable to be identified. This cemetery is well maintained and easily accessible (See *GRTZ Community Plan Supplemental Materials* Cultural and Historic Sites Map, Site C31).

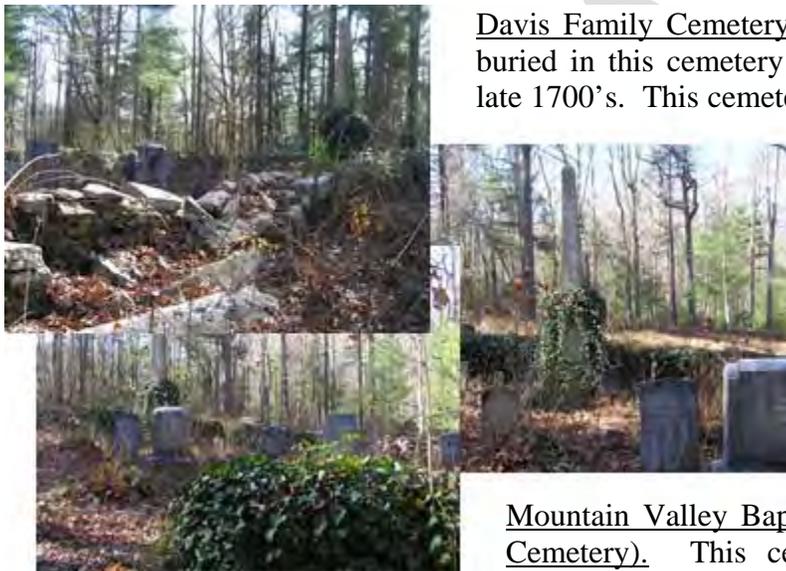


MT. Olivet Baptist Church Cemetery.

This cemetery is one of the largest in the Planning Area. Two grave sites date back to the 1700’s, Ephraim Hart was born in 1787, and Lucinda Freeman born in 1792. The cemetery is located off Highway 25 approximately three (3) miles up Mt. Olivet Road. This cemetery is well maintained and easily accessible (See *GRTZ Community Plan Supplemental Materials Cultural and Historic Sites Map, Site C13* and photos at Left).

Bell Family Cemetery. This family cemetery is now uniquely located in the Camp Green Cove property.

Joseph O. Bell was not buried in this cemetery, but he is related to the individuals buried here. There are four (4) grave sites in this plot, which is uniquely tucked away in a heavily forested area covered by ivy. This cemetery is on private land and is not easily accessible (See *GRTZ Community Plan Supplemental Materials Cultural and Historic Sites Map, Site C22*).



Davis Family Cemetery. Many members of the Davis family are buried in this cemetery including two (2) individuals born in the late 1700’s. This cemetery has several war veterans, which include Bales Fate Levi, Civil War, and Captain John Levi, Mexican War. This cemetery is located off Old US 25 South in a heavily wooded area. This site is easily accessible, but the cemetery is in distress with several falling walls and stones (See *GRTZ Community Plan Supplemental Materials Cultural and Historic Sites Map, Site C18* and Photos at Left).

Mountain Valley Baptist Church Cemetery (Old Pearson-Ward Cemetery).

This cemetery is located on Mountain Valley Cemetery Road off Cabin Creek Road about five (5) miles up from Green River Road. The cemetery is located on the right just past the new church. Several grave sites date back to the early 1800’s, which include Leonard R. Capps, 1836, and Matharsia Capps, 1838. This cemetery contains a significant number of fieldstones that are unreadable and were identified as hand cut. Willie Calloway, WWII, and Leonard R. Capps, Confederate Marker, are two (2) individuals identified as veterans. The site is easily accessible, well kept, and easy to follow (See *GRTZ Community Plan Supplemental Materials Cultural and Historic Sites Map, Site C7*).

Trends. Historical and cultural sites important to the Planning Area and County are being lost due to decay, lack of knowledge of the site or its historical significance, and development pressures. Identified historic structures are also in close proximity to major roads and expansion and widening of these roads may pose a threat to the preservation of these structures.

Natural and Cultural Resources Goals and Objectives

Goal N1. Monitor water quality within the GRTZ Planning Area

- N1.1. Current federal, state and local regulations provide adequate water quality protection. No additional regulations are needed in the planning area.**
- N1.2. An official water supply watershed designation for Lake Adger (that includes the entire Green River Watershed) within Henderson County should not be supported by Henderson County.**
- N1.3. Develop or use existing educational materials regarding development of property along or with streams.**

Goal N2. Protect land quality within the GRTZ Planning Area.

- N2.1. Provide educational material and encourage mountain views and ridge tops to be preserved/protected.**
- N2.2. Encourage limited cutting on ridges and slopes for development and forestry management.** The County should encourage reforestation cleared or logged areas of land, especially those on ridges and slopes.
- N2.3. Encourage open space through voluntary conservation.**

Goal N3. Create incentives/opportunities for preservation of historic and cultural sites within the GRTZ Planning Area.

- N3.1. Develop and incorporate a historical feature about the community’s heritage and manufacturing history on the Tuxedo Park Plan located at the old mill site.**
- N3.2. Encourage the preservation of the petroglyphs at Long Rock as a cultural and significant natural heritage site.**

3.2: AGRICULTURE

Existing Agriculture Lands and Production

Approximately 14,384.71 acres (42.39%) of the Planning Area is agricultural land (horticultural and forestlands are included in this category)¹. Data used to identify the amount of land in agriculture include: (1) United States Department of Agriculture data (2009 Farm Services Agency and 2007 Census of Agriculture data); and (2) Henderson County data (2011 tax parcel and voluntary agricultural district data).²

The Planning Area contains a significant portion of the County’s agricultural lands; containing 14.13% of the County’s land but approximately 16.36% of its agricultural land (See Map 3, Agriculture (Pg. 63)).

The Planning Area contributes to the County’s agricultural prominence with farms producing apples, tomatoes, peppers, corn, vegetables, hay, cattle, and sheep. The Planning Area also includes a significant number of nursery operations.

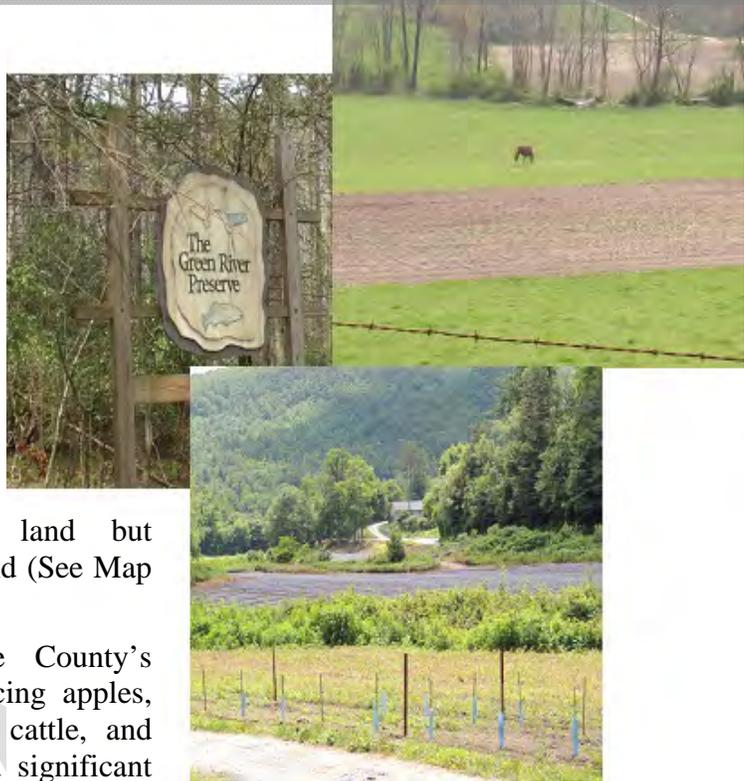


Table 3.2.1. Planning Area Agricultural Lands			
Place	Acreage		Percent of Total Acreage in Agricultural Lands
	Agricultural Lands	Total	
Henderson County	87,929.91	240,099.79	36.62%
Planning Area	14,384.71	33,933.16	42.39%

Source: USDA FSA data (2009) and Henderson County data (tax parcel and voluntary agricultural district (2012)).

Recent trends indicate farmers are diversifying crops and products to remain competitive. County production ranks as follows:

- Apple Production. First in the State annually, and a leading producer of apples in the southeast;
- Nursery, Greenhouse, & Floriculture Revenues. Second in the State (2010);
- Vegetable Production. Third in the State annually (2010);
- Dairy Revenues. Eighth in the State annually (2011);
- Corn for Grain Production. First in Western North Carolina (2011); and
- Cattle. Fifth in Western North Carolina (2011).

In terms of cash receipts, the County was the second most lucrative in the State in terms of revenues from nursery, greenhouse, and floriculture generating just under 46 million dollars in 2010. The County was the 6th most lucrative in the State in terms of cash receipts for crops (2010) and the 34th

¹ Actual acreage in agricultural land may be higher than data indicates.

² United States Department of Agriculture (USDA) data include Farm Services Agency (FSA) program (conservation, loan, credit and disaster) data and Census of Agriculture data (conducted each five (5) years). Henderson County data include tax parcel data (all land classified as “present-use value”, “agriculture-horticulture” and “forestland”) and voluntary agricultural districts (all active participants in the program).

most lucrative in the State in terms of total cash receipts from agriculture (2010). Additionally, the County was second most lucrative in the State in terms of revenue from tomatoes and third in the State from sweet corn revenues.

The County is active in preserving its agricultural prominence. In 1991, the County adopted a Farmland Preservation Ordinance to: (1) encourage voluntary preservation and protection of farmland from nonfarm development; (2) increase awareness of local farm locations; (3) educate the public about local farms; and (4) recognize the importance of agriculture to the economic and cultural life of the County. The ordinance established the voluntary agricultural district program requiring purchasers of subdivided properties (within a specified distance of district lands) be notified of nearby district designations. The ordinance does not regulate the conversion of farms into developed lands.

In 2009, the County expanded the program to include the enhanced voluntary agricultural district which offers an increased set of incentives for landowners to restrict development for a ten (10) year period.

The County also participates in a present use value taxation program where it taxes eligible lands on the present use value instead of the market value. Present use value (the value of the land in its current use) is only applied to agricultural, horticultural, or forestland. Not all agricultural land is eligible and must meet requirements related to: (1) time of application, (2) ownership, (3) size, (4) income, (5) management, and (6) any other requirement established by North Carolina General Statutes. This program reduces property tax burden, ultimately reducing development pressure.

Finally, the County has provided in the Land Development Code (LDC) a 5% density bonus for those conservation subdivisions preserving active agricultural lands.

Agriculture in the GRTZ. The Planning Area has long been associated with and identified by its nursery, greenhouse, floriculture, and timber industries. GRTZ community planning area offers limited ideal growing conditions given its climate and terrain.



The agriculture industry in the GRTZ community planning area has long been a tradition. Agriculture was initially a tradition to provide resources for individual families. Throughout history, agriculture began to develop outside of the realm of individual family consumption to a method of marketing and selling to surrounding communities. In the late 1800’s, the first railroad in the County was built, with the first steam engine arriving in the original Hendersonville Depot in 1879. Agricultural growers soon thereafter began expanding their markets, hauling apples and other produce into nearby communities in South Carolina. Although agriculture began to expand within

Henderson County in the early 1900’s, the GRTZ community planning area was limited in their effort to expand agricultural practices.

In the GRTZ community planning area there are several limitations that inhibit the growth of agriculture beyond what is currently prevalent. First, the topography and geography of the land in the

community planning area is extreme and discourages agricultural practices. Over 77% of the community planning area has slopes greater than 16%. Agricultural practices traditionally require flat land in order to be efficient and effective with the challenges associated with farming. Additionally, agricultural practices require a continuous supply of water resources to support the lifecycle of the agricultural products. The community planning area has a number of water resources, but the accessibility to harvest the water is a significant challenge. Most of the streams and rivers in the community planning area runoff from steep terrain that make controlling and harvesting the water resources an expensive endeavor. Water resources for agricultural practices, traditionally, are found within low lying areas where the flow of water is slow and easily accessible. The community planning area primarily has one large river, Green River that offers ideal requirements for agricultural practices. The Green River Valley hosts a number of different agricultural practices, but it is limited due to the valley floor being constricted by the surrounding topography.

Although the GRTZ community planning area faces limitations in agricultural production, there are several key important agricultural practices that contribute to the overall Henderson County agricultural production. In the community planning area there is one apple orchard, which is one of the top producing apple orchards in the county at over 50 acres. There are no dairy farms, but there are several cattle farms with approximately 225 head of cattle. Additionally, there are a few sheep farms with approximately 25 sheep and some small scale chicken farms. The community planning area also contributes to the County’s agricultural presence through hay, tomatoes, peppers, and corn production. A large majority of the farms are family owned and primarily serve the community in which they are found. One significant agricultural resource that is found in the GRTZ community planning area is nurseries, greenhouses, and floriculture. The majority of agriculture found in the community planning area consists of nurseries that grow a variety of local native species of shrubs and trees. Henderson County nursery, greenhouse, and floriculture are second in the state in revenues after generating just under 46 million dollars. Also, timber is a large industry in the community planning area, but the Green River Preserve, which was a major source of timber, is now under a conservation easement that limits the amount of harvested timber.

