

# **Dana Community Plan**



**Adopted March 16, 2011**

## PLAN PARTICIPANTS

### ***Henderson County Board of Commissioners***

Mike Edney, Chairman  
Tommy Thompson, Vice Chairman  
Charlie Messer  
Bill O'Connor  
Larry Young

### ***Dana Community Plan Advisory Committee***

Tommy Thompson, Chairman  
Jeff Justus, Vice Chairman  
Roger Byers  
Harry Fozzard  
Jim Gedwellas  
Danny McConnell  
Lee Roy Nicholson  
Norma Pryor  
James Revis  
Henderson County Planning Board Liaison, Tommy Laughter  
Blue Ridge Community College Representative, Matt Matteson  
City of Hendersonville Representative, Tim Murphy

### ***Henderson County Planning Board***

Jonathan Parce, Chairman  
Tommy Laughter, Vice Chairman  
Mike Cooper  
Steve Dozier  
Wayne Garren  
Marilyn Gordon  
Rick Livingston  
Stacy Rhodes  
Suprina Stepp

### ***Henderson County Planning Department Staff***

Anthony Starr, AICP, Planning Director  
Autumn Radcliff, Senior Planner  
Matthew Cable, AICP, Planner  
Parker Sloan, Planner  
Patrick Rust, Planning Intern

### ***Other Participants and Special Thanks***

Henderson County Historical and Genealogical Society  
Henderson County Partnership for Economic Development  
North Carolina Natural Heritage  
United States Department of Agriculture Farm Service Agency





## EXECUTIVE SUMMARY

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The Henderson County 2020 Comprehensive Plan (hereinafter “Comprehensive Plan”) was adopted on July 6, 2004 (as amended through April 7, 2008). The Comprehensive Plan identified the need to plan for individual communities within the County. The community planning areas were prioritized based on anticipated growth and relation to the Growth Management Strategy (established by the Comprehensive Plan).

The Dana Community Plan is a community-specific comprehensive plan outlining goals related to:

- Natural and Cultural Resources,
- Agriculture,
- Housing,
- Community Facilities and Public Services,
- Transportation,
- Economic Development,
- Land Use and Development, and
- Community Character and Design.

The process for developing the Dana Community Plan began with the adoption of a Community Plan Charter by the Board of Commissioners on May 4, 2009. On July 15, 2009, the Board of Commissioners appointed the Community Planning Committee. The Committee consisted of nine (9) community residents and three (3) ex-officio members representing the Henderson County Planning Board (serving as its liaison), Blue Ridge Community College and the City of Hendersonville. The Committee held meetings from September 2009 through November 2010 resulting in an estimated 34 meeting hours. During this period the Committee also gathered public input through two (2) public input sessions and online surveys.

The purposes of the Dana Community Plan Advisory Committee, as outlined by the charter, were to serve as an advisory role to the Board of Commissioners whereby it would recommend Planning Area specific policies. The Committee formed recommendations and action strategies for each element of the Plan based on input solicited from the public, County staff, and relevant experts. The following is a summary of the Plan’s recommendations and action strategies:

### **3.1: Natural and Cultural Resources (p. 11-20)**

#### **Protect Water Quality within the Dana Planning Area.**

- Develop educational materials for development of property along or with streams.
- Official watershed designation for Lake Adger within Henderson County should not be supported by the County, unless the water supply would service Henderson County residents.
- Promote monitoring the effects of development and agriculture on the quality of water in the Hungry River and Mud Creek.

#### **Protect Land Quality within the Dana Planning Area.**

- Consider standards, requirements, incentives or other methods to preserve Dana Planning Area mountain views.
- Consider expanding ridge top protection regulations.
- Support and promote conservation easements within the Dana Planning Area to protect agricultural land and open space.

#### **Create incentives/opportunities for preservation of historic and cultural sites within the Dana Planning Area.**

- The Historic Resources Commission should encourage the preservation and care of Dana Planning Area historic sites through preservation grants and other identified means that both promote site accessibility and respect the rights and privacy of site owners.

### **3.2: Agricultural (p.19-22)**

#### **Expand and diversify agricultural markets.**

- Consider establishing a tailgate market in the Dana Planning Area.

#### **Provide public education as a means of supporting farmers and protecting farmland.**

- Expand and support the existing Agricultural District Signage Program through the County Soil Conservation Office.
- Work with NCDOT to place road signs warning motorists of slow moving farm machinery.
- Encourage participation in NCDOT's agritourism signage program.
- Support, educate and retain agricultural workers in the Dana Planning Area.

#### **Expand agricultural enterprises' access to economic development and promotion programs and support services.**

- Consider establishing a County Agricultural Development Director Position.
- The County should work with the Henderson County Partnership for Economic Development and others to encourage agriculture-related industries to locate in the Dana Planning Area.
- Consider establishing a "Buy Henderson" local food campaign, similar to existing "Local Food" campaigns in the region.

### **3.3: Housing (p. 23-28)**

#### **Expand affordable housing in the Dana Planning Area.**

- Consider offering incentives for affordable housing.

#### **Expand and diversify housing options.**

- The County should encourage—and regulations should permit—a mix of housing types (including multifamily units) in the Dana Planning Area.
- The County should consider applying additional design standards for multifamily units in the Dana Planning Area to ensure continuity with the surrounding rural community.

#### **Support the continuance and expansion of the existing local program for abandoned/dilapidated manufactured home removal.**

#### **Encourage quality housing for migrant workers through continued enforcement of the minimum housing code and by encouraging additional affordable housing options to serve this population.**

### **3.4: Community Facilities and Public Services (p.29-38)**

#### **School outdoor recreation facilities should be available for community use when not being used by students or otherwise by the school system.**

#### **Redevelop the Dana Community Park, as depicted in the Conceptual Master Plan, to serve as a focal point for the community.**

#### **Consider establishing a park on the grounds surrounding the Upward Community Center.**

#### **Consider providing sidewalks in commercially zoned areas within the Dana Planning Area.**

#### **Support extensions of public water and public sewer into certain areas within the Dana Planning Area.**

### **3.5: Transportation (p. 37-40)**

#### **Improve the transportation network in the Dana Planning Area.**

- The County, through its involvement in the French Broad River MPO, should prioritize projects within the Dana Planning Area in accordance with Plan goals.
- Improve identified intersections based on recommended studies.
- Facilitate safer automobile movement and alleviate traffic stacking issues on Ridge Road, Academy Road, and Blue House Road during school peak hour traffic.
- Provide an additional Interstate 26 interchange between the existing interchanges at Upward Road and US Highway 64 East.
- The County, through its involvement in the French Broad River MPO, should prioritize bicycle projects within the Dana Planning Area in accordance with Plan goals.
- Review public transit periodically to identify service provision changes or increases.

### **3.6: Economic Development (p. 41-46)**

#### **The Upward Road interchange along Interstate 26 and surrounding area should be developed to draw businesses, tourists, County residents, and the residents of the surrounding region.**

- Economic development at a regional scale should be focused at the interchange and in the surrounding area.
- Aesthetic improvements to the interchange should be considered to encourage economic growth and promote a positive perception of the Dana Community, Henderson County, and nearby municipalities

#### **Encourage higher density residential development in the areas near and mixed within nonresidential development at the interchange.**

#### **Promote high-tech and research and development operations in the Dana Planning Area in light of the Planning Area's adjacency to Blue Ridge Community College.**

### **3.7: Land Use and Development (p.47-54)**

**Industrial (I) Zoning District Map Amendment.** Industrial (I) zoning should be applied to those properties bounded by McMurray Road and Ballenger Road and located between the existing Regional Commercial (RC) and Industrial (I) zoning districts (See Map 8, Land Use Recommendations (Pg. 67)).

**Residential One (R1) Zoning District Map Amendment.** Residential One (R1) zoning should be applied to those properties located along Howard Gap Road and South Orchard Road and between Upward Road and Orchard Road (See Map 8, Land Use Recommendations (Pg. 67)).

### **3.8: Community Character and Design (p. 55- 59)**

**Community character should be protected for the Dana Planning Area, with particular attention to the "Downtown Dana" area and Interstate-26 interchange at Upward Road.** The County should consider providing guidelines, standards and regulations for nonresidential development in the Planning Area. The following should be addressed:

- Building orientation (fronting the street and located proximate to the street);
- Façade articulation (changing alignment and/or building material used);
- Glazing (preventing long facades without windows);
- Parking orientation (locate in the side or rear of the business);
- Provision of pedestrian access within and between developments; and
- Signage (in scale with building) and landscaping installation.

- Architectural character consistent with rural residential development of the area including: building materials (wood siding, stone, brick), porches and covered walks, and roofs (pitched roofs and metal roofs); and
- Preservation of the views of Refuge Baptist Church (addressing building height and setback to achieve visibility)
- Interconnectivity/traffic flow management (through the addition of street connections and roundabouts or other traffic calming measures).

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## **SECTION 1: INTRODUCTION TO THE PLANNING AREA**

### ***Purpose***

County officials, local organizations, and the community at large developed the Henderson County 2020 Comprehensive Plan (hereinafter “Comprehensive Plan”) adopted July 6, 2004 (as amended through April 7, 2008). A principal recommendation of the Comprehensive Plan is the detailed study of individual communities within the County. The Dana Community Plan is a community-specific comprehensive plan that outlines future goals related to Land Use and Development, Community Character and Design, Natural and Cultural Resources, Agriculture, Housing, Community Facilities and Public Services, Transportation, and Economic Development.

### ***Process***

The plan development process began with the adoption of the Dana Community Plan Advisory Committee Charter by the Board of Commissioners on May 4, 2009 and appointment of the committee on July 15, 2009. The Committee consisted of nine (9) community residents and three (3) ex-officio members representing the Henderson County Planning Board (serving as a liaison to the Board), Blue Ridge Community College, and City of Hendersonville. The Committee’s purposes were to advise the Board of Commissioners by recommending policies specific to the Dana Planning Area. The Committee met for the first time on September 1, 2009.

The Committee gathered public input through two (2) public input sessions, mailed survey and an online survey. The County held the initial public input session on November 9, 2009 at Dana Elementary School. Approximately 60 community residents participated in the meeting by discussing the strengths of, concerns for, and 15-year vision for the community. To solicit additional input the County also provided an online survey available from October 1, 2009 through December 15, 2009.

The Committee held 16 successive meetings following the initial public input session during which the Committee reviewed each of the Plan’s elements. The Committee formed recommendations and action strategies for the Plan elements based on input from the public, County staff, and relevant experts.

The County held a second public input session on November 8, 2010 to allow residents to comment on the Plan. The Committee then held its final meeting to review the public input and finalize the Plan on November 15, 2010. The Committee presented the Plan to the Planning Board at a joint meeting held December 16, 2010. With Planning Board support, the Committee presented the Plan to the Board of Commissioners on March 16, 2011. At its March 16, 2011 meeting, the Board of Commissioners adopted the Dana Community Plan.