Nurseries play an important role in protecting the native species that are found in specific areas. The United States Department of Agriculture defines nurseries as crops that include ornamental trees and



shrubs, vines, and ground covers for landscaping and garden uses. Floriculture is also defined by the USDA as the cultivation of ornamental and flowering plants. Traditionally, nursery crops are woody perennial plants that are grown in the open and floriculture crops are grown in greenhouses or other covered areas. Native species are defined as one that occurs in a particular region, habitat without direct or indirect human actions, and ecosystem. The Endangered Species Act only protects about 737 native plant species, but it is estimated that nearly 25 percent of the native plant species in North American are at risk of extinction.

More and more regions are recognizing that in order to preserve individual native species that their plant communities must be preserved. Native plant species are valued for their economic, ecological, genetic, and aesthetic benefits, which is the growing concern that these plant species should be protected. In 1995, federal agencies and a handful of organizations created the Native Plant Conservation Initiative National Strategy for the protection of native plants. This initiative is still operating to this day and works to preserve the native plant species found throughout North America. Nurseries are one example of how this initiative is working to mitigate the growing fear of species loss.

Growing native plants to restore the landscape or as a substitute for exotic ornamental plants can help preserve and reverse native habitat loss. Native species provide the keystone elements for ecosystem restoration and native plants help to increase the local population of native plant species. The National Park Service believes that local nurseries growing native plants are essential for future preservation of the natural plant species found in particular areas.

Trends. Despite the prominence of agricultural lands in the Planning Area, trends show declining agricultural lands in the County. According to the USDA Census of Agriculture, the County has seen an estimated 35.93% decline in total agricultural acreage during the 20-year period between 1987 and 2007 (See Table 3.2.3).

Table 3.2.3. Henderson County Agricultural Census Data

Place	Acreage by Census Year*					Percent Change	
	1987	1992	1997	2002	2007	Total (%)	Average Annual (%)
Henderson County	59,232	52,281	44,511	48,619	37,947	-35.93	-1.80

*The acreage included herein may not include all land actively involved in agriculture as the Census of Agriculture is a survey based on individual responses. Information available from the FSA indicates additional acreage not included by the Census.

Source: USDA Census of Agriculture (1987, 1992, 1997, 2002 and 2007).

Agricultural lands are declining because of: (1) parcelization, (2) scattered development pattern, (3) farmers' inability to compete successfully for land because of increased land value, (4) the loss of farmers due to age and lack of heirs interested in continuing farming, and (5) the economic hardships of farming.

Once agricultural land is developed, its agricultural value is reduced significantly if not permanently lost. Agricultural lands are lost piece by piece to development because of parcelization (when a farm is divided multiple times into smaller tracts that are more easily sold and developed). Parcelization is part of the problems created by scattered development (occurring adjacent to existing agricultural lands). Scattered development makes farming more difficult in that farming practices and effects (dust, smells, sprays, noise, etc.) may be difficult to mitigate and can cause tension between neighboring residential uses and the farm. Individuals associated with the development may also negatively affect the farm through their own activities including trespassing, vandalism and theft. Adjacent development may result in increased property values making it more difficult for farmers to compete successfully for valuable agricultural land.

The overall decline in agricultural land is also the result of selling farms to developers. A farmer's age and lack of heirs combined with the economic hardships of farming often results in the sale of farms. In 2007, the average age of a Henderson County farmer was 57.2 (USDA Census of Agriculture). Given the aging population, this issue will likely remain a cause of agricultural land loss.

Development trends and future pressures, if not properly managed, may negatively affect agriculture.

Agricultural Goals and Objectives

Goal A1. Expand and diversify agricultural markets within the GRTZ Planning Area

- A1.1. Continue to support and increase local participation in the tailgate market located at the Tuxedo Community Store.**
- A1.2. Work with the Henderson County Partnership of Economic Development and the Henderson County AgriBusiness Director to market local farms in the GRTZ area. Link local farm productions with larger retail outlets (example Ingles on Hwy 176) to promote the selling of local food.**

- A1.3. Promote agritourism in the GRTZ planning area.** Encourage local agriculture to grow and diversify through agritourism similar to efforts made by Sky Top Orchard. Agritourism is a way to attract tourists and local residents to the farm.
- A1.4. Support small scaled local farms and encourage a range of diversity.** The topography of the GRTZ planning area and scale of existing farmland supports small scaled operations. This also provides an opportunity for a new generation of farmers to diversify and to become established.

Goal A2. Provide public education as a means of supporting farmers and protecting farmland.

- A2.1. Encourage local farms to work with the Henderson County Soil and Water Conservation District about soil erosion prevention, diversifying agricultural production and funding sources.**
- A2.2. Connect local producers with educational opportunities at Blue Ridge Community College.**
- A2.3. Work with the local FFA, 4-H Clubs and school system to encourage and educate younger generations in agriculture practices.**
- A2.4. Encourage good forestry management practices in conjunction with agriculture activities.**

Goal A3. Reduce farmland loss within the GRTZ Planning Area.

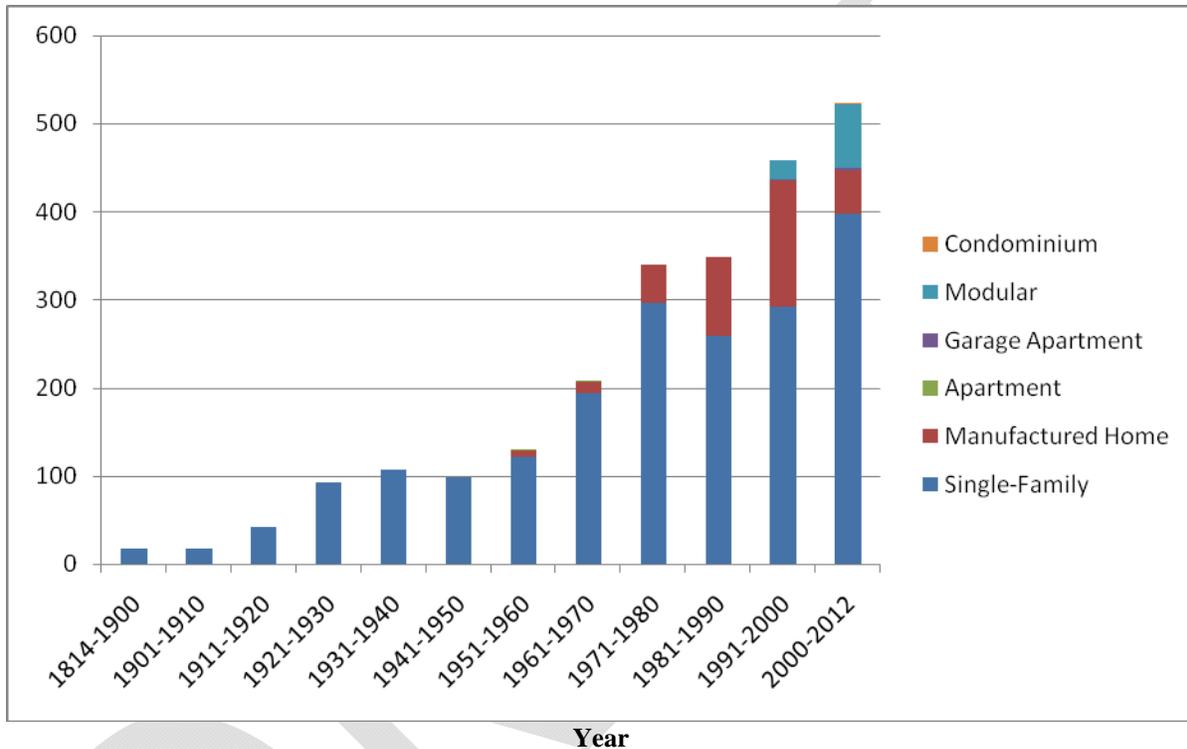
- A3.1. Support an estate tax waiver or deferment for agricultural lands intended to remain in agriculture.** The County should support any necessary changes in State law to permit waiver.
- A3.2. Promote rural character in prime agricultural areas as a method of encouraging agricultural preservation.**

DRAFT

3.3: HOUSING

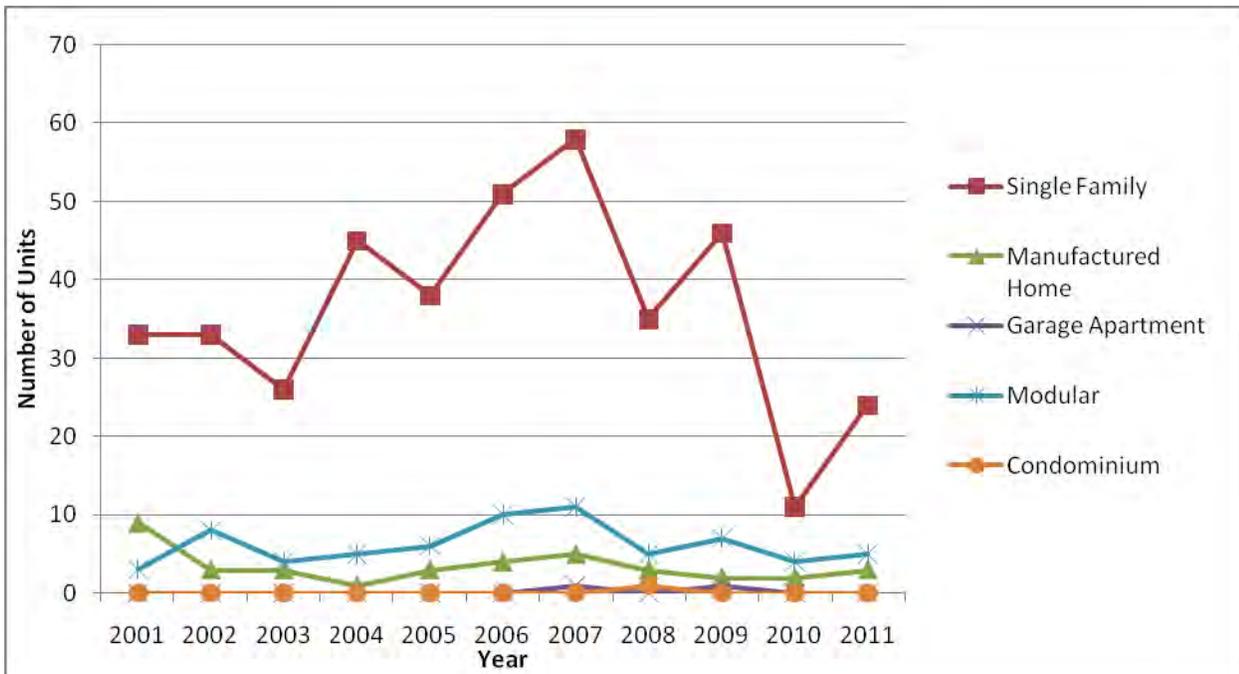
Existing Housing Stock. The Planning Area contains 2,376 permanent residential units with the oldest existing permanent residential unit built in 1868 (See Figure 3.3.1 and Map 4, Housing Stock 1930-2010 (Pg. 64)). Over half of these permanent units were built or placed between 1991 and 2011 (with the greatest amount of residential development occurring during the 10-year period from 1991 to 2011). During this 20-year period an average of 49 units were built/placed annually. From 2001 to 2011, an average of 46 residential units were built/placed each year.

Figure 3.3.1. Planning Area Housing Year Built by Type, 1814-2012



From 2001 to 2011, a steady decline in the number of permanent manufactured homes placed in the Planning Area occurred. Other single-family unit types (stick-built and modular) showed steady increase through 2011. The highest number of units built/placed in a single year was 75 in 2007.

Figure 3.3.2. Planning Area Housing Year Built by Type, 2001-2011



The Planning Area contains 5.27% of all permanent residential units in the County. The predominant permanent residential unit in both the Planning Area and County is traditional “site built” single-family residences. Data indicates site built single-family residences account for 72.58% of all County residential units and 81.27% of all Planning Area residential units (See Tables 3.3.1 and 3.3.2).

Residential Structure Type		Number	Percent (%)
Single-Family	Site Built	1,931	81.27
	Modular	96	4.04
	Manufactured (Real Property)	202	8.50
	Manufactured (Personal Property)	141	5.93
Apartment (including Garage Apartments)		5	0.21
Condominium		1	0.04
Total		2,376	100

Source: Henderson County Building Services data (2012) with extrapolations by Henderson County Planning Staff.

Table 3.3.2. Henderson County Residential Units by Structure Type 2012			
Residential Structure Type		Number	Percent (%)
Single-Family	Site Built	32,665	72.58
	Modular	1,546	3.43
	Manufactured (Real Property)	3,781	8.40
	Manufactured (Personal Property)	4,151	9.22
Townhouse		1,365	3.03
Apartment (including Garage Apartments)		362	.80
Duplex		158	0.35
Group Housing		10	0.02
Condominium		1,012	2.25
Total		45,002	100

Source: Henderson County Building Services data (2012) with extrapolations by Henderson County Planning Staff.

Approved Residential Lots. The Planning Area currently contains 1,991 vacant lots located within zoning districts which permit the placement of single family residences. In addition, the Planning Area contains 110 approved but unrecorded residential lots (located within active major subdivisions). A total of 2,101 recorded and unrecorded lots are possible in the Planning Area, accommodating a minimum of 2,101 single-family residences. These lots could contain accessory residential structures not accounted for in this figure. Further, it is possible these lots may be further subdivided or contain more dense residential development.

Housing Tenure. Housing tenure in the Planning Area and County is comparable. Within the Planning Area, approximately 81.95% of occupied structures are owner occupied and 17.28% are renter occupied (See Table 3.3.3).

Table 3.3.3. Planning Area Occupied Residential Structures by Tenure Type 2012					
Place	Total Occupied Residential Structures	Owner Occupied		Renter Occupied	
		Percent (%)	Total	Percent (%)	Total
Henderson County	45,448	75.16	34,143	24.87	11,305
Planning Area	1,961	81.95	1607	17.28	339

Source: Census data (2010 Block Group) with extrapolations by Henderson County Planning Staff.

Housing tenure by population indicates that, within both the Planning Area and County, approximately four (4) in five (5) individuals reside in owner occupied housing (See Table 3.3.4).

Table 3.3.4. Planning Area Population by Tenure Type 2010					
Place	Total Population	Reside in Owner Occupied Housing		Reside in Renter Occupied Housing	
		Percent (%)	Total	Percent (%)	Total

Henderson County	106,740	74.22	79,218	24.57	26,223
Planning Area	4,730	81.64	3,861	17.9	846

Source: Census data (2010 Block Group) with extrapolations by Henderson County Planning Staff.

Affordable Housing. The Department of Housing and Urban Development (HUD) is the agency responsible for federal housing programs. HUD defines housing as “affordable” when a household earning at or below 80% of the area median household income puts no more than 30% of its income toward a mortgage payment or rent. Within this group are those households with low income (income equivalent to between 51 and 80% of the area median household income), very low income (income equivalent to between 31 and 50% of the area median household income), and extremely low-income (income equivalent to less than 30% of the area median household income). A household paying more than 30% of its gross income for housing costs is “cost burdened”. A household paying more than 50% of its gross income for housing costs is “extremely cost burdened”.

Housing affordability determination by HUD typically accounts for mortgage payment and other monthly housing costs (taxes, insurance, and utilities). Table 3.3.5 provides affordable housing price estimates.

Table 3.3.5. Henderson County Housing Affordability for Low and Median Income Households 2010				
Henderson County Household Income	Low Income Household			
	Income	Monthly Income	Affordable Monthly Housing Payment*	Estimated Affordable Housing Price**
Median Income	\$46,446	\$3,870	\$1,161	\$179,675
Low Income	\$23,223 - 37,156	\$1,935 - 3,096	\$580 – 928	\$84,723 – \$141,596

* Price determined based on HUD recommendations that no more than 30% of monthly income go toward a mortgage payment. This mortgage payment estimate, provided by HUD is slightly higher than 30% because it includes private mortgage insurance, property taxes, and hazard insurance which are often included in other monthly housing costs but are commonly now escrowed into mortgages.

**Assumes a conventional, fixed 30-year mortgage at 3.73% interest with no money down.

Source: Census data (2010 County and 2010 Block Group), Henderson County parcel data (2011), and Department of Housing and Urban Development (HUD) Affordability Calculator.

In 2010, a County household earning \$46,446 was a median income household. A median income household could afford a home with a maximum value of \$179,675. The average assessed housing value in the County (\$185,800) is 103.41% of the affordable cost. The Planning Area average assessed housing value (\$140,013) is affordable to a County median income household.

In 2010, a County household earning \$37,156 or less was a low-income household. A household earning at the top of this category could afford a home with a maximum value of \$141,596. The 2011 average assessed housing value in the County (\$185,800) is 131.21% of the affordable cost. The Planning Area average assessed housing value (\$140,013) is just within affordability to a County low income household (representing 98% of the affordable cost).

The Planning Area’s median household income (\$44,444) is approximately 4.31% lower than the median household income for the County. Planning Area median income is lower, therefore an affordable home for a Planning Area median income household is also lower (\$171,340). The Planning Area average assessed housing value (\$140,013) is affordable to a median income Planning Area household.

Trends. The Planning Area is experiencing an expansion of its housing stock. Trends show a slight decline in the number of houses built/placed over the past 10 years. Housing affordability could be an issue in the Planning Area and the County as housing costs remain high and incomes remain stagnant. Ensuring an adequate stock of affordable housing in the future depends largely on future incomes and housing costs.

Housing Goals and Objectives

Goal H1. Expand and diversify housing options within the GRTZ Planning Area

- H1.1. The County should continue to encourage a mix of housing options in the GRTZ planning area that accommodate a range of income levels.**
- H1.2. Current regulations and standards provide adequate aesthetic requirements for new manufactured homes and manufactured home parks.**

Goal H2. The County should support the expansion of utility services such as cell, internet/broadband, and cable television throughout the GRTZ planning area to accommodate existing and future homes.

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3.4: COMMUNITY FACILITIES AND PUBLIC SERVICES

Public Schools

The Planning Area falls entirely within the Flat Rock Middle and East High School District. The Planning Area contains portions of the following elementary school districts: Dana, Hillandale, and Upward. Although the Dana Elementary School District falls within the Planning Area, it is classified as Green River Game Lands with no residents (hereinafter “Planning Area District Schools”). There are no County schools located within the Planning Area since the Tuxedo Extended Day School closure after the 2003-2004 school year.



Planning Area District Schools are expected to remain within state capacity through the 2016-2017 school year. Flat Rock Middle School currently exceeds state capacities and will all remain over capacity through the projected 2016-2017 school year. In the 2010-2011 school year, Flat Rock Middle School began to exceed state capacity and will remain over capacity until expansion projects to increase capacity are built (See Table 3.4.1). The Henderson County School District witnessed an increase in school population throughout the early 2000’s. Recently, the school district identified that growth in the school system has leveled out, which is indicated in the chart below.

Table 3.4.1. Current School Capacities and Projected Populations

Schools	Capacity		20 Day Membership		Projections* (2012-2017)				
	State	Core	10-11	11-12	12-13	13-14	14-15	15-16	16-17
Elementary Schools									
Hillandale	722	810	550	572	573	573	574	574	575
Upward	533	400	465	454	454	455	455	456	456
Middle Schools									
Flat Rock	800	665	801	811	812	813	813	814	815
High Schools									
East Henderson	1065	840	960	970	971	972	973	974	975
Green = Well within State Capacity			Red = Over State Capacity						

* Projected growth is calculated by the kindergarten growth over the past eight (8) years.
 ** The Media Center and Dining room capacities are calculated with the least value of the 2 capacities is the school core capacity.
 *** The anticipated capacity reflects post construction project capacity. These numbers were used to evaluate projections beginning in 2012-2013 school year and continuing through 2016-2017 school year.
 Source: Henderson County Public Schools data (2012).

Planning Area Schools.

The Planning Area has a long history in education. Early schools in the community included:

Gap Creek Road Common School: a common school house that was named for its location, which was built in 1870 to serve Green River District. The school was located about mid-way between

Old US 25 and US 25 on the north side of Gap Creek Road. The building has since been torn down, but a spring still marks the site;

Green River Baptist Church Common School: named for its location, was established in 1889. Operated as part of an agreement between the School District Committee and the Church Trustees, in which the church would house a school on a lease for 40 years; and

Tuxedo Extended Day School: was constructed in 1924 and served 6th Grade through 12th Grade until 2004, when the school closed. Tuxedo was categorized as an Alternative School.



Planning Area District Schools.

Planning Area District Schools were all above district and state averages for school sizes in the 2011-2012 school year, with the exception of Upward Elementary School (see Table 3.4.2).

Annually, North Carolina schools receive designations based on their performance on the state's ABCs tests. This evaluation takes into account the percent of students performing at grade level and on whether students have learned as much as they are expected to

learn annually. The designations are as indicated in Table 3.4.4.

Table 3.4.2. School Size in Number of Students

Schools	State Average	District Average	2011-2012 School Size
Elementary Schools			
Hillendale	499	471	572
Upward	499	471	454
Middle Schools			
Flat Rock	668	786	811
High Schools			
East Henderson	829	764	970
Green = Lower than District and State Average		Red = Greater than State Average	

Source: Henderson County Public Schools data (2011-2012 school year) and NC School Report Card (2011-2012 school year).

Table 3.4.4. North Carolina School Designations for Henderson County				
Designation	Performance: Students Performing at Grade Level	Grade	Percent of Schools with Designation	
			District	State
Honor School of Excellence	At least 90% of students at grade level and the school made adequate yearly progress	Elementary	31	9
		Middle	0	8
		High	20	20
School of Excellence	At least 90% of students at grade level	Elementary	0	0
		Middle	0	0
		High	20	2
School of Distinction	80 to 90% of students at grade level	Elementary	31	29
		Middle	100	31
		High	40	30
School of Progress	60 to 80% of students at grade level	Elementary	31	37
		Middle	0	41
		High	0	27
No Recognition	60 to 100% of students at grade level	Elementary	8	17
		Middle	0	12
		High	20	19
Priority School	50 to 60% of students at grade level or Less than 50% of students at grade level	Elementary	0	8
		Middle	0	8
		High	0	2
Low Performing	Less than 50% of students at grade level	Elementary	0	1
		Middle	0	0
		High	0	0
Red = State Average Greater		Green = District Average Greater		

*Any of the following: High Growth, Expected Growth, or Expected Growth Not Achieved may be the measure. Source: NC School Report Cards (2011-2012 school year).

In the 2011-2012 school year, the State Board of Education recognized Flat Rock Middle as a North Carolina School of Distinction, with a the learning achieved recognized as “high growth”. The State Board of Education recognized Hillandale Elementary and Upward Elementary as Schools of Progress with Upward experiencing “expected growth” learning achieved and Hillandale experiencing “high growth”.

North Carolina end-of-grade tests results in math, reading and science show that pass rates for Planning Area Schools vary (See Table 3.4.5). In terms of overall performance on the tests, students at Upward Elementary performed better than Hillandale Elementary students. Flat Rock Middle School had the only math end-of-grade average higher than the state and district average.

Table 3.4.5. Percent of Students Passing the End of Grade Test (Scoring at or Above Grade Level*)				
Exam Type	East Henderson	Flat Rock	Hillandale	Upward
Reading	87.4	78.6	65.3	67.5
Math	81.1	90.9	83.6	81.5
Science	83.6	83.5	68.5	78.8
Red = Below District and State Average		Yellow = Below District Average but Above State Average		
*Grades 3 through 5 receive reading and math tests. Only fifth grade students are tested for science. Source: NC School Report Cards (2011-2012 school year).				

Recreation



Proposed Tuxedo Park. The Planning Area currently has no County operated parks. The Board of Commissioners appointed the Green River, Tuxedo, Zirconia Park Planning Committee (GRCA) to coordinate with the Recreational Advisory Board and to advise the Board of Commissioners on the local community’s view of the best use and design for the former Green River Manufacturing Company mill site. The committee worked with the Parks and Recreation Department to

develop and recommend a specific plan for the site that is located in along Old US 25 Hwy which is owned by County. Above is the master plan presented by the Green River, Tuxedo, Zirconia Park Planning Committee and adopted by the Board of Commissioners on March 4, 2013.

Greenways. The Comprehensive Plan identifies possible sites for greenways in the Planning Area. Greenways serve as an alternate link between residential communities, recreational areas, nonresidential centers and open spaces. These sites were initially identified by the Apple County Greenway Commission whose purposes are to promote and facilitate the planning, development, and maintenance of greenways in the County. The Planning Area contains a large portion of the proposed greenway network. 18.2 miles of the Apple County Greenway is proposed to be found within the Planning Area and this segment is primarily located along Green River Road. The greenway would provide connectivity throughout the Planning Area, especially to and from the Green River Game Lands. There are currently no built greenways in the Planning Area.

Libraries

The Green River Branch Library first opened to the public in late 1990 after a series of community meetings. Mr. Roscoe Green offered to build a facility to house the current library during a series of meetings where interested residents advocated the need for a public library.