### ***Planning Area Boundary***

The Planning Area is located in the eastern portion of Henderson County and includes 20,796 acres of land (8.66% of the County acreage and 10.17% of the County’s jurisdictional acreage). The Planning Area’s northern boundary falls between Sugarloaf Road and US Highway 64 East. The eastern boundary follows the border shared by Polk and Henderson Counties. The City of Hendersonville and its Extra Territorial Jurisdiction (ETJ) define the western boundary. The southern boundary is defined by the following features: Airport Road, South Allen Road, Upward Road, Interstate 26, and Green River (See Map 1, Planning Area Boundary (Pg. 60)).

***Historical Overview, Community Beginnings***

Howard Gap Road, which traverses the Dana Community Plan area, follows perhaps the oldest traveled route leading into Western North Carolina. Originally blazed by migrating herds of bison, elk and deer, the Cherokee began following the game and using the surrounding areas as hunting grounds. The route developed as the Cherokee and other Native Americans began to follow it for trade. Captain Thomas Howard, for whom the Howard Gap Road is named, is memorialized for leading the militia into a victorious battle against the Cherokee in the “gap of the mountain” above Tryon in 1776. Settlers quickly thereafter began using Howard Gap Road as the principal route to enter Western North Carolina. Most of the 65 miles of this historical road leading

from Fletcher, NC into Union, SC remains intact; the exception being a steep portion of the road removed during the construction of Peter Guice Bridge (across Green River) on Interstate 26.

Howard Gap Road brought along it many of the Western North Carolina’s earliest colonial settlers. Conflicts became inevitable with settlers entering Cherokee territory. The State of North Carolina and Cherokee, in an attempt to reduce conflict between the groups, entered into an agreement known as the Hopewell Treaty (1785). The treaty attempted to establish a western boundary of colonial settlement, which passed through what are today the communities of Dana, Flat Rock, and Fruitland. Early colonial settlers’ landholdings in the Dana area did not go unchallenged. In 1793 the State officially recognized the boundary of the Hopewell Treaty through its granting of lands in the Dana area to Mr. John McMinn.

The earliest settlers within the Dana area included Gibbs, Hill, Jones, Justice, Justus, McCraw, Tabor, and Stepp families. These pioneer families settled largely east of “the Ridge” and along the Little Hungry River. The Ridge, as the area is still known to some today, follows the crest of the Blue Ridge Mountains along Upward/Ridge Road.

Mr. James Dyer Justice moved into the Dana portion of the Ridge in the late 1790s to early 1800s. The Justice family’s American history can be traced back to his grandfather John Justice. John Justice and his brother James (Welsh) originally settled in Virginia in 1760, neighboring President Thomas Jefferson at Monticello. John’s son Thomas Justice married Mary Dyer and moved to the area that is now Polk County, NC where the couple had their son James D. Justice. It was probably the proximity of his parents’ home to the Dana area that first led James D. Justice to the area. It was here in 1806 that James D. Justice married his wife Anthorit Thomas (daughter of a landholder in the western portion of Hendersonville) in 1806. The couple had 14 children and the family has remained prominent in the community to this day.

Mr. John Jones (1764-1860) was another early settler of the Dana area. Jones is noted for not only building one of the first grist mills but also for, in the early 1800s, building the first water-power operated saw mill in Henderson County. Both mills were located below Oleta Falls, at the foot of Golden Hill. The name Oleta reflects Native American naming of the site prior to colonization. Mr. Benjamin Merrell and his wife Alice Stepp Merrell later (1908) located “Aleeta Post Office” in the area.

The area where the grist mill, saw mill, and Aleeta Falls Post Office were located is now accessed by “Oleta Mill Trail” in the gated community of Oleta Falls. Mr. John Jones is buried in Jones Cemetery ((See See *Dana Community Plan Supplemental Materials Cultural and Historic Sites Map, Site C14*).

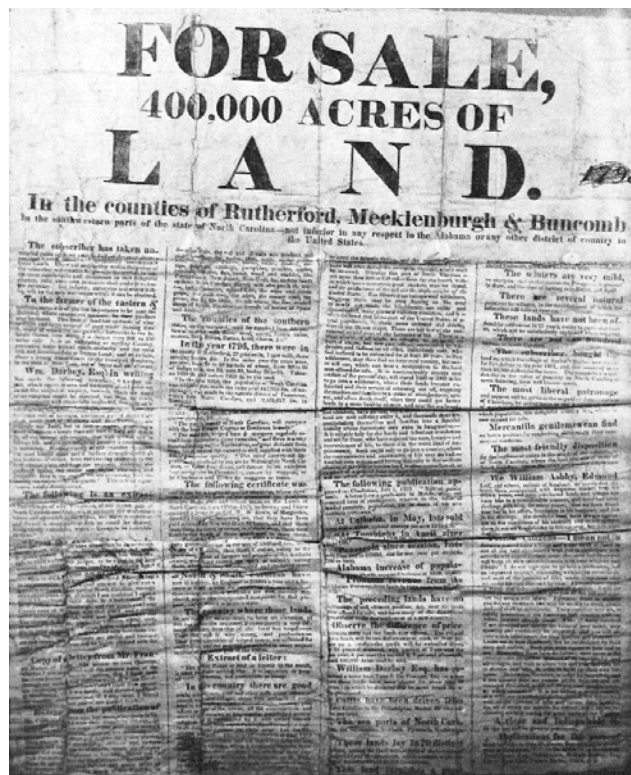


Oleta Falls today and yesterday. The photo at right, courtesy of “From the Banks of the Oklawaha Vol. II”, is of the original Aleeta/Oleta Falls Post Office and Saw Mills. Given the structures shown, the photo may have been taken as early as 100 years ago.

Other settlers of the early 1800s included Baptist Preacher Andy Gibbs and his wife Sally Dimsdale Gibbs. Preacher Gibbs came with his wife from what is now Polk County soon after the Revolutionary War and settled on the unnamed tributary of Saconon Creek which flows behind Refuge Baptist Church in Dana.

The Dana Area was, during the period from 1790 to 1840, located in the heart of United States gold mining. The US supply of gold came from mines in North Carolina, Georgia and South Carolina, with what is now Henderson, Polk and Rutherford Counties, serving as the center of the activity. The area

located between Oleta Falls and Little Hungry River would, by the 1930s be commonly known as Golden Hill. Gold was being panned in the Hungry and Little Hungry Rivers even during the Depression when money and employment opportunities were scarce.



Speculation Lands handbill courtesy of “From the Banks of the Oklawaha Vol. III”.

The combination of these circumstances—the establishment of the Hopewell Treaty, the arrival of these early settlers, the location of gold among other valuable resources, and the natural beauty of the area—lead to the first mass marketing of American real estate (including lands in the Dana area). Properties within the Dana area were part of the “Speculation Lands”. The 400,000 acres of these lands covered all or parts of what is today Buncombe, Henderson, Polk, Rutherford, Gaston, McDowell, Mecklenburg and Union Counties. Mr. Tench Coxe (who held appointed positions under Presidents George Washington and Thomas Jefferson) was the original owner of these lands, receiving them through both a grant from the State of North Carolina and through the purchase of other properties granted by the State to other Revolutionary War Officers. In 1819 Augustus Sackett purchased the “Speculation Lands”. It was Mr. Sackett who advertised the lands for sale by

distributing handbills (24 by 19 inches) in 1820 to all parts of the eastern seaboard of the United States, England, and parts of Europe. The lands were marketed for as little as \$2 per acre. James D. Justice (one of the original settlers) was hired as the commissioner, sales agent and supervisor of the Speculation Lands. He was succeeded by four (4) other Justices, including Rev. T Butler, C. Baylus, S.D., and George W. Justice (1919). Shortly thereafter the ownership of the remaining lands was settled.

Dana only received its placename at the turn of the century. In 1890 Mr. D.G. Hadley, of New Hampshire, brought his wife, son and daughter to Henderson County on the advice of their physician who recommended the pure mountain air and the wonderful year round climate. Mr. Hadley purchased property just off Ridge Road where he built the Summit Hotel and observation tower. Mr. Hadley requested and received the promise of a post office, to be located in the Summitt Hotel, when a name for the area was given. Hotel guests were invited to suggest names for the new post office. A guest recommended to Mrs. Hadley that they name the area after their son, Dana Hadley. The “Dana” name was submitted to the Federal Government and approved. The family which had given the area its name left Dana after their hotel burned. Many years later the observation tower was blown down by a storm.

The Ridge, Dana and Upward areas that comprise the Dana Community Plan have a significant past which will continue to impact this area and Henderson County in the future.

## SECTION 2: DEMOGRAPHICS OF THE PLANNING AREA

### Demographic Trends

**Population and Growth.** Demographics and current trends for the Planning Area were derived from United States Census data (1970 County, 1990 and 2000 Block Group, and 2007 American Communities Survey) and Henderson County government data. The United States Census (hereinafter “Census”) identified the number of households for Block Groups. The demographic estimates for the Planning Area were extrapolated from this data by comparing Henderson County government residential structure data to Census Block Group household data.

The Planning Area’s estimated 2010 population is approximately 10,470 persons, some 9.9% of the County’s estimated 2010 population (105,910 persons) (See Table 2.1). In perspective, the Planning Area contains only 8.66% of the County’s total acreage.

**Table 2.1. Planning Area Population, Persons and Households 2010**

<b>Persons</b>	10,470
<b>Households</b>	4,505
<b>Persons/Household</b>	2.32

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

The Planning Area experienced substantial population growth in the 10-year period from 1990 to 2000 (See Table 2.2). Data extrapolated from the Census (1990 and 2000 Block Group) indicate the Planning Area experienced a net gain of 2,392 persons and an overall 42.8% increase in population. In comparison, Henderson County experienced a 28.7% increase in population during the same period. The Planning Area population gain accounts for 12.0% of the total population increase for the County during this period (See Tables 2.2 and 2.3).

The number of households within the Planning Area grew at a rate (46.3%) that exceeded population growth during the 10-year period from 1990 to 2000. The rate of household growth also exceeded population growth for the County during the same period. The average persons per household fell slightly within the Planning Area during this 10-year period, but continued to exceed that of the County in both 1990 and 2000 (See Tables 2.2 and 2.3).

**Table 2.2. Planning Area Population, Persons and Households 1990 to 2000**

<b>Year</b>	<b>1990</b>	<b>2000</b>	<b>Net Change</b>	<b>Percent Change (%)</b>
<b>Persons</b>	5,586	7,978	2,392	42.8
<b>Households</b>	2,213	3,238	1,025	46.3
<b>Persons/Household</b>	2.52	2.46	-0.06	-2.4

Source: Census data (1990 and 2000 Block Group) with extrapolations by Henderson County Planning Staff.

**Table 2.3. Henderson County Population, Persons and Households 1990 to 2000**

<b>Year</b>	<b>1990</b>	<b>2000</b>	<b>Net Change</b>	<b>Percent Change (%)</b>
<b>Persons</b>	69,285	89,173	19,888	28.7
<b>Households</b>	28,709	37,414	8,705	30.3
<b>Persons/Household</b>	2.41	2.38	-0.03	-1.2

Source: Census data (1990 and 2000 County).



Data indicate the Planning Area continued to grow rapidly, with population growing 21.0% during the period from 2000 to 2007. This was a significant decline from the previous 42.8% increase experienced from 1990 to 2000. The County population grew more slowly with a 12.3% increase in population during the period from 2000 to 2007. The Planning Area population increase accounts for 14.4% of the total population increase for the County during this period. Average persons per household continued to decline in both the Planning Area and County (See Tables 2.4 and 2.5).

**Table 2.4. Planning Area Population, Persons and Households 2000 to 2007**

Year	2000	2007	Net Change	Percent Change (%)
<b>Persons</b>	7,978	9,651	1,673	21.0
<b>Households</b>	3,238	4,074	836	25.8
<b>Persons/Household</b>	2.46	2.36	-0.10	-4.1

Source: Census data (1970 County, 2000 Block Group and 2007 American Communities Survey) with extrapolations by Henderson County Planning Staff.

**Table 2.5. Henderson County Population, Persons and Households 2000 to 2007**

Year	2000	2007	Net Change	Percent Change (%)
<b>Persons</b>	89,173	100,810	11,637	13.0
<b>Households</b>	37,414	44,022	6,608	17.7
<b>Persons/Household</b>	2.38	2.29	-0.09	-3.78

Source: Census data (2000 County and 2007 American Communities Survey).

**In-Migration and Change in Housing.** Planning Area in-migration during the period from 1995 to 2000 (20.4%) was slightly lower than that experienced in the County as a whole. This did reflect a significant increase in the in-migration rates experienced in the Planning Area during the period from 1985 to 1990 (See Table 2.6). The Planning Area and County both saw a decline in the percent of persons living within the same household when comparing the periods of 1985 to 1990 and 1995 to 2000. The percent of persons living in the same household within the Planning Area (53.4%) was just below that of the County (54%) during the period between 1995 and 2000 (See Table 2.7).

**Table 2.6. In-Migration,\* 1985 to 2000**

Place	Percent of Population	
	1985 to 1990	1995 to 2000
<b>Henderson County</b>	23.6%	25.0%
<b>Planning Area</b>	12.7%	20.4%

\*In-migration refers to those that moved into the listed place from outside of Henderson County.

Source: Census data (1990 and 2000 Block Group) with extrapolations by Henderson County Planning Staff.

**Table 2.7. Change in Housing, 1985 to 2000**

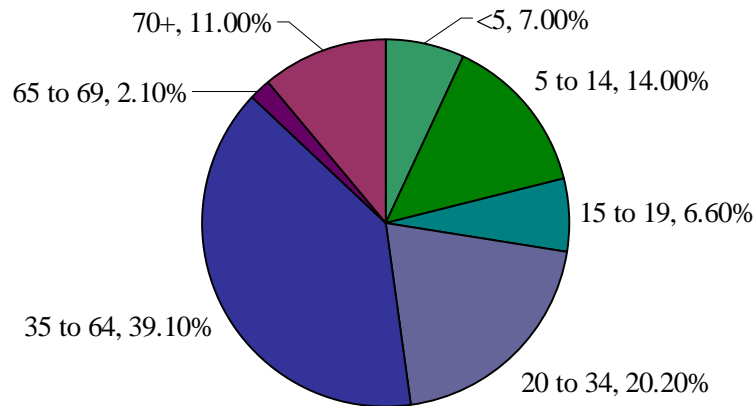
Place	Percent of Persons Living in the Same House Between	
	1985 and 1990	1995 and 2000
<b>Henderson County</b>	56.5%	54.0%
<b>Planning Area</b>	64.0%	53.4%

Source: Census data (1990 and 2000 Block Group) with extrapolations by Henderson County Planning Staff.

**Age of Population.** The populations of the United States, County, and Planning Area are composed primarily of residents aged 35 to 64. The United States, County, and Planning Area are composed secondarily of those aged 20 to 34 (See Figure 2.1 and Table 2.8). The Planning Area population is

generally younger than the County population. School-aged children (aged 19 or younger) make up 27.6% of the population in the Planning Area, higher than the percentage of school-aged children in the County (22.7%). Additionally, 21.7% of the County's population is aged 65 or older, while only 13.1% of the Planning Area population is this age or older (See Figure 2.1 and Table 2.8).

**Figure 2.1 Planning Area Age of Population 2000**



**Table 2.8. Planning Area Age of Population 2000**

Place*	Age						
	<5	5 to 14	15 to 19	20 to 34	35 to 64	65 to 69	70+
<b>United States</b>	6.8%	14.7%	7.1%	20.8%	38.3%	3.4%	9.0%
<b>Henderson County</b>	5,007 (5.6%)	10,499 (11.8%)	4,709 (5.3%)	14,667 (16.4%)	34,950 (39.2%)	4,929 (5.5%)	14,412 (16.2%)
<b>Planning Area</b>	542 (7.0%)	1,089 (14.0%)	515 (6.6%)	1,571 (20.2%)	3,043 (39.1%)	165 (2.1%)	858 (11.0%)

Source: Census data (2000 Block Group) with extrapolations by Henderson County Planning Staff.

The Planning Area has seen the most significant growth in the population under age five (5). Other age groups showing significant increase include those 5 to 14 and 70 or older. The number of persons age 65 to 69 declined by 41.3% between 1990 and 2000 (See Table 2.9).

**Table 2.9. Planning Area Age of Population 1990 to 2000**

Age	1990	2000	Net Change	Percent Change (%)
<b>Under 5</b>	331	542	211	63.7
<b>5 to 14</b>	727	1089	362	49.8
<b>15 to 19</b>	386	515	129	33.4
<b>20 to 34</b>	1227	1571	344	28.0
<b>35 to 64</b>	2056	3043	987	48.0
<b>65 to 69</b>	281	165	-116	-41.3
<b>70+</b>	579	858	279	48.2

Source: Census data (1990 and 2000 Block Group) with extrapolations by Henderson County Planning Staff.

**Population Race and Ethnicity.** The population in the County and Planning Area is predominantly White (See Table 2.10). The Planning Area includes a larger percentage of Hispanics/Latinos (of any race) than the County (12.3% versus 5.5%). Census Tract 99.03, Block Group 1 (the area bounded on the south by Sugarloaf Road and extending north to US Highway 64 East) contains the largest percent

of Hispanic or Latino persons in the Planning Area, with 24.3% of the population within this Tract falling into this category.

**Table 2.10. Planning Area Race and Ethnicity 2000**

Place	White	Hispanic/Latino (Any Race)	Black/African-American	Other**
Henderson County	89.7%	5.5%	2.8%	2%
Planning Area	84.8%	12.3%	0.8%	2.1%

\*\* Other includes: American Indian, Alaska Native, Native Hawaiian, Asian, other Pacific Islander, Individuals of two (2) or more races, or any other unlisted race.

Source: Census data (2000 Block Group) with extrapolations by Henderson County Planning Staff.

**Population Income and Poverty.** In 1999, approximately 52.6% of Planning Area households earned less than \$35,000 (See Table 2.11).

**Table 2.11. Planning Area Household Income 1999**

Place	Less than \$10,000	\$10,000 to \$24,999	\$25,000 to \$34,999	\$35,000 to \$44,999	\$45,000 to \$59,999	\$60,000 to \$74,999	\$75,000 to \$99,999	\$100,000+
Henderson County	8.4%	21.5%	15.6%	13.6%	14.8%	10%	8.5%	7.7%
Planning Area	8.4%	27.5%	16.7%	16.1%	13.4%	8.3%	5.8%	3.7%

Source: Census data (2000 Block Group) with extrapolations by Henderson County Planning Staff.

The projected 2008 median household income for the Planning Area is \$36,253 while for the County it is \$46,322 (approximately 18.6% higher). The Planning Area did not contain any Census Tract Block Groups with median incomes higher than those experienced by the County. Census Tract 99.10, Block Group 3 (the portion of the Planning Area west of Interstate-26) had the lowest median incomes at \$28,287 (See Table 2.12).

**Table 2.12. Planning Area Median Household Income 1999 and 2008**

Place	1999	2008*
Henderson County	\$38,109	\$46,322
Planning Area	\$32,120	\$39,042

\*Assumes a 21.55% increase in median household income based on the increase experienced for the County from 1999 to 2008.

Source: Census data (2000 County and 2008 American Communities Survey).

The Census Bureau defines poverty level based on income, family size, and family composition. In 1999, households with two (2) adults and two (2) children were in poverty when their income was \$16,895 or less. In 1999, approximately 9.7% of Planning Area households and 9.7% of County households had incomes below poverty level (See Table 2.13).

**Table 2.13. Planning Area Poverty Status 1999\***

Place	Income in 1999 Below Poverty Level		Income in 1999 at or Above Poverty Level	
	Persons	Percent	Persons	Percent
Planning Area	772	9.7%	7,159	90.3%
Henderson County	8,670	9.7%	80,503	90.3%
North Carolina	387,024	12.4%	3,133,282	87.6%
United States	12,404,237	11.8%	105,539,122	88.2%

Source: Census data (2000 Block Group) with extrapolations by Henderson County Planning Staff.

\*Data includes only those whose poverty status could be determined.

The Planning Area had similar poverty levels to those experienced Countywide among all age groups (See Table 2.14).

<b>Table 2.14. Planning Area Population Below Poverty Status, By Age, 1999*</b>			
<b>Place</b>	<b>&lt;18</b>	<b>18 to 64</b>	<b>65+</b>
<b>Henderson County</b>	2,719 (31.9%)	4,283 (50.2%)	1,524 (17.9%)
<b>Planning Area</b>	236 (30.6%)	393 (50.8%)	143 (18.6%)

Source: Census data (2000 Block Group) with extrapolations by Henderson County Planning Staff.

\*Population whose poverty status could be determined.

### **Demographic Projections**

Planning Area demographic projections were derived from Census data (1970 County, 2000 Block Group Data, and 2007 American Communities Survey) and Henderson County government data. The Census identifies the number of households for Block Groups. The demographic estimates for the Planning Area were extrapolated from this data by comparing Henderson County government residential structure data to Census Block Group household data.

Trends indicate the Planning Area will experience substantial population growth in the 25-year period from 2000 to 2025 (See Table 2.15). **Data indicate the Planning Area will experience a 97.3% increase in population by 2025.** In comparison, Henderson County will likely experience a 52.0% increase in population during the same period. The Planning Area population gain will account for 16.7% of the projected total population increase for the County (See Tables 2.15 and 2.16).