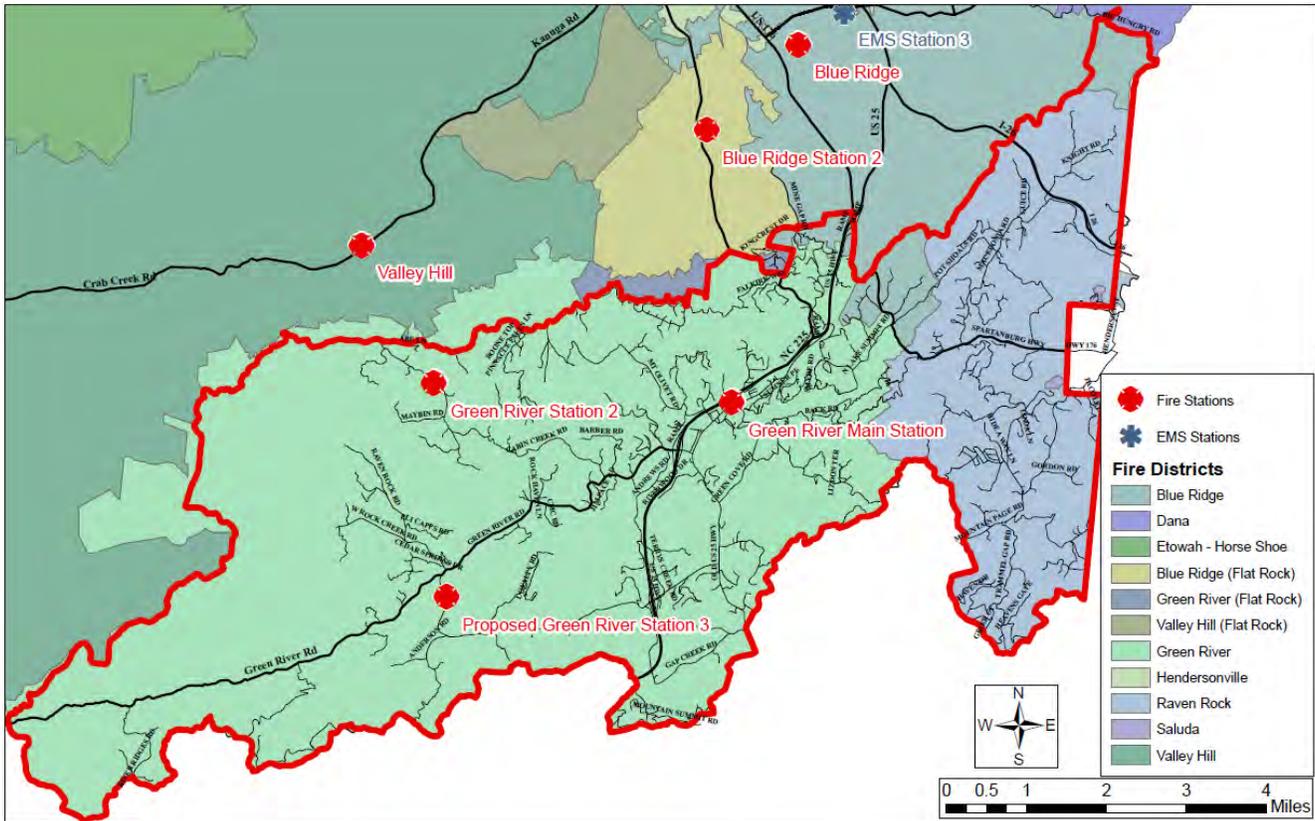


Katherine Taylor was a strong advocate for a public library in the Planning Area and has since retired from her role, but continues to serve on the Green River Branch Library’s Board. Currently, the library operates at its original location, 50 Green River Road. The Green River Branch library is a little less than 1,000 square feet and has continued to operate for over 20 years. The Green River Branch operates Monday through Saturday and is closed on Sunday. The County currently has six (6) branch libraries throughout the County. The other branches include: Main Branch (Hendersonville), Edneyville Branch, Fletcher Branch, Etowah Branch, and Mills River Branch.

Emergency Services

Fire Protection. The Planning Area contains the Blue Ridge, Green River, Raven Rock, and Saluda fire districts (See Figure 3.4.1).

Figure 3.4.1. Planning Area Emergency Services



The Green River Fire and Rescue Department Main Station is located at the 1524 Old US 25 Highway and serves most of the Planning Area. The station is approximately 7,300 square feet in size. The department has 12 vehicles, 1 boat and a diving trailer. The Planning Area has a second fire and rescue station, Green River Fire and Rescue Department Station 2, which is located at 3288 Cabin Creek Road. This station is approximately 2,400 square feet in size and currently has 4 vehicles. Both departments are all



volunteers and currently have 40 volunteers serving the Planning Area. Together, these two fire and rescue departments serve approximately 36,900 acres. Henderson County is currently in the process of constructing a third fire and rescue department in the Planning Area, Green River Fire and Rescue Department Station 3. This department will be located at 4364 Bob’s Creek Road.

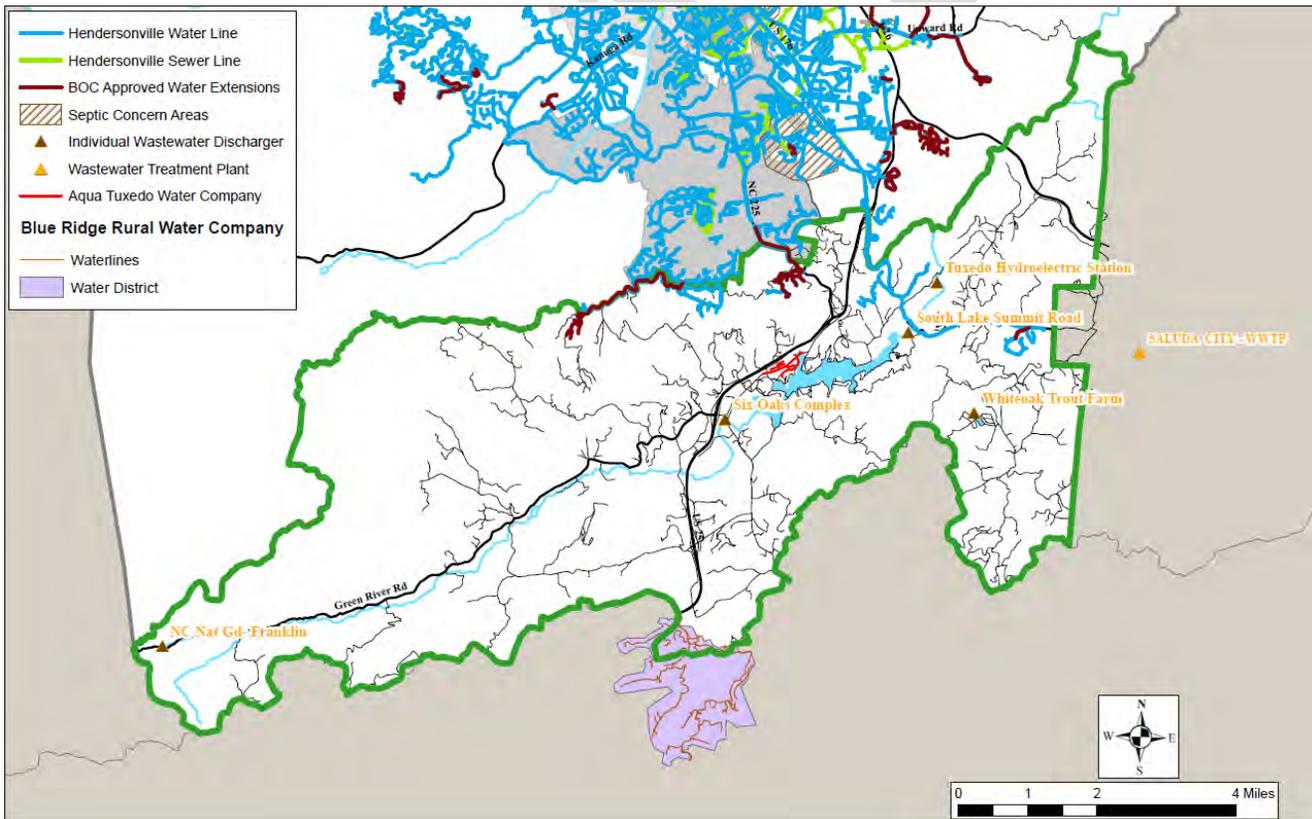
Emergency Medical Services (EMS). The Planning Area does not contain a separate EMS station. The closest EMS station is located at the corner of Commercial Boulevard and Upward Road. This station is EMS Substation 3 and was established to serve the Planning Area and Dana Planning Area.

Law Enforcement. There is no satellite Sheriff’s Office in the Planning Area. The Sheriff’s Department covers the Planning Area by allocating one (1) patrol officer within the general area 24 hours a day. Two (2) additional officers and one (1) supervising officer patrol the entire County. The 911 Emergency Center, servicing the entire County, has four (4) workers per night 12-hour shift and five (5) workers per day 12-hour shift. Twenty-eight (28) employees work at the detention center, located in the City of Hendersonville.

Public Water and Sewer

Public Water. The City of Hendersonville supplies public water to portions of the Planning Area. The waterlines principally run along US 176 (Spartanburg Highway) to the Town of Saluda. The City of Hendersonville waterlines primarily run directly to the Town of Saluda, but some residents and neighborhoods have connected to this system. Planning Area residents around Lake Summit have access to a private water system through Aqua North Carolina Incorporated. This private water company provides water to several Planning Area residents along the northern edge of Lake Summit through two large wells. Additionally, the private Blue Ridge Rural Water Company provides water to several Planning Area residents. This company has water lines that run through the Cliffs Valley North Subdivision. The Blue Ridge Rural Water Company has the capacity to supply water throughout the Planning Area (See Figure 3.4.2). Other limited private water systems may also exist. Private companies generally maintain the infrastructure for these systems, often supplying water through community wells.

Figure 3.4.2. Planning Area Water and Sewer



Public Sewer. The City of Hendersonville does not provide public sewer to the Planning Area. The sewer lines run close to US 25 South Highway. The closest City of Hendersonville public sewer line is approximately 0.5 miles away from the Planning Area boundary. Sewer lines are largely available to

the north of the Planning Area, but there is currently no infrastructure in place to expand the public sewer lines into the Planning Area.

The Planning Area does not include portions identified as a septic concern area (lands with significant concentrations of septic failures). The Planning Area primarily operates on individual septic systems. There are no wastewater treatment plants in the Planning Area. The closest wastewater treatment plant that is permitted is found within the City of Saluda. The Planning Area has five (5) individual wastewater discharges are located in the Planning Area. These facilities are permitted and annually inspected by the North Carolina Department of Environment and Natural Resources (NCDENR).

Solid Waste

There are approximately 30 private municipal solid waste haulers in Henderson County. The County contracts with Waste Management to transfer construction, demolition, and municipal solid waste from the Stoney Mountain Transfer Station to a landfill in Palmetto, South Carolina.

Recycling. Planning Area residents may drop off recyclables at the Stoney Mountain Landfill. Recyclables are sent to private companies located in Greenville, South Carolina. Individual private waste collection companies may transport certain recyclables to Asheville, North Carolina as well. The County employs an Environmental Programs Coordinator whose responsibility it is to examine improvements to and expansion of the existing recycling program. Henderson County once offered drop off recycle locations, but due to lack of use, the recycle drop off locations were removed.

Trends

As the Planning Area continues to develop, demand for and on public services and community facilities will increase. Proper management of development is necessary to ensure community facilities and public services remain adequate in the future.

Community Facilities and Public Services Goals and Objectives

Goal CFPS1. Support the development of the Tuxedo Park as depicted on the master plan approved by the Henderson County Board of Commissioners.

CFPS1.1. Encourage the County to provide a designated area within the Tuxedo Park that provides historical information about the GRTZ area and the Old Mill site.

CFPS1.2. Support the relocation of the veteran monument from the Tuxedo Community Store to the Tuxedo Park.

Goal CFPS2. Encourage and support the relocation of the Green River Library to the Tuxedo Park if funding is available.

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3.5: TRANSPORTATION

North Carolina Department of Transportation (NCDOT) Public Roads. NCDOT maintains the majority of public roads in the state (including over 79,000 miles of roadway and some 77% of the entire public road system). Most state departments of transportation do not maintain the majority of public roads and instead delegate road maintenance authority to municipalities and/or counties. Henderson County does not currently maintain any roads for public purpose.