<b>Table 2.15. Planning Area Growth 2000 to 2025</b>							
<b>Year</b>	<b>2000</b>	<b>2010</b>	<b>2015</b>	<b>2020</b>	<b>2025</b>	<b>Growth 2000 to 2025</b>	<b>Percent Change 2000 to 2025 (%)</b>
<b>Persons</b>	7,978	10,470	11,995	13,742	15,743	7,765	97.3
<b>Households</b>	3,238	4,505	5,326	6,296	7,444	4,206	129.9
<b>Persons/Household</b>	2.46	2.32	2.25	2.18	2.11	-0.35	-12.2

Source: Census data (1970 County, 2000 Block Group, and 2007 American Communities Survey) with extrapolations by Henderson County Planning Staff.

<b>Table 2.16. Henderson County Growth 2000 to 2025</b>							
<b>Year</b>	<b>2000</b>	<b>2010</b>	<b>2015</b>	<b>2020</b>	<b>2025</b>	<b>Growth 2000 to 2025</b>	<b>Percent Change 2000 to 2025 (%)</b>
<b>Persons</b>	89,173	105,910	114,991	124,850	135,554	46,381	52.0
<b>Households</b>	37,414	47,260	53,196	59,876	67,395	29,981	80.1
<b>Persons/Household</b>	2.38	2.24	2.16	2.09	2.01	-0.37	-15.5

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

The number of households within the Planning Area is projected to increase more quickly than the population will grow through 2020. The average persons per household is projected to be reduced in the Planning Area and the County over this period; however, the average household size in the

Planning Area (2.11 persons per household) is projected to continue exceeding that of the County (2.01 persons per household) in 2020 (See Tables 2.15 and 2.16).

## SECTION 3: DANA COMMUNITY PLAN

### 3.1: NATURAL AND CULTURAL RESOURCES

#### *Sensitive Water Resources*

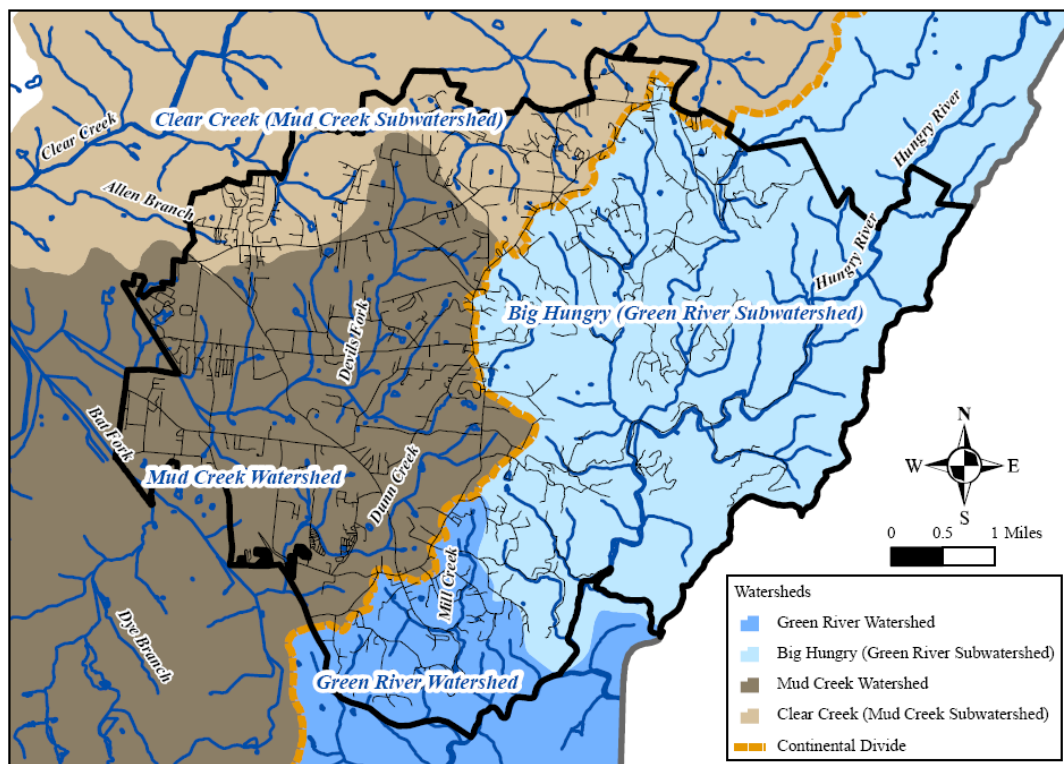
**River Basins and Watersheds.** The Eastern Continental Divide (ECD) is the boundary which separates the Gulf of Mexico and Gulf of St. Lawrence drainage basins from the drainage basins that flow directly into the Atlantic Ocean. Until 1763, the official end of the Seven Years' War (French and Indian 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. 61)). 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 11,408 acres (54.85%) in the Broad River Basin and 9,391 acres (45.15%) in the French Broad River Basin.

The French Broad River Basin includes the Mud Creek Watershed. This is the most heavily developed watershed located entirely within the County, resulting in degraded streams and poor water quality (See Figure 3.1.1). The Mud Creek Watershed Restoration Project, currently underway, is intended to restore these degraded streams and improve water quality.

The Broad River Basin includes the Green River Watershed. The Green River Watershed is a heavily forested watershed with excellent water quality and healthy streams (See Figure 3.1.1).

**Figure 3.1.1. Planning Area Watersheds**



**Stream Classifications.** The US Clean Water Act (specifically Section 303(d)) requires states list waters that do not meet established quality standards. Devil's Fork and Bat Fork Creeks, part of the degraded Mud Creek Watershed, appear on the North Carolina Division of Water Quality's (NCDWQ)



2006 list of North Carolina Impaired Waters (Published June 19, 2007) (See Map 2, Sensitive Natural Areas (Pg. 61)).

Devil's Fork and Bat Fork Creeks were first classified in 1998 due to the poor health of their biological communities. Both creeks exhibit higher turbidity and total suspended solids than other creeks within the County. Nitrate, nitrite, and nitrogen concentrations are much higher than any other sites monitored in the County, and are more than double the regional average median concentrations. Animal waste, fertilizer runoff, and urban runoff are likely affecting the nitrogen concentrations in these creeks. According to the Volunteer Water Information Network (VWIN), which monitors sites on both creeks, water quality has been improving in these streams in recent years.



View of an unnamed tributary of Devil's Fork Creek, looking south from Old Dana Road. Devil's Fork Creek is an impaired stream.

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.

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 94.7 miles of perennial streams in the Planning Area and 26.5 miles are classified as trout waters (27.98% of streams). These streams include all or portions of the following: Little Hungry, Hungry and Green River; Coon, Hill, and Jones Branch; and Beck, Henderson, Mill, Saconon, and Tumblebug Creeks. The Trout Waters classification protects these streams by applying more stringent water quality standards.

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.

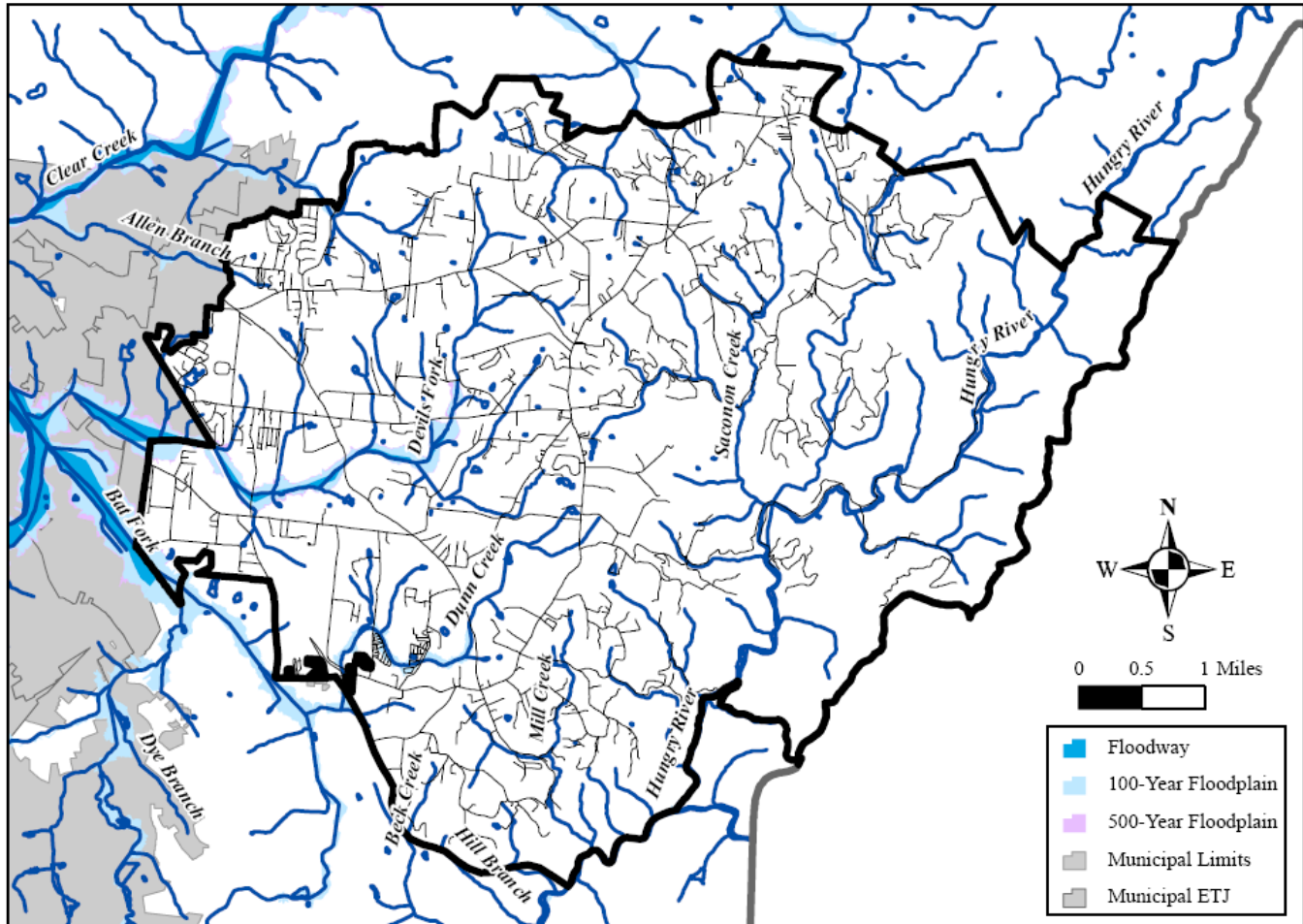
Even with protective measures, sedimentation and the resulting increased turbidity (the measurement of the visual clarity of a water sample) remain a particular concern in trout waters. Trout eggs can withstand only small amounts of silt before the likelihood of hatching is greatly reduced.

**Flood Lands.** Planning Area floodplains and floodway are principally located around Devils Fork Creek and Dunn Creek (in the western portion of the Planning Area). 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. Approximately 1.74% of the Planning Area falls within flood lands (See Table 3.1.1 and Figure 3.1.2).

Table 3.1.1. Planning Area Flood Lands			
Flood Designation	Total Acreage	Percent of	
		Planning Area (%)	County Flood Lands (%)
<b>Floodway</b>	57.19	0.28	1.48
<b>100-Year Floodplain</b>	271.06	1.30	4.83
<b>500-Year Floodplain</b>	33.36	0.16	4.87
<b>Total</b>	361.61	1.74	3.56

Source: Henderson County Flood Damage Prevention data (2009).

**Figure 3.1.2. 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 67.13 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. 61)).

**Trends.** The Planning Area contains significant water resources but water quality is threatened. 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 Planning Area water quality. As development continues, monitoring and protecting the quality and quantity of water resources in the Planning Area will be essential to prevent further 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. 61)). 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 3.1.3). The LDC reduces density by one-half ( $\frac{1}{2}$ ) 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).

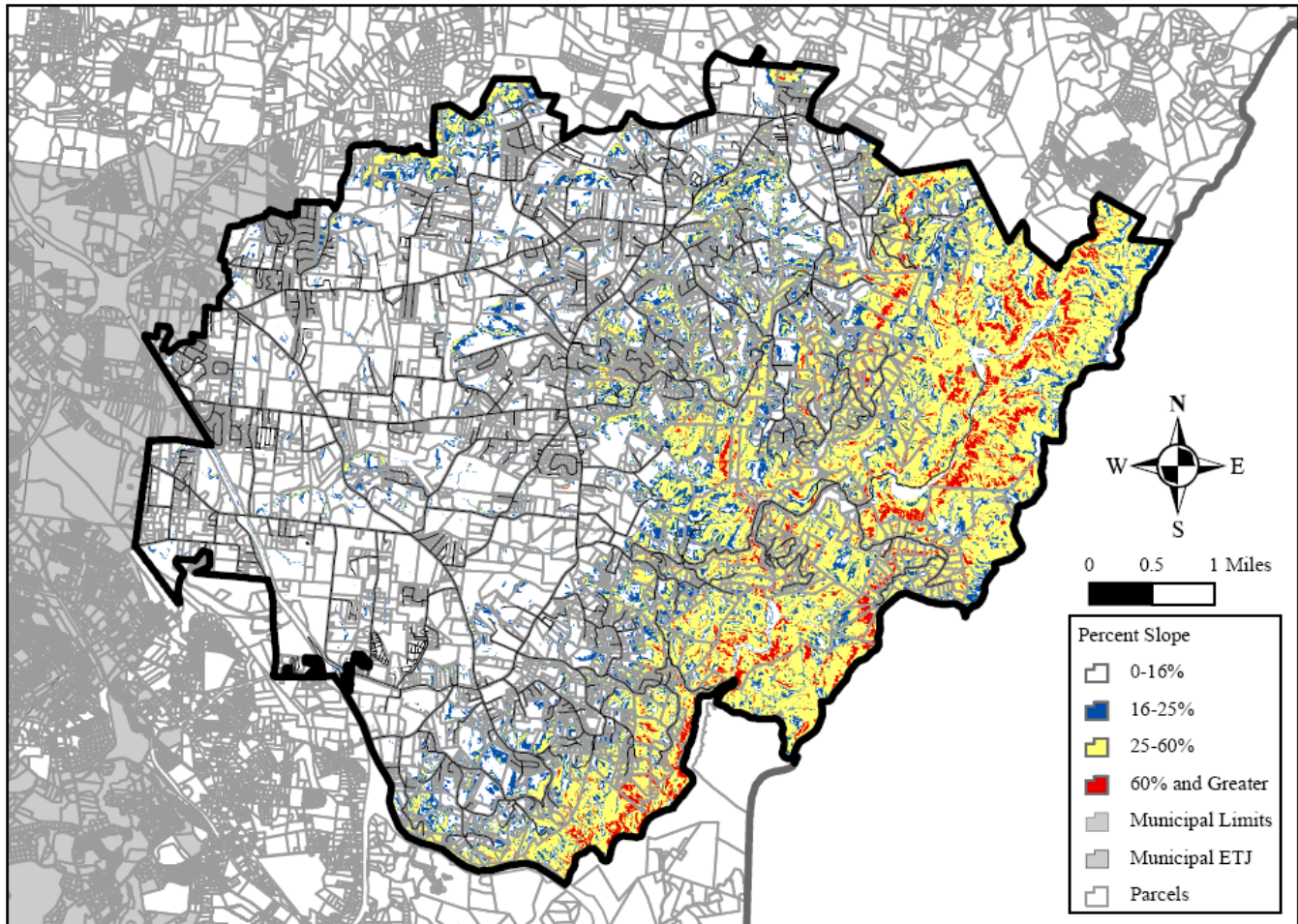
<b>Table 3.1.2. Planning Area Slope</b>		
<b>Percent Slope (%)</b>	<b>Total Acreage</b>	<b>Percent of Planning Area Lands (%)</b>
<b>0-16</b>	11,800.46	56.74
<b>16-25</b>	2,659.71	12.79
<b>25-60</b>	5,659.99	27.22
<b>60 and Greater*</b>	675.71	3.25

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

Source: Henderson County slope data (2009).



Figure 3.1.3. Planning Area Slope



**Environmentally Sensitive Sites.** The Planning Area contains many environmentally sensitive sites, with four (4) designated as Significant Natural Heritage Areas by North Carolina Natural Heritage Program (See Map 2, Sensitive Natural Areas (Pg. 61)). These four (4) sites include:

Clifffield Mountain. The privately owned site is significant due to its good quality Chestnut Oak, Montane Oak-Hickory, Montane Alluvial Forests, Pine-Oak/Heath, and rock outcrop communities. This site provides the best link between the Green River Game Lands and the Hickory Nut Gorge.

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), and French Broad heartleaf (Federal Species of Concern and 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.

**Bat Fork Bog.** The publicly owned site (NC Department of Agriculture and Consumer Services (NCDA&CS)) is a remnant Southern Appalachian Bog and Piedmont/Mountain Alluvial Forest. The NCDA&CS Plant Conservation Program is currently restoring the site.

**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
<i>Sarracenia jonesii</i>	Mountain Sweet Pitcher Plant	Plant	Endangered	Endangered
<i>Sisyrinchium dichotomum</i>	White Irisette	Plant	Endangered	Endangered
<i>Dendroica cerulea</i>	Cerulean Warbler	Animal	SC	SC
<i>Marshallia grandiflora</i>	Large-flowered Barbara's-buttons	Plant	SC	SR
<i>Hexastylis rhombiformis</i>	French Broad Heartleaf	Plant	SC	Threatened
<i>Hexastylis contracta</i>	Mountain Heartleaf	Plant	SC	Endangered
<i>Carex barrattii</i>	Barratt's Sedge	Plant		Endangered
<i>Helenium brevifolium</i>	Littleleaf Sneezeweed	Plant		Endangered
<i>Myrica gale</i>	Sweet Gale	Plant		Endangered
<i>Platanthera integrilabia</i>	White Fringeless Orchid	Plant		Endangered
<i>Hypochilus coylei</i>	A Lampshade Spider	Animal		SR
<i>Narthecium montanum</i>	Appalachian Yellow Asphodel	Plant		SR
<i>Carex utriculata</i>	Beaked Sedge	Plant		SR
<i>Hygrohypnum closteri</i>	Closter's Brook-hypnum	Plant		SR
<i>Robinia hispida</i> var. <i>kelseyi</i>	Kelsey's Locust	Plant		SR
<i>Mustela nivalis</i>	Least Weasel	Animal		SR
<i>Carex pedunculata</i>	Longstalk Sedge	Plant		SR
<i>Sphagnum capillifolium</i>	Northern Peatmoss	Plant		SR
<i>Dendrolycopodium dendroideum</i>	Prickly Ground-pine	Plant		SR
<i>Symphotrichum laeve</i> var. <i>laeve</i>	Smooth Blue Aster	Plant		SR
<i>Poa palustris</i>	Swamp Bluegrass	Plant		SR
<i>Trillium simile</i>	Sweet White Trillium	Plant		SR
<i>Hackelia virginiana</i>	Virginia Stickseed	Plant		SR

\*SC: Special Concern; SR: Significantly Rare.

Source: North Carolina Natural Heritage Program (2009).

**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 43.2% (1,232.28 acres) of the Henderson County portion of the game lands (See Map 2, Sensitive Natural Areas (Pg. 61)).

**Conservation Easements.** The Planning Area does not currently contain any conservation easements.

**Trends.** Land resources in the Planning Area are limited. Approximately 7,998 acres of the Planning Area's 20,796 acres (38%) are vacant. Approximately 1,969 acres (9%) of the Planning Area's 20,796 acres are within one tract, which is currently vacant. Development trends and future pressures, if not properly managed, could negatively affect these limited resources.



### ***Cultural and Historical Resources***

Colonial settlers began arriving in the Planning Area shortly after 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 *Dana Community Plan Supplemental Materials* for a full Cultural and Historic Sites Inventory). Included are the following sites:

**Dana Methodist Church Cemetery.** The cemetery contains the oldest marked burial site for an infant, William Willis, whom was born and died on April 11, 1798. According the document compiled by the Henderson County Genealogical and Historical Society (1995) no other marked grave in this or any other Henderson County cemetery contains Willis from this time period (See *Dana Community Plan Supplemental Materials* Cultural and Historic Sites Map, Site C2)).

**Gilbert-Justus Family Cemetery.** This cemetery is in a heavily wooded area and contains 18 unmarked graves. The one marked grave in the cemetery belongs to Isabella Justus (b. October 29, 1809 and d. September 9, 1851).



**Jones Family Cemetery at Upward Road.** This family cemetery is now uniquely located along a dirt road wedged between apple orchards. The first individual buried in this cemetery was Elizabeth Tabor on April 10, 1840 (b. October 29, 1801). Among early settlers buried in the cemetery are Tabors, Justus (W.D. Sr. family), and Jones (See *Dana Community Plan Supplemental Materials* Cultural and Historic Sites Map, Site C14 and Photos as Left, including the gravestone of Elizabeth Tabor).

### **Refuge**

**Baptist Church Cemetery.** Many members of the Gibbs family are buried in this cemetery including Sallie Gibbs whose burial marks the oldest on site at March 2, 1854 (See *Dana Community Plan Supplemental Materials* Cultural and Historic Sites Map, Site C1 and Photos at Right, including the gravestone of Sallie, wife of Thomas Gibbs).

**Stepp Family Cemetery at Golden Hill.** Eight (8) individuals are buried at this cemetery including





four (4) unmarked graves. Four (4) members of the Stepp family are buried at this cemetery, including Henry Stepp (buried in 1893). The site is largely inaccessible but when last visited in 1979 stones of an old church foundation were still present north of graves (See See *Dana Community Plan Supplemental Materials Cultural and Historic Sites Map*, Site C8).

Stepp Family Cemetery at Red Hill. This cemetery located east of the confluence of Little Hungry and Hungry Rivers, includes 21 unmarked graves and 1 marked grave for A.T Stepp (Co H 2<sup>nd</sup> N.C. Mtd Inf U.S. Army) (b. 1744 d. 1821). (See See *Dana Community Plan Supplemental Materials Cultural and Historic Sites Map*, Site C9).