Regional Planning Process. NCDOT coordinates much of its transportation planning efforts for the County through the French Broad River Municipal Planning Organization (MPO). Henderson County is part of this MPO which also includes Buncombe and Haywood Counties and the municipalities within each of the three (3) counties. Henderson County, like all local governments in the MPO, participates in the preparation and prioritizing of project lists for the:

- (1) “Comprehensive Transportation Plan for French Broad River MPO and Rural Areas of Buncombe, Haywood and Henderson Counties” (hereinafter “Comprehensive Transportation Plan”) which serves as a vision for the future transportation system (adopted January 18, 2008);
- (2) “Transportation 2035: The Long Range Multi-Modal Plan for Buncombe, Haywood, and Henderson Counties” (hereinafter “Long Range Multi-Modal Plan”) which identifies transportation improvements and programs to be carried out over the next 25 years; and
- (3) “Transportation Improvement Program” (hereinafter “TIP”) which lists projects proposed for the next seven (7) years.

Beyond the MPO process, Henderson County also works directly with NCDOT engineers (district and county) to provide feedback on and track progress of projects within the County.

Henderson County also has an appointed Transportation Advisory Committee (TAC). The TAC is comprised mostly of MPO representatives who meet regularly to: (1) discuss local transportation issues; (2) receive updates from the NCDOT district engineer regarding TIP and secondary road project progress; and (3) take public input regarding transportation related concerns and issues.

Regional Transportation Network Challenges. The regional transportation network faces challenges in that it is: (1) rural, (2) isolated from a major urban center, (3) under development pressure, and (4) restricted by scarce financial resources. The following are the major issues for the region:

Shortfall in Revenues. A shortfall in revenues needed to implement an adequate pavement rehabilitation program and make needed improvements to roads, highways and bridges.

Addition of Substandard Roads. State maintenance funds are fiscally impacted when already substandard roads are added to the maintained roadway inventory.

Lack of Transportation Services. There is a need for transportation services to ensure mobility and reasonable access for all age and income groups. This needs to be addressed despite limited funding sources, extensive travel distances and high regional operating and fuel costs.

Lack of Bicycle and Pedestrian Facilities. There is a need for bicycle and pedestrian facilities to provide safer environments and better connectivity for non-motorized travel.

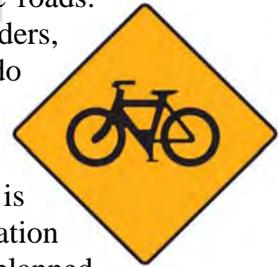
Recommended Potential Improvements to Roadway Facilities. The recently completed Comprehensive Transportation Plan recommended the improvement of US Highway 25, upgrading the segment between I-26 and NC 225 to a 4-lane freeway. This project is to be completed in 2012.

The Comprehensive Transportation Plan, Long Range Transportation Plan and Transportation Improvement Program do not propose any additional roadway facility improvements in the planning area.

Vehicle Crashes. Vehicle crashes may indicate congestion problems and/or be associated with the physical characteristics of a roadway. Inadequate turn bays, sight distance, pavement width and traffic control devices can all contribute to a vehicle crash. Crash data available from January 1, 2004 to December 31, 2006 were analyzed to identify intersections with a high frequency of vehicle crashes (10 or more). A total of 75 intersections were identified and ranked in Henderson County. The Planning Area contained none of these intersections.

Bike Routes. NCDOT designated bike routes in the Planning Area include all or portions of: US Highway 176 (segment of Route 8 – Southern Highlands Cross-State Route), US Highway 225, Old US Highway 25 (SR 1265), Mountain Page Road (SR 1846) and Anderson Road (SR 1105) (See Map 5, Recreation and Multimodal Transportation (Pg. 65)). These designated bike routes contain no dedicated bike facilities (bike lanes or paved shoulders) because most of these roads:

(1) are rural in nature, (2) have a low volume of traffic, (3) lack adequate shoulders, and (4) have poor geometrics. NCDOT cautions route users that these roads do not contain special accommodations. The most heavily traveled road segments include “Share the Road” signs.



Painted bike lanes along road shoulders may be added when a roadway is widened, geometrics are improved, or road resurfacing is scheduled. The designation of a bike facility (bike lane) should occur during the design phase for a planned improvement to a road.

Public Transportation. An existing fixed-route transit system serves the County (See Map 5, Recreation and Multimodal Transportation (Pg. 65)). The four (4) routes operate on weekdays between the hours of 6:30 a.m. and 6:30 p.m. (three (3) routes) or 9:00 a.m. and 5:00 p.m. (one (1) route). Eligible citizens of the County (senior citizens and disabled persons living within ¾ miles of a fixed route) may use paratransit (rural van service) upon request. Paratransit is available during the same operation days/hours as the fixed-route service. Federal and State grants and County and municipal contributions fund the transit system.

The planning area is not serviced by the existing fixed-route transit system or paratransit.

Transportation Goals and Objectives

Goal T1. *Work with NCDOT to identify opportunities to create bike lanes when existing roads are widened or improved.*

Goal T2. *The County should support and encourage road and intersection improvements in the GRTZ Planning Area.*

3.6: ECONOMIC DEVELOPMENT³

Economies are the result of two elements: (1) the physical element (natural resources, climate, and infrastructure (buildings, roads, utility provision) among others); and (2) the human element. People provide the economy with energy to develop and the necessary intelligence to maximize its potential. Future economic development with the Planning Area depends upon its workforce, employment opportunities, and employment projections.

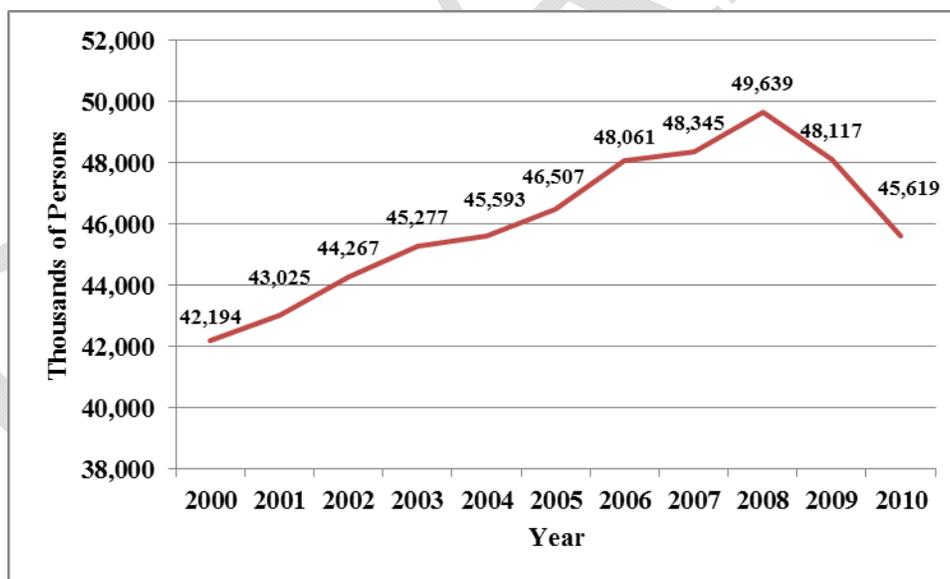
Workforce. The workforce includes employed and unemployed workers aged 16 years or older. In 2010, the Planning Area contained 4.4% of the County’s population and 4.2% of the County’s workforce. A smaller percent of the Planning Area population participates in the workforce than is seen countywide (40.4% and 42.7% respectively) (See Table 3.6.1).

Table 3.6.1. Workforce Population 2010			
Place	Total Population	Workforce Population	Participation Rate
Henderson County	106,740	45,619	42.7%
Planning Area	4,730	1,910	40.4%

Source: Census data (2010 Block Group Data and 2010 Census) with extrapolations by Henderson County Planning Staff.

Employment Securities Commission data suggest the Henderson County workforce population decreased from 2009 to 2010 by approximately 5% (or 2,498 persons) (See Figure 3.6.1). Data indicates that this is the only occurrence of workforce population decline during the past 11 years. A number of factors may have caused this reduction.

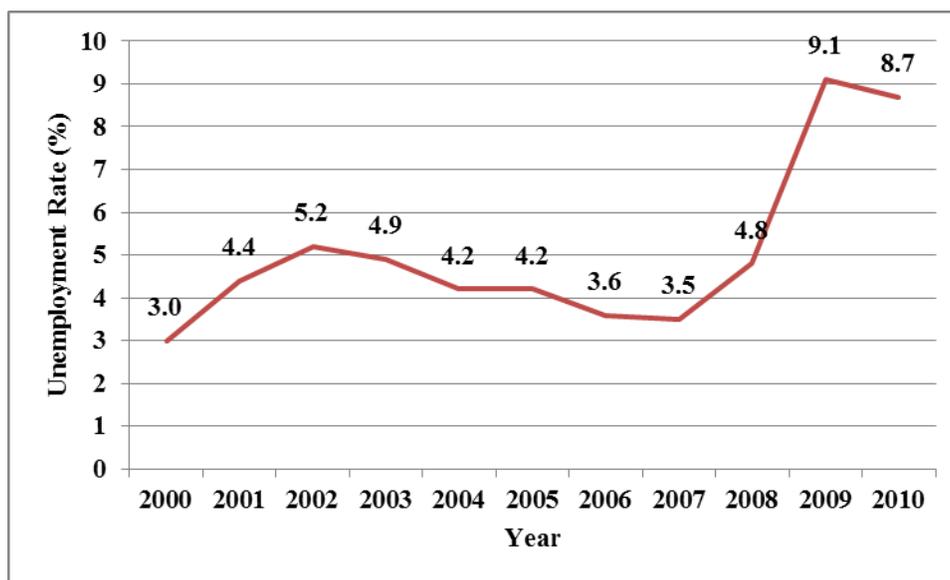
Figure 3.6.1 Henderson County Workforce



Unemployment. Unemployment is a significant concern given current economic conditions. According to Employment Securities Commission data, at no other time during the past 11 years has unemployment been: (1) lower than in 2000 (3%), or (2) higher than in 2009 (9.1%).

³ Data were compiled from Census data (2010 Block Group Data and 2010 Census) and the North Carolina Employment Securities Commission.

Figure 3.6.2. Henderson County Unemployment Rate



Employee Skills. In the current job market, an individual’s employment opportunities are increased or diminished based upon that individual’s skill set and skill level. Skills provide the competitive edge for job seekers, and represent a combination of education, training, and work experiences. In terms of educational attainment, the County has higher rates of some college to associate degrees, bachelor degrees, and advanced degrees attainment than is seen in the Planning Area. This suggests a job seeker in the Planning Area may be at a disadvantage to citizens in the rest of the County based on educational experiences (See Table 3.6.2).

Table 3.6.2. Educational Attainment for the Population Aged 25+ (2010)

Place		Planning Area	Henderson County	North Carolina	United States
Total Population Aged 25+		2,658	78,132	6,325,621	204,288,933
Schooling	None, Some, No Diploma	397 (14.9%)	8,325 (10.6%)	964,827 (15.3%)	29,417,606 (14.4%)
	High School Diploma*	878 (30.0%)	19,245 (24.6%)	1,749,642 (27.7%)	58,222,346 (28.5%)
Degree	Some College, Associate’s	862 (32.4%)	28,113 (36.0%)	1,937,833 (30.6%)	59,039,502 (28.9%)
	Bachelor’s	365 (13.7%)	14,010 (17.9%)	1,123,118 (17.8%)	36,159,141 (17.7%)
	Master’s, Doctorate, or Professional School	156 (5.9%)	8,439 (10.8%)	550,201 (8.7%)	21,246,049 (10.4%)

* This category also includes those passing high school equivalency exams.

Source: Census data (2010 Block Group, State and National) with extrapolations by Henderson County Planning Staff.

County Employment by Major Industry Group. According to the Employment Securities Commission, Henderson County experienced a 6% decrease in total employment from 2005 to 2010⁴. Relative to the original number of employees in the industry:

1. Significant growth occurred in: federal government, education and health services, public administration, and leisure and hospitality industries; and
2. Significant decline occurred in: construction, goods-producing domain industries, natural resources/mining, and manufacturing (See Table 3.6.3).