In addition to churches and cemeteries, there are several other historically and culturally significant structures and sites in the Planning Area including: the Stepp Mill, the Cannery on Dana Road, the Maxwell House, Oleta Falls, Golden Hill, and the sites which formerly contained the Summit Hotel, Aleeta Post Office and the post office at Stepp Mill. While these sites are currently privately owned and not immediately accessible to the public, they are important to the community and its history.

**Trends.** Historical and cultural sites important to the Dana Community 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. Protect water quality within the Dana Planning Area*

- N1.1. Develop educational materials for development of property along or with streams.** These materials should explain and provide reference to stream classifications and associated development limiting regulations.
- N1.2. Official watershed designation for Lake Adger within Henderson County should not be supported by Henderson County, unless the water supply would service Henderson County residents.**
- N1.3. Promote monitoring the effects of development and agriculture on the quality of water in the Hungry River and Mud Creek.**

#### *Goal N2. Protect land quality within the Dana Planning Area.*

- N2.1. Consider standards, requirements, incentives, or other methods to preserve Dana Planning Area mountain views.**
- N2.2. Consider expanding ridge top protection regulations.** The County may wish to consider limiting cutting, applying additional height limitations, and including more ridges to be regulated to achieve more effective ridge top protection.
- N2.3. Support and promote conservation easements within the Dana Planning Area to protect agricultural land and open space.**

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

- N3.1. The Historic Resources Commission should encourage the preservation and care of Dana Planning Area historic sites through preservation grants and other identified means that both promote site accessibility and respect the rights and privacy of site owners.**

### 3.2: AGRICULTURE

#### Existing Agriculture Lands and Production

Approximately 11,057 acres (53.19%) of the Planning Area is agricultural land (horticultural and forestlands are included in this category)<sup>1</sup>. 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 (2010 tax parcel and voluntary agricultural district data).<sup>2</sup>

The Planning Area contains a significant portion of the County's agricultural lands; containing 8.66% of the County's land but approximately 12.57% of its agricultural land (See Map 3, Agriculture (Pg. 62)).

The Planning Area contributes to the County's agricultural prominence with farms producing apples, soybeans, hay, corn, vegetables, small fruits (blackberries/strawberries), peaches, pumpkins, and tomatoes. The Planning Area also includes small nursery operations.



Table 3.2.1. Planning Area Agricultural Lands			
Place	Acreage		Percent of Total Acreage in Agricultural Lands
	Agricultural Lands	Total	
Henderson County	87,937.64	240,099.79	36.63%
Planning Area	11,057.37	20,796.14	53.19%

Source: USDA FSA data (2009) and Henderson County data (tax parcel and voluntary agricultural district (2010)).

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 (2008);  
Vegetable Production. Second or third in the State annually;  
Corn for Silage. Seventh in the State in tons produced (2008); and  
Cattle. Fifth in Western North Carolina (2006).

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 2008. The County was the 12<sup>th</sup> most lucrative in the State in terms of cash receipts for crops (2008) and the 40<sup>th</sup> most lucrative in the State in terms of total cash receipts from agriculture (2008).

<sup>1</sup> Actual acreage in agricultural land may be higher than data indicates.

<sup>2</sup> 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).

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.



**Apples.** The Planning Area has long been associated with and identified by its apple growing industry. Dana offers ideal apple growing conditions given its climate and terrain.



The apple growing industry developed slowly in the 1800's due to poor means of transporting apples for long distances outside of the County. 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. Apple growers soon thereafter began expanding their markets, hauling apples and other produce into nearby communities in South Carolina. Apples soon became the most prominent County crop (early 1900's).



In the early 1900's apples from the Upward area were sold at the standard price of 20 cents a bushel. Mr. Ben Laughter purchased many of these Upward area apples and was among the first to process apples in Henderson County. Laughter's value added product was apple brandy, which he had obtained a government

license to make and sell (selling for \$1.50 per gallon). By the mid-1930's apple sales amounted to approximately 200,000 dollars in revenue annually.

The apple industry grew slowly but steadily until it saw a second period of rapid growth in the late 1950's and 1960's. New technologies, including speed sprayers and automatic pruners were introduced in the County in the 1950's. Near the end of the decade (1958), Gerber Products Company selected Skyland, North Carolina as a location for a processing plant. Gerber changed Henderson County apple

production with its arrival. The company introduced harvesting apples in bins and the 20 bushel bin box. Over the next decade, the apple market in the County would shift largely from a fresh fruit market to an apple processing market. Although the plant closed in 1998, apple growers continue to use the 20-bushel bin box introduced by the company.

Apple growers have also modified their growing practices, including changing in tree spacing. Reductions in tree spacing allowed for industry expansion. Since the 1930's per acre tree planting rates increased tenfold (See Table 3.2.2). Apple production per acre also increased dramatically as a result.

The apple growing industry remains an important aspect of the Planning Area's agriculture, heritage and economy. The Planning Area, according to the USDA Farm Services Agency, contains 64 apple farms and approximately 1,263 acres in orchards.

**Table 3.2.2. Henderson County Apple Tree Spacing**

<b>Apple Trees</b>	<b>1930's</b>	<b>Today</b>
<b>Spacing Within Rows</b>	30-35 feet	10-15 feet
<b>Separation Between Rows</b>	30-35 feet	16-20 feet
<b>Planting Rate Per Acre</b>	40-50 trees	400-500 trees

Source: Blue Ridge Farm Direct Market Association, [www.ncapples.com](http://www.ncapples.com)

The County in 2008 contained an identified 4,500 apple bearing acres, 855,000 apple-bearing trees, and a potential full crop yield of 3,262,500 bushels (average of 725 bushels per acre). The County produced 80% of NC apples in 2008, grossing a total of 30.9 million dollars (net income averages between 15 and 20 million dollars annually). The County's apple market is once again largely a fresh fruit market.

**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**

<b>Place</b>	<b>Acreage by Census Year*</b>					<b>Percent Change</b>	
	<b>1987</b>	<b>1992</b>	<b>1997</b>	<b>2002</b>	<b>2007</b>	<b>Total (%)</b>	<b>Average Annual (%)</b>
<b>Henderson County</b>	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 Dana Planning Area.***

##### **A1.1. Consider establishing a tailgate market in the Dana Planning Area.**

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

##### **A2.1. Expand and support the existing Agricultural District Signage Program through the County Soil Conservation Office.**

##### **A2.2. Work with NCDOT to place road signs warning motorists of slow moving farm machinery.**

##### **A2.3. Encourage participation in NCDOT's agritourism signage program.** This program allows for the advertisement of agritourism farms (as defined by NCGS and that meet North Carolina Department of Agriculture and Consumer Services (NCDA and CS) requirements) along interstates and other roads provided the farm falls within 15 road miles of the exit/interchange.

##### **A2.4. Support, educate and retain agricultural workers in the Dana Planning Area.** Agricultural workers are essential to the viability of farming in the Planning Area. Measures to support, educate and retain these workers should be supported by the County to ensure the continued viability of farming.

#### ***Goal A3. Expand agricultural enterprises' access to economic development and promotion programs and support services.***

##### **A3.1 Consider establishing a County Agricultural Development Director Position.** Researching and implementing the numerous and diverse programs and activities related to agricultural economic development and farmland preservation is a full-time job. Having county-paid staff dedicated to serving the Agricultural Advisory Board (AAB) and managing an integrated agricultural preservation program will increase the likelihood of the program's success. The director's role could include such duties as: promote economic development for agriculture and agribusiness, research issues and programs, assist farmers with marketing, administer tailgate markets, write grant proposals, manage grants received and implement the resolutions of the AAB.

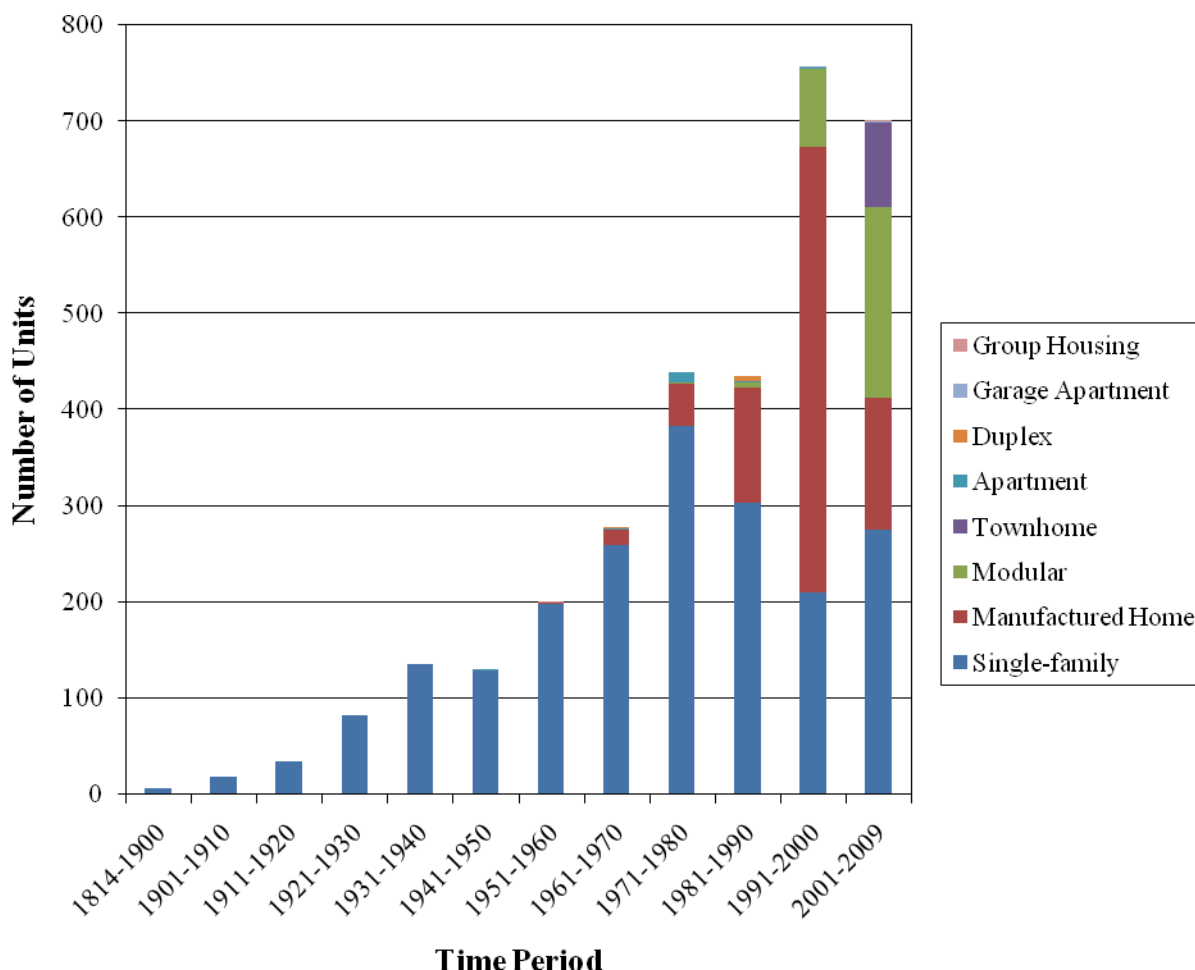
##### **A3.2. The County should work with the Henderson County Partnership for Economic Development and others to encourage agriculture-related industries (i.e. agricultural processing plants, biofuels processing, etc.) to locate in the Dana Planning Area.**

##### **A3.3. Consider establishing a "Buy Henderson" local food campaign, similar to existing "Local Food" campaigns in the region.** The focus of these efforts should be educating the public about non-local food sources. This effort could be coordinated with the "Shop & Dine Henderson County" campaign.