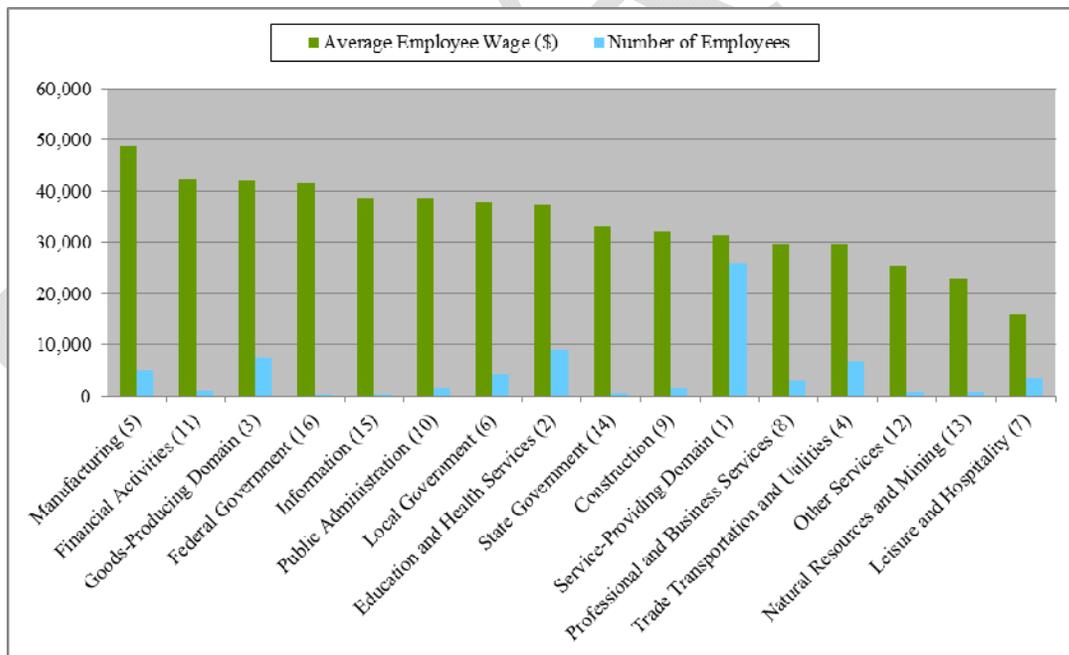
⁴ The Employment Securities Commission has not made available more recent data which would reflect any impacts of the recent economic challenges.

Major Industry Group	Total Number Employed		Percent Change (%)
	2005	2010	
Federal Government (Total)	228	277	21
Public Administration	1,333	1,503	12
Education and Health Services	8,165	9,005	10
Local Government (Total)	4,234	4,456	5
Service-Providing Domain	25,655	25,921	1
Trade, Transportation and Utilities	6,524	6,621	1
State Government (Total)	688	677	-2
Leisure and Hospitality	3,927	3,739	-5
Professional and Business Services	3,127	2,850	-9
Financial Activities	1,129	998	-12
Other Services	1,022	891	-13
Information	353	298	-16
Manufacturing	6,391	5,008	-22
Natural Resources and Mining (includes Agriculture)	1,183	884	-25
Goods-Producing Domain	10,099	7,513	-26
Construction	2,525	1,620	-36

Source: North Carolina Employment Securities Commission (2011).

Declines in manufacturing, financial activities, goods-producing domain industries, and information employment is significant for the County as these have been among four (4) of its top five (5) highest paying industries (See Table 3.6.3 and Figure 3.6.3).

Figure 3.6.3. Henderson County Average Wage by NCEC Major Industry Group 2010



The average wage for County employees increased in all major industry groups through 2010, except for federal government. The other-services domain, which is ranked twelfth in number of employees, saw a 32% increase in wages, to an average wage of \$25,599. The federal government industry, which employs the fewest County citizens, experienced the only wage decrease to \$41,496 (See Table 3.6.4).

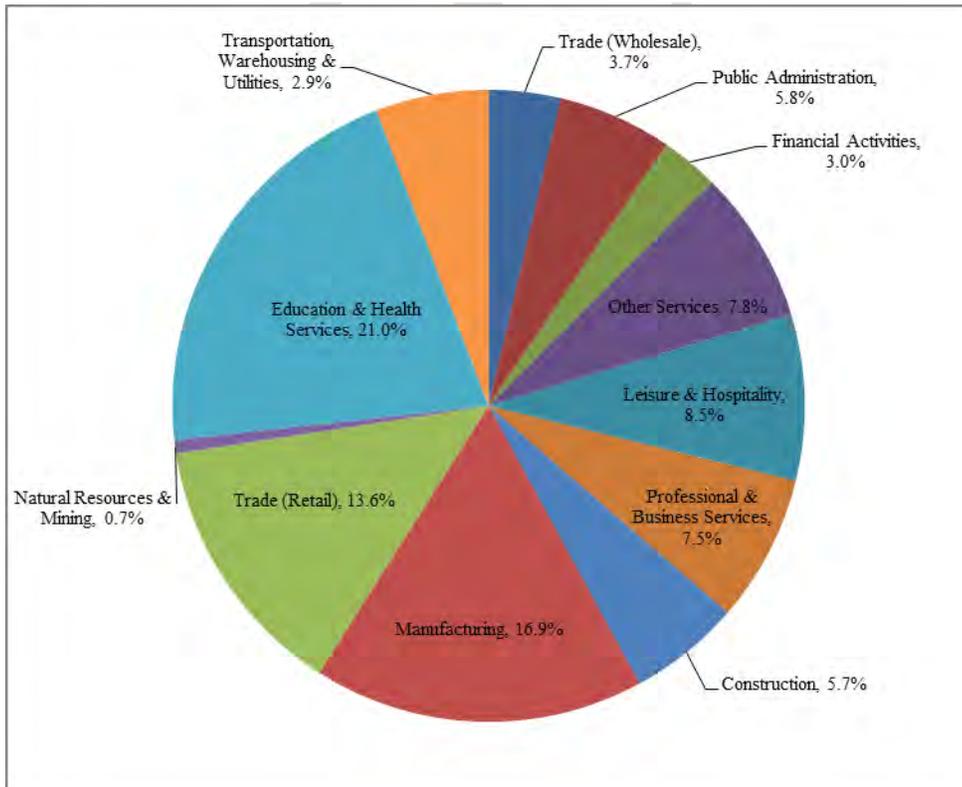
Table 3.6.4. Henderson County Average Wage by NCESC Major Industry Group 2005 and 2010

Major Industry Group	Wages		Percent Change (%)
	2005	2010	
Other Services	\$19,346	\$25,599	32
Professional and Business Services	\$24,310	\$29,801	23
State Government (Total)	\$27,872	\$33,072	19
Financial Activities	\$35,932	\$42,382	18
Service-Providing Domain	\$27,154	\$31,374	16
Public Administration	\$33,390	\$38,548	15
Information	\$34,041	\$38,759	14
Education and Health Services	\$32,789	\$37,248	14
Leisure and Hospitality	\$14,282	\$16,159	13
Local Government (Total)	\$33,956	\$37,960	12
Manufacturing	\$43,489	\$48,687	12
Goods-Producing Domain	\$37,653	\$42,079	12
Trade Transportation and Utilities	\$27,227	\$29,776	9
Natural Resources and Mining (includes Agriculture)	\$21,659	\$23,019	6
Construction	\$30,377	\$32,071	6
Federal Government (Total)	\$43,368	\$41,496	-4

Source: North Carolina Employment Securities Commission (2011).

Planning Area Employment by Major Industry Group. The Employment Security Commission does not provide Planning Area specific data; however, the Census (2011 American Communities Survey and 2010 Census) provides information on employment by major industry group. Census major industry groups vary from Employment Security Commission classifications.

Figure 3.6.4. Planning Area Population Aged 16+ within Workforce by Census Major Industry Group 2011



According to Census data, 51.5% of the Planning Area workforce is working within one (1) of three (3) major industry groups: education and health services, retail trade, or manufacturing (See Figure 3.6.4) Information services was not included in this chart since the Planning Area has no individuals employed in this field.

Education and Health Services. Approximately 21.0% of the Planning Area workforce is involved in education and health services. This industry ranks eighth in the County in terms of average employee wage (\$37,248) (See Figure

3.6.3). Projections for the region indicate approximately 23% more individuals will be employed in education and health services by 2018 (See Table 3.6.5).

Retail Trade. Approximately 13.6% of the Planning Area workforce is involved in retail trade (which usually is categorized under the service-providing domain). This industry ranks eleventh in the County in terms of average employee wage (\$31,374 in the service-providing domain) (See Figure 3.6.2). Projections for the region indicate approximately 13% more individuals will be employed in the service-providing domain (which includes retail trade) by 2018 (See Table 3.6.5).

Manufacturing. Approximately 16.9% of the Planning Area workforce is involved in manufacturing. This industry ranks first in the County in terms of average employee wage (\$48,687) (See Figure 3.6.3). Projections for the region indicate approximately 11% of positions currently available in the manufacturing industry will be eliminated by 2018 (See Table 3.6.5).

Employment Projections. The Employment Securities Commission provides projected employment by major industry group for a four (4) county area (Henderson, Buncombe, Madison, and Transylvania). Regionally, most major industry groups anticipate expansion (See Table 3.6.5).

Projections indicate three (3) major industry groups (goods-producing, natural resources and mining, and manufacturing industries) will reduce employment by 2018 by 18%. Among these, the manufacturing industry and goods-producing are currently ranked first and third among the top five (5) highest average wage industries in Henderson County (See Figure 3.6.1). Reduction of employment opportunities in the manufacturing industry group could have a significant impact on the Planning Area workforce given the portion of residents working in this industry (17%).

Industries within the region projected to expand 20% or more by 2018 is educational and health services. Other services, leisure and hospitality, services-providing, and professional and business industries are expected to grow by over 10% by 2018. None of these industries ranks among the top five (5) highest average wage industries in Henderson County. The education and health services industry employs the largest percentage of the Planning Area workforce (21%). Services-providing industry ranks third in Planning Area employment (14% of the workforce). The expansion of these industries may increase:

1. Demand for employees in these industries,
2. Opportunities for those employed/experienced in these industries, and
3. Wages as employers compete to attract the most qualified employees.

Growth in the professional and business service and financial activities will affect the Planning Area less given that only 7.5% and 3.0% (respectively) of the Planning Area workforce participates in these industries. The benefits from the expansion of professional and business service industries will be limited as it is among the bottom five (5) of the lowest average wage industries (See Figure 3.6.3).

Major Industry Group	Total Employed		Percent Change (%)
	2008	2018	
Education and Health Services	40,790	50,000	23
Other Services (Nongovernment)	8,000	9,080	14
Leisure and Hospitality	22,220	25,170	13
Services-Providing	138,730	156,670	13
Professional and Business Services	15,860	17,680	11
Financial Activities	5,590	6,150	10
Construction	10,380	11,260	8
Information	2,090	2,260	8
Trade, Transportation and Utilities	32,930	34,790	6
Government	11,250	11,540	3
Natural Resources and Mining (includes Agriculture)	1,770	1,710	-3
Goods-Producing	30,770	29,470	-4
Manufacturing	18,620	16,500	-11

Source: North Carolina Employment Securities Commission, 2011

Industries expanding employment will help offset reductions in other industries; however, growing industries may not provide wages equivalent to or better than shrinking industries. Financial activities is expect to grow 10% by 2018, but the Planning Area will not benefit from the second highest average wage in the county, since only 3.0% of the Planning Area workforce participates in this industry.

Trends. The Planning Area has a long economic history because of the area’s entrepreneurial citizens. From the late 1800s through the early 1900’s many Planning Area residents mined for the mineral Zircon, which was a valuable resource that was used to make zirconium oxide for light bulb production. Additionally, the Planning Area residents were employed through the Green River Mill that contributed to the regions success in early textile manufacturing. Manufacturing and mining industries have continually declined over the 21st Century and recent reports project these industries will continue to decline through 2018. These early economic activities have ended many years ago largely due to external factors that drive market trends and industries in the current economy.

The Planning Area has several significant advantages in the current economy. First are its advantages of connectivity. The Planning Area has four significant roadways that travel through the Planning Area. NC 225, I-26, US 176, and US 25 all run through the Planning Area and offer a variety of options for travel to and from the area. Additionally, the connectivity offers one of the County’s most interconnected local road networks with a variety of direct access to Hendersonville and significantly larger municipalities. Economic development opportunities and the Planning Area’s existing commercial and industrial businesses make it more attractive to potential future development. The Planning Area contains a diverse workforce that will entice future development in the area. This diversity makes the Planning Area more attractive to a variety of businesses as the economy continues to evolve

Economic development can be properly managed to prevent negative impacts on the Planning Area.

Economic Development Goals and Objectives

Goal E1. Support existing businesses in the GRTZ Planning Area.

Goal E2. Promote small business and cottage industry growth in the GRTZ Planning Area.

E2.1. Support the development of an electronic network (website, email, social media, etc.) to connect existing businesses and cottage industries in the GRTZ Planning Area.

Goal E3. Encourage and support the expansion and growth of the camp industry.

E3.1. The County should review its regulations to ensure camps can expand operations through the addition of necessary accessory structures to support activities and growth.