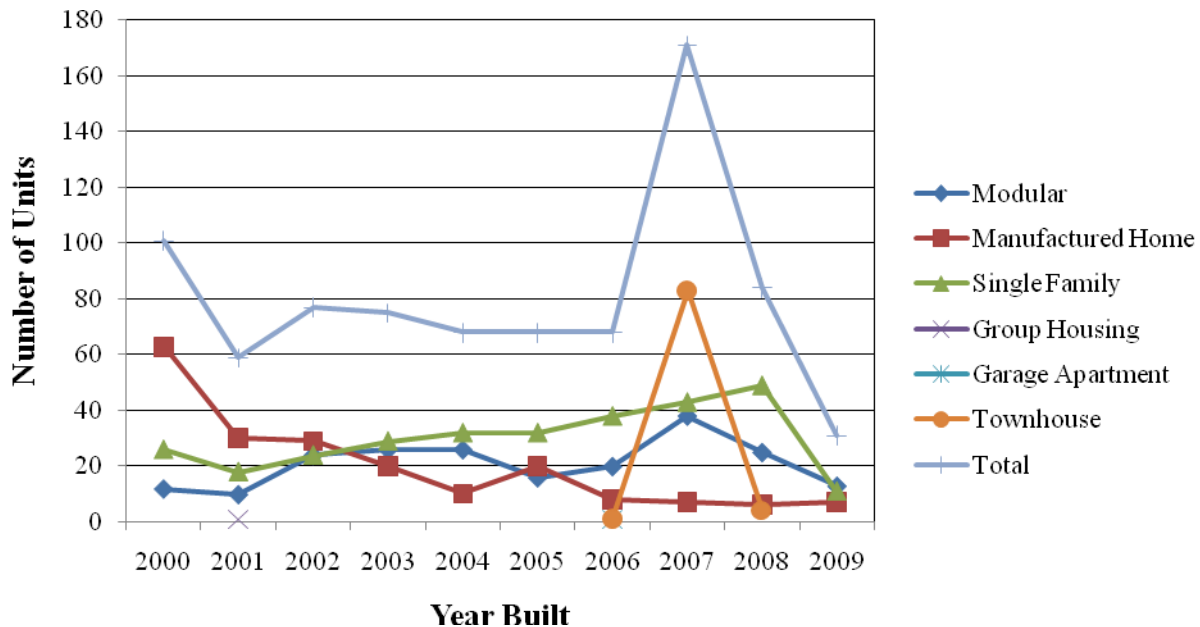
### 3.3: HOUSING

**Existing Housing Stock.** The Planning Area contains 3,234 permanent residential units with the oldest existing permanent residential unit built in 1814 (See Figure 3.3.1 and Map 4, Housing Stock 1930-2009 (Pg. 73)). Over half of these permanent units were built or placed between 1981 and 2009 (with the greatest amount of residential development occurring during the 10-year period from 1991 to 2000). During this 10-year period an average of 76 units were built/placed annually. From 2001 to 2009, an average of 70 residential units were built/placed each year.

**Figure 3.3.1. Planning Area Housing Year Built by Type, 1814-2009**



From 2000 to 2009, 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 2008. The highest number of units built/placed in a single year was 171 units in 2008. A large number of townhomes (81) were completed in 2008 which accounts for this increase. These townhome units are associated with a development known as “The Orchards of Flat Rock”.

**Figure 3.3.2. Planning Area Housing Year Built by Type, 2000-2009**

The Planning Area contains 7.33% 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 indicate site built single-family residences account for 79.14% of all County residential units and 63.48% of all Planning Area residential units (See Tables 3.3.1 and 3.3.2).

<b>Table 3.3.1. Planning Area Residential Units by Structure Type 2009</b>			
<b>Residential Structure Type</b>		<b>Number</b>	<b>Percent (%)</b>
<b>Single-Family</b>	<b>Site Built</b>	2,053	63.48
	<b>Modular</b>	285	8.81
	<b>Manufactured (Real Property)</b>	781	24.15
<b>Townhouse</b>		88	2.72
<b>Apartment (including Garage Apartments)</b>		19	0.59
<b>Duplex</b>		6	0.19
<b>Group Housing</b>		2	0.06
<b>Condominium</b>		0	0.00
<b>Total</b>		3,234	100

Source: Henderson County Building Services data (2010) with extrapolations by Henderson County Planning Staff.

<b>Table 3.3.2. Henderson County Residential Units by Structure Type 2009</b>			
<b>Residential Structure Type</b>		<b>Number</b>	<b>Percent (%)</b>
<b>Single-Family</b>	<b>Site Built</b>	34,916	79.14
	<b>Modular</b>	1,562	3.54
	<b>Manufactured (Real Property)</b>	3,984	9.03
<b>Townhouse</b>		1,190	2.70
<b>Apartment (including Garage Apartments)</b>		1,124	2.55
<b>Duplex</b>		214	0.49
<b>Group Housing</b>		11	0.02
<b>Condominium</b>		1,116	2.53
<b>Total</b>		44,117	100

Source: Henderson County Building Services data (2010) with extrapolations by Henderson County Planning Staff.

**Manufactured Homes.** With regard to manufactured housing, approximately:

- 24.15% of all permanent residential units in the Planning Area are manufactured,
- 19.60% of all manufactured homes considered permanent residential units (also referred to as “real property”) in the County are located in the Planning Area,
- 24.08% of manufactured homes classified as personal property (financed/owned separately from the parcel of land with which they are associated) in the County are located in the Planning Area,
- 21.98% of all manufactured home park spaces in the County are located in the Planning Area.

In total it is possible the Planning Area contains 1,919 manufactured homes. It is possible that the County contains 9,096 manufactured homes. The Planning Area thus accounts for 21.10% of all possible manufactured homes within the County.

**Approved Residential Lots.** The Planning Area currently contains 1,808 vacant lots located within zoning districts which permit the placement of single family residences. In addition, the Planning Area contains 214 approved but unrecorded residential lots (located within active major and minor subdivisions). A total of 2,022 recorded and unrecorded lots are possible in the Planning Area, accommodating a minimum of 2,022 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 80.06% of occupied structures are owner occupied and 19.94% are renter occupied (See Table 3.3.3).

<b>Table 3.3.3. Planning Area Occupied Residential Structures by Tenure Type 2000</b>					
<b>Place</b>	<b>Total Occupied Residential Structures</b>	<b>Owner Occupied</b>		<b>Renter Occupied</b>	
		<b>Percent (%)</b>	<b>Total</b>	<b>Percent (%)</b>	<b>Total</b>
<b>Henderson County</b>	37,414	78.80	29,483	21.20	7,931
<b>Planning Area</b>	3,231	80.06	2,587	19.94	644

Source: Census data (2000 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).

<b>Table 3.3.4. Planning Area Population by Tenure Type 2000</b>					
<b>Place</b>	<b>Total Population</b>	<b>Reside in Owner Occupied Housing</b>		<b>Reside in Renter Occupied Housing</b>	
		<b>Percent (%)</b>	<b>Total</b>	<b>Percent (%)</b>	<b>Total</b>
<b>Henderson County</b>	89,173	78.49	69,992	21.51	19,181
<b>Planning Area</b>	7,992	79.68	6,368	20.32	1,624

Source: Census data (2000 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.

<b>Table 3.3.5. Henderson County Housing Affordability for Low and Median Income Households 2006</b>				
<b>Henderson County Household Income</b>	<b>Low Income Household</b>			
	<b>Income</b>	<b>Monthly Income</b>	<b>Affordable Monthly Housing Payment*</b>	<b>Estimated Affordable Housing Price**</b>
<b>Median Income</b>	\$46,322	\$3,860	\$1,143	\$157,966 (includes \$23,695 down)
<b>Low Income</b>	\$23,624 - 37,057	\$1,968 - 3,088	\$650 – 1,019	\$89,764 – \$140,806 (includes \$13,465 – \$21,120 down)

\* 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 6.25% interest with 15% down payment.

Source: Census data (2000 and 2008 County and 2000 Block Group), Henderson County parcel data (2010), and Department of Housing and Urban Development (HUD) Affordability Calculator.

In 2008, a County household earning \$46,322 was a median income household. A median income household could afford a home with a maximum value of \$157,966. The average assessed housing value in the County (\$212,432) is 134.48% of the affordable cost. The Planning Area average assessed housing value (\$163,768) is just beyond affordability to a County median income household.

In 2008, a County household earning less than \$37,058 was a low-income household. A household earning at the top of this category (\$33,057) could afford a home with a maximum value of \$140,806. The average assessed housing value in the County (\$212,432) is 150.87% of the affordable cost. The

Planning Area average assessed housing value (\$163,768) is beyond affordability to a County low income household (representing 116.31% of the affordable cost).

The Planning Area's median household income (\$39,042) is approximately 15.72% 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 (\$148,348). The Planning Area average assessed housing value (\$163,768) is beyond affordability to a median income Planning Area household (representing 110.39% of the affordable cost). Over 50% of the Planning Area's households cannot afford an average valued Planning Area home.

**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 will 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 affordable housing in the Dana Planning Area.***

**H1.1. Consider offering incentives for affordable housing.** The County should consider incentives such as building inspection fee waivers or reductions to encourage the development of affordable housing.

#### ***Goal H2. Expand and diversify housing options.***

**H2.1. The County should encourage—and regulations should permit—a mix of housing types (including multifamily units) in the Dana Planning Area.**

**H2.2. The County should consider applying additional design standards for multifamily units in the Dana Planning Area to ensure continuity with the surrounding rural community.**

#### ***Goal H3. Support the continuance and expansion of the existing local program for abandoned/dilapidated manufactured home removal.***

#### ***Goal H4. Encourage quality housing for migrant workers through continued enforcement of the minimum housing code and by encouraging additional affordable housing options to serve this population.***



### 3.4: COMMUNITY FACILITIES AND PUBLIC SERVICES

#### Public Schools

The Planning Area falls partially within the Apple Valley Middle and North Henderson High School district and the Flat Rock middle and East Henderson High School district. The Planning Area contains portions of the following elementary school districts: Dana, Edneyville, Hillandale, Sugarloaf, and Upward. County schools located within the Planning Area include Dana, Sugarloaf and Upward Elementary (hereinafter “Planning Area Schools”).