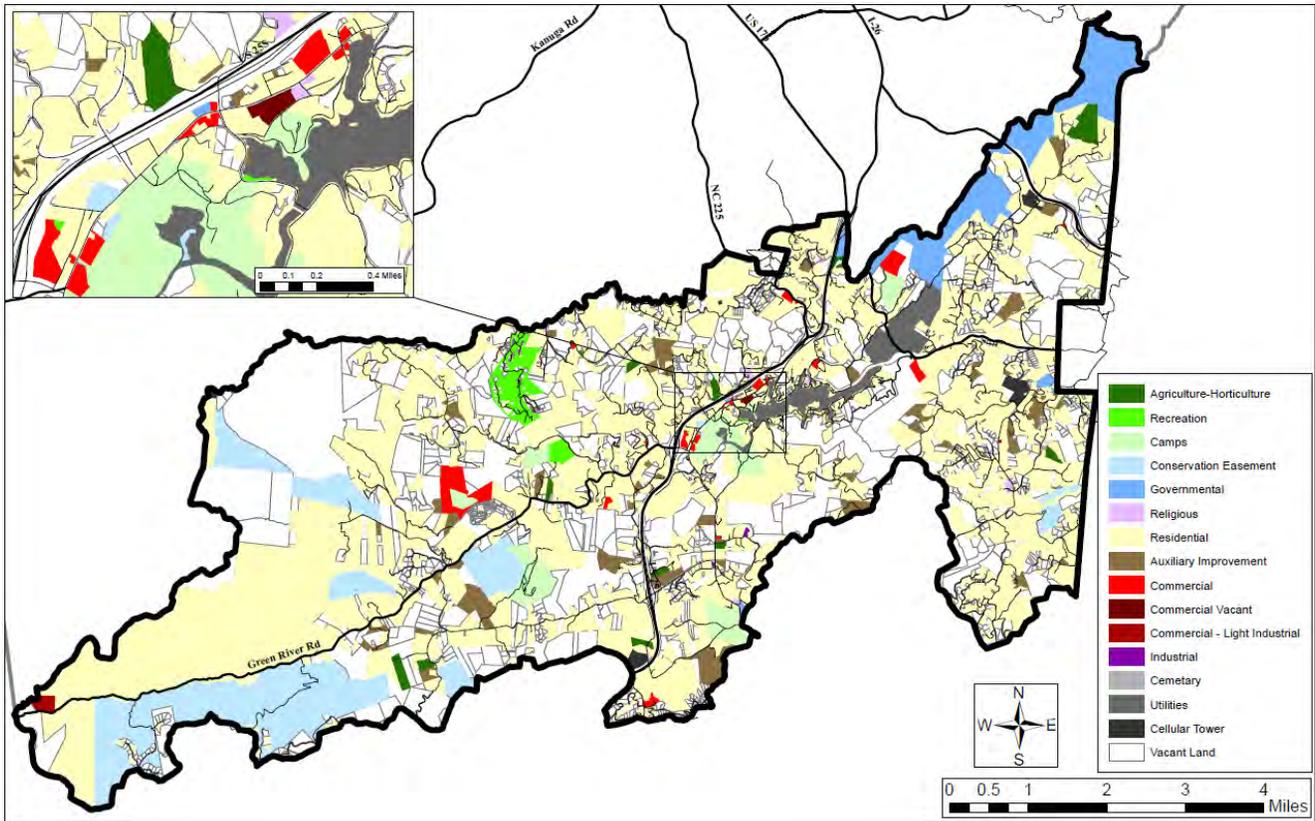
Goal E4. Work with the Henderson County Partnership for Economic Development to promote the natural assets of the Planning Area, small businesses and cottage industries that do not require public utilities. These industries include but are not limited to outdoor recreation industries.

Goal E5. Work with the Henderson County Agribusiness to promote the economic development of agriculture and agribusiness in the GRTZ Planning Area.

3.7: LAND USE AND DEVELOPMENT

Existing Land Use and Development and Current Zoning. The Planning Area contains various land uses as classified by the County Tax Assessor’s Office (See Figure 3.7.1).

Figure 3.7.1. Land Classification



The principal class of Planning Area land is vacant with single family residential as a close second. Together all residential land uses (including single-family and other) comprise 42.07 percent of all lands within the Planning Area. Approximately one (1) in every three (3) acres in the Planning Area is classified as vacant by the Tax Assessor’s Office.

Table 3.7.1. Acreage by Land Use Classification		
Land Use Classification	Approximate Acreage	Percent of Total Acreage (%)
Vacant Land	13,178.06	36.61
Residential (Single Family Traditional and Modular)	13,016.07	36.16
Conservation Easement	2,613.09	7.26
Residential (Other)	2,128.51	5.91
Governmental	1,978.13	5.50
Auxiliary Improvement	940.43	2.61
Camps	679.18	1.89
Utilities	538.54	1.50
Commercial	253.02	0.702
Recreational	251.13	0.698
Agriculture-Horticulture	218.47	0.61
Cellular Tower	103.68	0.29
Religious	44.76	0.124
Commercial Vacant/Commercial – Light Industrial	43.27	0.120
Cemetery	6.60	0.02
Industrial	4.68	0.01

Source: Henderson County Tax Assessor data (January 2013).

Table 3.7.2. Residential (Other) Land Use Subclasses		
Residential (Other) Land Use Subclass	Approximate Acreage	Percent of Total Acreage (%)
Manufactured Home	1,287.51	60.49
Manufactured Home (Real Property)	443.27	20.83
Leasehold	305.56	14.36
Manufactured Home Park	50.79	2.39
Property Owners Association	39.16	1.84
Multifamily	1.40	0.07
Condominium	0.82	0.04

Source: Henderson County Tax Assessor data (January 2013)

The Planning Area includes eight (8) zoning districts (See Map 7, Official Zoning (Pg. 66) and Table 3.7.3). Zoning districts include five (5) residential, commercial, industrial, and surface water zoning districts.

Table 3.7.3. Current Zoning Composition		
Zoning District	Total Acreage	Percent of Total Acreage
Residential District Three (R3)	26,384.19	71.44
Residential District Two Rural (R2R)	7,749.97	20.98
Residential District Four (R4)	1,114.17	3.02
Waterfront Residential District (WR)	854.71	2.31
Estate Residential District (R-40)	388.59	1.05
Surface Water District (SW)	229.40	0.62
Industrial (I)	100.47	0.27
Community Commercial (CC)	42.35	0.11

Source: Henderson County Official Zoning Map (January 2013).

Residential Land Use and Development. Approximately 96.49% of the Planning Area is zoned residential (See Table 3.7.3). Planning Area residential lots average 6.12 acres in size, indicating a low-density development pattern.

There are 1,998 single-family (traditional and modular) residences in the Planning Area (2013). Single-family (traditional and modular) residential uses account for 85.95% of all residential uses. Single-family residential use is permitted in all residential zoning districts and the LC zoning district.

Manufactured home and manufactured home park residential uses account for approximately one-tenth (11.76%) of all residential uses, making this residential use the second most prevalent. All residential zoning districts applied in the Planning Area allow multisection manufactured homes. The R2R and R3 zoning districts also allow singlewide manufactured homes and manufactured home parks.

Commercial and Industrial Land Use and Development. The Planning Area contains 54 commercial and industrial land uses, each falling within one (1) of 18 specified categories of land use. Planning Area commercial uses include general retail, warehousing and storage, and offices, among other uses (See Table 3.7.4). Automobile and equipment services operations where the principal industrial use of land within the Planning Area.

Table 3.7.4. Commercial and Industrial Uses within the Planning Area		
Land Use*	Occurrence	Locations**
Automobile and Equipment Services	11	B1, C1, G(1,2,10,12,16,17,18,B), I4
Recreation	7	E(2,3), G(3,4,6,7), I5
Camps	6	A(1,2), C(3,4,5), F(C)
General Retail	6	G(13,20,21, 23, A), H2
Storage/Warehouse	4	E1, F(1,4), I2
Vacant Commercial	4	G9, H(A,B), K1
Education/Libraries	2	G(8,22)
Office	2	G(14,19)
Garage	2	C2, F2
Infirmary	2	D1, G15
Manufacturing	1	F3
Motel/Hotel (Includes Cottage Rentals)	1	I3
Apartments/Mixed Use	1	H1
Government (Post Office)	1	H3
Recreation (Community Center)	1	J1
Barber Shop	1	G11
Landscaping Services	1	I1
Musical Services	1	FB

* Identified by June 2012 windshield survey. Categorized based on LDC Table of Permitted/Special Uses (§200A-62).

** Locations identified on in *Green River, Tuxedo, Zirconia Community Plan*, Commercial, Industrial and Warehouse Land Use Inventory Maps.

The Planning Area has significant commercial/industrial heated square footage, with just less than 183,000 heated square feet (See Table 3.7.5). The Planning Area population for 2010 (4,730 persons) indicates there are over 38 square feet of commercial/industrial space per resident.

Table 3.7.5. Heated Square Footage by Nonresidential Use Type: Commercial, Industrial, Warehouse, or Vacant	
Nonresidential Use Type	Total Heated Square Footage
Commercial	76,997 sq. ft.
Industrial	80,869 sq. ft.
Warehouse	23,347 sq. ft.
Vacant	1,664 sq. ft.
Total	182,877 sq. ft.

Source: Henderson County parcel data (January 2013).

This 183,000 square feet of commercial/industrial space is divided among 10 sites located throughout the Planning Area (See Table 3.7.6). Two (2) sites, F and G, account for over seventy percent (70%) of the Planning Area’s total heated square feet of commercial/industrial space. Five (5) out of the ten (10) sites contain 10,000 heated square feet of commercial/industrial space or more.

Table 3.7.6. Heated Square Footage of Commercial and Industrial Structures containing Commercial and Industrial Uses Located on Parcels Identified as Nonresidential within the Planning Area	
Heated Square Footage (sq. ft.)	Number of Properties
0 to <5,000	41
>5,000 to <12,500	9
>12,500 to <25,000	3
>30,000	1

Source: Henderson County parcel data (January 2013).

Commercial. Commercial lands account for approximately 0.12% of classified lands in the Planning Area (See Table 3.7.1). The most significant concentration of Planning Area commercial uses occur along US 225, along both US 176 and off Green River Road. Additional commercial uses are scattered throughout the Planning Area, primarily along US 25 South, Smyre, and Red Bird Song Roads (See Figure 3.7.1).

Many Planning Area commercial uses are not found within the single commercial zoning district. The Planning Area contains one Community Commercial (CC) zoning district (See Table 3.7.7 for general district descriptions and requirements). This zoning district was originally designated on September 19, 2007 (though some have been expanded through rezoning processes).

Table 3.7.7. Commercial, Office Institutional and Industrial Zoning Districts within the Planning Area					
District	Allows for and Provides...	Scale	Maximum Size (sq. ft.)		
			Single Tenant Structure or Secondary Tenant in Multitenant Structure	Principal Tenant in a Multitenant Structure	Multitenant Structure (Total All Tenants)
CC	Retail sales and services, public and private administrations, offices, other uses done primarily for sale or profit, and residential development	Local and community	30,000 sq. ft.	80,000 sq. ft.	Unlimited
I	Industrial and heavy commercial development	Compatible with the surrounding community	Unlimited	Unlimited	Unlimited

Source: Henderson County Land Development Code, Adopted September 19, 2007, as amended through September 19, 2013.

Industrial. Five (5) parcels in the Planning Area contain industrial uses of which three (3) are zoned Industrial (I) (See Figure 3.7.1). The Industrial zoning district minimizes conflict between land uses because its regulations seek to minimize the impact industrial uses have on the environment and surrounding uses (See Table 3.7.8).

Two (2) of the identified industrial uses are within the R2R zoning district. The R2R allows manufacturing and production operations and machining and assembly operations provided the operations are 10,000 square feet in size or smaller. Manufacturing and production operations smaller than 10,000 square feet require a special use permit in the R2R zoning district. Site F3 currently exceeds, but site F1 appears to be within the maximum square footage applied. Given

preexisting status in the zoning district, these operations may expand but may have some limitations.

The remaining three (3) identified industrial uses are located in the Industrial zoning district (I). Industrial uses are permitted and allows for further expansion.

Vacant Lands. Vacant lands account for approximately 36.61% of Planning Area classified lands, making it the most prevalent land use. Vacant lands occur throughout the Planning Area with the largest contiguous tracts located in north western portions of the Planning Area (See Figure 3.7.1). The majority of Planning Area vacant lands (9,570.16 acres) are located in the R3 Zoning District (See Table 3.7.8).

Zoning District	Total Acreage	Vacant Land Acreage by District	Percent of Zoning District Acreage Vacant
R3	26,384.19	9,570.16	36.27
R2R	7,749.97	2,480.82	32.01
R4*	1,114.17	0	0.00
WR	854.71	853.77	99.89
R-40	388.59	180.26	46.39
SW	229.40	1.62	0.71
I	100.47	63.15	62.85
Municipal**	50.37	25.95	51.52
CC	42.35	2.33	5.50
Total	36,914.22	13,178.06	35.70

* The Green River Gamelands which, while vacant, is classified as “Governmental” by the Tax Assessor’s Office and does not identify as having vacant land.

**Municipal zoning is displayed to keep total vacant land acreage consistent with the Community Plan.

Source: Henderson County Tax Assessor data (January 2013).

Residential Build-Out Scenario. The Planning Area provides a low-density residential development pattern. Existing residential zoning districts contains lots which average 7.20 acres in size and a density (the number of residential dwelling units divided by total acreage in lots) is less than one (1) unit per every fourteen (14) acres (See Table 3.7.9).

Residential Zoning District	Total Acreage in Lots*	Total Number of Lots	Average Lot Size	Number of Residences	Density (units/acre)
R3	25,260.58	2,752	9.18	1,212	0.05
R2R	7,020.72	1,598	4.39	893	0.13
R4	1,097.71	7	156.82	0	0
WR	778.81	392	1.99	195	0.25
R-40	513.39	65	7.90	38	0.07
Total	34,671.21	4,814	7.20	2,338	0.07

*Total acreage in lots is less than zoning district total acreage as lands within right-of-way are excluded from total acreage in lots and included in zoning district total acreage.

Source: Henderson County Official Zoning Map (January 2013), Henderson County data (parcel data and Building Services data) (January 2013) with extrapolations by Henderson County Planning Staff.

Projecting future development in the Planning Area involves considering existing conditions and applying specific assumptions. The following apply to the residential build-out scenario provided herein:

- (1) Existing zoning boundaries remain unchanged;
- (2) Existing lot configuration remains unchanged;
- (3) Standard density (which does not account for higher densities available through conservation efforts or development of multifamily structures) is applied;
- (4) Special subdivision regulations, when applicable, are assumed to be used to maximize density;
- (5) Development is assumed to include both principal and accessory residences to maximize density;
- (6) Existing site-specific conditions and limiting factors (topographical considerations, a parcel’s ability to provide adequate water supply or sewage disposal systems, or deed restrictions, restrictive covenants or conservation easements) are unknown and are not considered; and
- (7) Commercial and office institutional zoning districts, while permitted various types of residential development, are assumed to be developed into nonresidential uses (commercial or office institutional).

Build-out scenarios should be used for informational purposes only and are not intended to accurately predict the future development or population of the Planning Area.

Table 3.7.10. Projected Build-Out at Standard Residential Density				
Residential Zoning District	Permitted Standard Density (units/acre)	Principal and Accessory Residences Permitted	Existing Residences	Unbuilt Potential
WR	0.69 (30,000ft ²)	1,506	195	1,311
R-40	0.92 (40,000ft ²)	916	38	878
R2R	1	13,714	893	12,821
R3	0.66	33,054	1,212	31,842
R4	0.20	436	0	436
Total		49,626	2,338	47,288

Source: Census data (1970 County and 2007 American Communities Survey) and Henderson County data (parcel (January 2013) and structure (January 2013)) with extrapolations by Henderson County Planning Staff.

Approximately 47,288 additional residential units would be required to reach standard residential density within existing residential zoning districts. By the year 2107 (within 94 years), the Planning Area would reach full build-out with 49,626 residences and a population of 26,667 persons. The average household size would represent 0.54 persons, which is skewed since the Planning Area has a significant number of second and or vacation homes. This would be an average density of one (1) unit per each 0.74 acres of land.⁵

Land Use Trends and Zoning Application. Tracts of agricultural lands, rural lands, and difficult mountainous areas have comprised the Planning Area since the early 1800’s. During the last several decades, development pressure has converted these agricultural and rural lands to use for residential, commercial, and industrial purposes.

The Planning Area’s major road interchanges and interconnected local road network accommodate and encourage continued residential, commercial and industrial growth. The Community Plan’s support of the proposed improvements to local road network and interconnectivity will continue to support

⁵ Assuming the following: (1) persons per household remains constant from 2020 forward (2.08 persons per household); (2) population growth continues to trend based on Census data (See Table 2.14); and (3) each residential unit accommodates only one (1) household;

development in the Planning Area. Additionally, the Planning Area's awareness to support alternative methods of transportation will attract future residents, businesses, and industries into the area.

The availability of public water and sewer within the Planning Area will also make it appealing to development. The City of Hendersonville provides public water service mainly along the easternmost portions of the Planning Area. The primary source of public water runs down Spartanburg Highway to Saluda and also down portions of Pinnacle Road to a few major subdivisions. Public sewer is currently not available within the Planning Area and most residents rely on septic systems. The terrain limits the ability to place septic areas, but the Planning Area does not contain any septic areas of concern. Development can easily be accommodated through expansion of public sewer or water services, with addition to package plants and private utility service entities.

The expansion of residential land use is most prevalent in the Planning Area. Over half of the Planning Area's existing residential units were built within the last 30 years. It is estimated that by the year 2025 an additional 1,438 individuals will move to the planning area, occupying an additional 1,277 residences. Commercial and industrial development will likely keep pace with this residential growth as these individuals demand goods, services, and jobs in the Planning Area. The Planning Area's growth will be dependent upon a number of factors, specifically water and sewer, and other utilities.

Topographical impediments to development exist throughout the Planning Area, specifically in the north western portion of the Planning Area boundary. Lands with steeper slopes are prevalent which may discourage development in the short term but not prevent development permanently. Careful application of land use regulations in the areas with steeper slopes may provide additional protection to the area in the face of development pressure. Land use regulations should also be carefully applied to the Green River Gamelands in the event that the State of North Carolina no longer retains these lands.

Identifying key areas to focus services and infrastructure coupled with careful application of residential, commercial, office institutional, and industrial zoning district designations will guide land use and development trends in the future.

Land Use and Development Goals and Objectives

Goal LUD1. Residential Zoning District Map Amendments.

LUD1.1. Residential District Two (2) Rural. Replace Estate Residential (R-40) zoning with Residential Two Rural (R2R) zoning between Hattie Osteen Road and the existing western boundary of the Residential Two Rural (R2R) zoning district. The northern boundary of this zoning change will follow the Planning Area boundary, which runs along Pinnacle Mountain Road. Replace Estate Residential (R-40) zoning district north of Pinnacle Mountain Road to the Planning Area boundary with Residential Two Rural (R2R) zoning. Additionally, replace existing Estate Residential (R-40) zoning district on parcel 9935958 with Residential Two Rural (R2R) (See Map 7).

LUD1.2. Residential District Four (4). Replace Residential Three (R3) zoning in the western portions of the Planning Area with Residential Four (R4) zoning. This zoning district should encompass all of the Green River Preserve and the adjoining parcels at the Western most edge of the planning area. This district should only be extended to meet existing Residential Four (R4) zoning on DuPont State Forest or to prevent split zoning. Additional, the County should consider extending the existing Residential Four (R4) zoning located immediately outside the Planning Area to the southwest to connect DuPont State Forest and the Green River Preserve (See Map 7).

LUD1.3. Residential District Two (2) Rural. Replace the remaining Residential Three (R3) zoning district with Residential Two Rural (R2R) zoning district. Leaving the current existing zoning districts of Waterfront Residential (WR), Surface Water (SW), Community Commercial (CC), Residential Four (R4) and Industrial (I) zoning districts (See Map 7).

Goal LUD2. Commercial, Office Institutional and Industrial Zoning District Map Amendments.

LUD2.1. Local Commercial (LC). To preserve small local businesses, local scale commercial development should be the Planning Area’s principal type of commercial development. Local Commercial (LC) zoning should be applied in the following areas:

1. Along Greenville Highway from the former Day Care Facility parcel south to Zion Hill Baptist Church. On the adjacent side of the Greenville Highway from parcel 9975443 to Zirconia Road (See Inset 3 on Map 7);
2. From the intersection of Old U.S. 25 and North Lake Summit Drive to the intersection of Old Greenville Hwy and Old U.S. 25. The northern boundary of this zoning change along the U.S. 25 right-of-way and the southern boundary adjacent to the Waterfront Residential (WR) zoning district around Lake Summit (See Inset 2 on Map 7);
3. From the intersection of Old U.S. 25 and Icey Hill Road to the intersection of Old U.S. 25 and Cranmore Lane. The boundary of this zoning change will abut U.S. 25 right-of-way and the parcels along Old U.S. 25 (See Inset 2 on Map 7).

LUD3.1. Amend the Land Development Code (LDC) to promote rural and local businesses. The County should consider allowing the small scaled retail sales and services use in the Residential Two Rural (R2R) zoning district.

3.8: COMMUNITY CHARACTER AND DESIGN

Existing Community Character. The citizens of the Planning Area uphold its “rural character”. Defining rural character is difficult given that different people have different interpretations of the meaning of “rural”. When an area has rural character it generally contains a large amount of farmland, woodland, and undeveloped open spaces combined with lower-density residential development patterns and nonresidential development that is usually small and locally owned. The Planning Area’s rural character is unique from other areas of the County, resulting from both its natural setting and the historical interaction of its citizens with the environment.

The Planning Area’s natural setting is unique because of its topography, streams, and climate. One of its most defining natural features is Lake Summit, which is the largest standing body of water in the County. Lake Summit provides a number of recreational opportunities and is a draw for many citizens looking to locate in the Planning Area. The rugged mountain ranges found throughout the Planning Area provide scenic views unique to the area. The terrain varies greatly with limited flat land available for high density development or agriculture. Early settlers recognized the area’s abundance of minerals in the mountains, which were mined for various applications. Mining and small agricultural practices found today help maintain the rural character of the Planning Area. The valley floors and gradual slopes, which are more easily developed, contain a significant portion of the County’s residential and nonresidential development. The rugged terrain found throughout the Planning Area remains largely undeveloped with extensive woodlands, particularly in the Green River Game Lands and the Green River Preserve.

Another defining characteristic of the Planning Area’s rural character is its strong sense of community and the preservation of the historical past. There is a strong connection with the history of the Planning Area and a desire to protect those memories. The community has no formal meeting space, but the proposed Tuxedo Park may provide a common meeting location. The proposed Tuxedo Park will be placed at the old Green River Mill site with a possible walking trail dedication to the history of that site.

Businesses also play a key role in keeping the community connected. Nonresidential (commercial and industrial) development has long been a part of the Planning Area, which began with textile manufacturing and extensive mining operations. Existing nonresidential uses are scattered primarily along US 225 around the Lake Summit



area, but are not limited to this area. These include a mix of automobile and equipment service, recreation, camps, general retail, and warehouses/storage. Some of the nonresidential uses are located in traditionally industrial structures (metal prefabricated buildings). Still, many other nonresidential uses are located in more architecturally traditional structures with similar building materials and traditional color pallets to residential structures that offer limited differentiation from nonresidential and residential structures. The Planning Area's development patterns reflect the minimalist and simplistic characteristics of the Planning Area to the County.

The Planning Area is primarily surrounded by undeveloped land, but the Planning Area also surrounds several additional nonresidential uses to the North. The nonresidential uses are primarily found to the north of the Planning Area around the City of Hendersonville, which is composed of formula businesses (McDonalds, Zaxby's, Cracker Barrel, and other stores and restaurants that have standardized services, décor, methods of operation, and other features that make them virtually identical to businesses elsewhere). A majority of these nonresidential businesses have been annexed by the City of Hendersonville.

Preserving Community Character and Accommodating Development. Preserving the rural character of the Planning Area will become more challenging given development pressure the community will continue to experience. The community's definition of rural character is essential to its preservation. By identifying the qualities that create the rural character of the area, a community can then seek to identify how it may be preserved. Rural character preservation in the Planning Area can be achieved by identifying target areas for higher-density residential and nonresidential development, applying appropriate design standards, protecting open spaces and agricultural lands, and identifying target areas for low-density residential development with limited nonresidential activity.

Existing Design Standards. Rural community character is impacted by residential and nonresidential (commercial, office institutional and industrial) uses and developments. The LDC provides limited regulations that address landscaping, buffering, and signage. Many of the existing nonresidential developments and uses in the Planning Area were developed prior to the implementation of these regulations and were not required to conform to these standards. Any new development must comply with any requirements outlined in the LDC, and include:

Buffers: required to separate industrial, commercial (including office institutional), and residential development.

Parking Lot Landscaping: required where ten (10) or more spaces are proposed (the amount of plant material increases for each additional five (5) parking spaces).

Planting Strip: required where parking is proposed within 20 feet of the property line.

Street Trees: required where a major subdivision of land occurs.

Screening and Fencing: required for specific nonresidential uses

Prohibited Signs: include signs (1) placed in the right-of-way; (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; (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 (380 feet in area or greater).

Sign Area and Height Limitations: determined based on sign type and applicable zoning district.

Photo Rendering for Future Development. The GRTZ committee selected two (2) sites in the planning area to perform photo renderings to demonstrate how these areas might look if developed in

the future (See Figure 3.8.1.). The committee did not make recommendations to address specific design standards, but the photo renderings is a good example of how new non-residential development can support the community’s unique character.

Figure 3.8.1. U.S. 225 Photo Rendering



Community Character and Design Goals and Objectives

Goal CCD1. Promote development compatible with the rural character and natural setting of the GRTZ Planning Area. The community does not recommend specific design standards or support regulations or requirements for design standards. Although, the GRTZ area encourages new non residential uses to design developments that reflect the values and unique characteristics of the Planning Area.

Goal CCD2. Promote redevelopment and adaptive reuse of existing abandoned nonresidential structures. Existing abandoned nonresidential structures like the Old Tuxedo School site should be reused and adapted for new nonresidential or residential development where possible.

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