Planning Area Schools are expected to remain within state capacity through the 2014-2015 school year. Edneyville Elementary, Apple Valley Middle, and North Henderson High Schools currently exceed state capacities and will all remain over capacity by 2014-2015 school year (despite construction efforts at Apple Valley Middle and North Henderson High which will only temporarily relieve capacity issues at North Henderson High). In the 2011-2012 school year, Flat Rock Middle is anticipated to exceed state capacity, as will Upward Elementary in the 2013-2014 school year (See Table 3.4.1).

**Table 3.4.1. Current School Capacities and Projected Populations**

Schools	Capacity		20 Day Membership		Projections* (2010-2015)				
	State	Core	08-09	09-10	10-11	11-12	12-13	13-14	14-15
<b>Elementary Schools</b>									
<b>Dana</b>	648	688	492	484	481	476	476	476	453
<b>Edneyville</b>	512	674	606	633	633	652	647	659	674
<b>Hillandale</b>	722	810	411	584	590	606	639	643	650
<b>Sugarloaf</b>	648	723	468	475	466	466	454	453	436
<b>Upward</b>	533	400	646	457	486	501	518	541	555
<b>Middle Schools</b>									
<b>Apple Valley (Current)</b>	654	847							
<b>Apple Valley (Anticipated)***</b>	(966)	(1149)	828	868	948	977	1014	1014	1076
<b>Flat Rock</b>	800	665	799	774	797	819	841	863	905
<b>High Schools</b>									
<b>East Henderson</b>	1065	840	987	969	996	1025	1024	1016	1054
<b>North Henderson (Current)</b>	895	1110							
<b>North Henderson (Anticipated)***</b>	(1170)	(1169)	995	954	973	1020	1064	1134	1221
Green = Well within State Capacity		Yellow = Approaching 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 2011-2012 school year and continuing through 2014-2015 school year.

Source: Henderson County Public Schools data (2008).

#### Planning Area Schools.

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

Ace School: a one teacher cabin opened in the 1850s by Johnson and Collie Crawford Hill located near what is today the pond off Frank Hill Road;

Mount Vernon School: a two-room school house located on Old Dana Road on the hill above Haunt Branch (referred to as “Dry Hill School”); and

Blue House Academy: named for its paint color, the largest of these three (3) early schools was established in 1866 and served as an educational hub attracting students from Rutherford, Transylvania, Polk, and Buncombe Counties.

In 1928, at least eight (8) schools in the Planning Area (including these earliest schools) were combined and placed into a new school built near the center of the community. This was known as the Dana School and taught students grades one (1) through 12. This original structure was destroyed by fire in the 1970’s.

The present day Dana Elementary School serves kindergarten through fifth grade, and is located in the newly refurbished Dana School building which was originally completed in 1974 to replace the destroyed structure.

Upward Elementary School was constructed in 1993 and Sugarloaf Elementary is among the newest County schools, constructed in 2008.

Planning Area Schools all fell below district and state averages for school sizes in the 2009-2010 school year (see Table 3.4.2).

During the 2008-2009 school year Sugarloaf and Upward Elementary experienced only slightly higher than average kindergarten classes while all Henderson County schools had higher than average class sizes in the fourth and fifth grade (See Table 3.4.3).

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**

<b>State Average</b>	511
<b>District Average</b>	493
<b>Dana</b>	484
<b>Sugarloaf</b>	475
<b>Upward</b>	457

Source: NC School Report Cards (2008-2009 school year) and Henderson County Public School data (2009-2010 school year).

**Table 3.4.3. Average Students per Class**

Grade	State Average	District Average	Dana	Sugarloaf	Upward
<b>Kindergarten</b>	19	19	15	20	20
<b>First</b>	19	19	17	19	19
<b>Second</b>	19	18	18	15	19
<b>Third</b>	19	19	21	17	18
<b>Fourth</b>	21	22	20	25	23
<b>Fifth</b>	21	23	27	21	23
Red = Above State Average					

Source: NC School Report Cards (2008-2009 school year).



**Table 3.4.4. North Carolina School Designations for Henderson County**

Designation	Performance: Students Performing at Grade Level	Growth: Learning Achieved*	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	Variable	15%	5%
School of Excellence	At least 90% of students at grade level	Variable	0%	0%
School of Distinction	80 to 90% of students at grade level	Variable	46%	22%
School of Progress	60 to 80% of students at grade level	Variable	39%	49%
No Recognition	60 to 100% of students at grade level	Variable	0%	5%
Priority School	50 to 60% of students at grade level or Less than 50% of students at grade level	Variable	0%	17%
Low Performing	Less than 50% of students at grade level	Variable	0%	3%

\*Any of the following: High Growth, Expected Growth, or Expected Growth Not Achieved may be the measure.

Source: NC School Report Cards (2008-2009 school year).

In the 2008-2009 school year, the State Board of Education recognized Dana Elementary as a North Carolina School of Distinction, with a the learning achieved recognized as “high growth”. The State Board of Education recognized Sugarloaf Elementary and Upward Elementary as Schools of Progress with Upward experiencing “high growth” learning achieved and Sugarloaf experiencing “expected 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 Dana Elementary performed better than Upward Elementary students. Sugarloaf Elementary students achieved the lowest average test results. Dana Elementary School students’ math scores were higher than the district average and indicate that only 6.3% of students are not meeting grade level expectations in math at Dana Elementary.

**Table 3.4.5. Percent of Students Passing the End of Grade Test (Scoring at or Above Grade Level\*)**

Exam Type	State	District	Dana	Sugarloaf	Upward
Reading	67.6	79.5	74.6	59.0	69.3
Math	80.0	90.4	92.7	78.8	82.0
Science	60.8	77.5	91.9	61.9	63.2
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 (2008-2009 school year).					

## Recreation

**Dana Park.** The County currently operates one (1) park in the Planning Area. Dana Park is located along Upward Road, south of its intersection with Orchard Road. The County entered a long-term lease (99 years) with the Dana Community Club for use of the 3.94 acres of land and associated community club building. The leasing of the property and structure was with the understanding that the property would be used as a park and for community



gatherings. The park currently includes a community building (with kitchenette, restrooms, tables and chairs), shelter (with associated picnic tables and grill), multipurpose fields, a basketball court, and playground. The community building and picnic area can be reserved (See Map 5, Recreation and Multimodal Transportation (Pg. 64)).

**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 small portion (3,600 feet) of the proposed greenway network, this segment being located along Crest Road and providing a connection to Upward Elementary School (See Map 5, Recreation and Multimodal Transportation (Pg. 64)). There are currently no built greenways in the Planning Area.

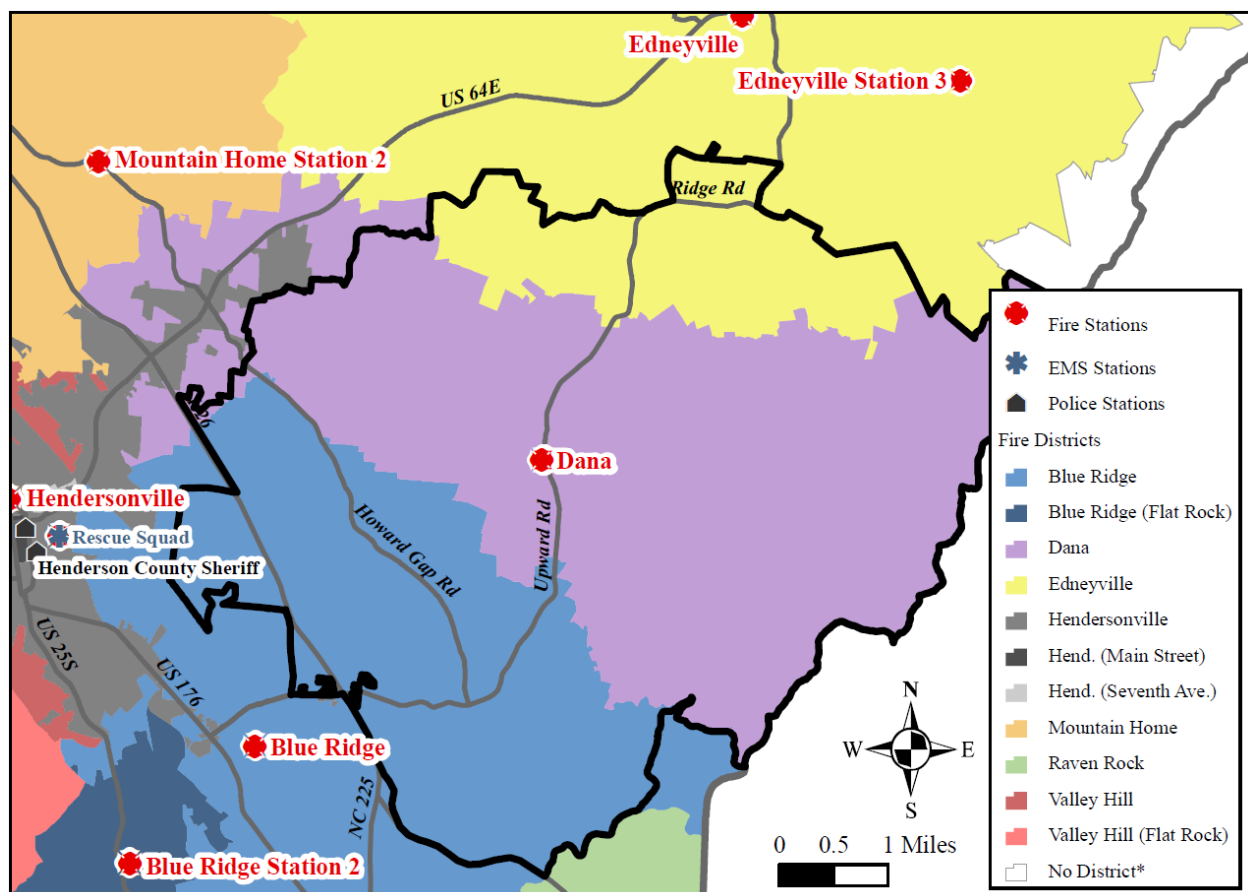
### Libraries

The Planning Area does not contain a library. The County currently has six (6) branch libraries throughout the County. The nearest branches include: Main Branch (Hendersonville), Edneyville Branch, and Green River Branch.

### Emergency Services

**Fire Protection.** The Planning Area contains the Blue Ridge, Dana, and Edneyville fire districts (See Figure 3.4.1).

**Figure 3.4.1. Planning Area Emergency Services**



The Dana Volunteer Fire and Rescue Department, located at the intersection of Dana Road and Upward/Ridge Road, serves most of the Planning Area. The station is approximately 14,500 square feet in size. The department currently has four (4) paid staff, 28 volunteers and 9 trucks that serve an area of approximately 13,173 acres.

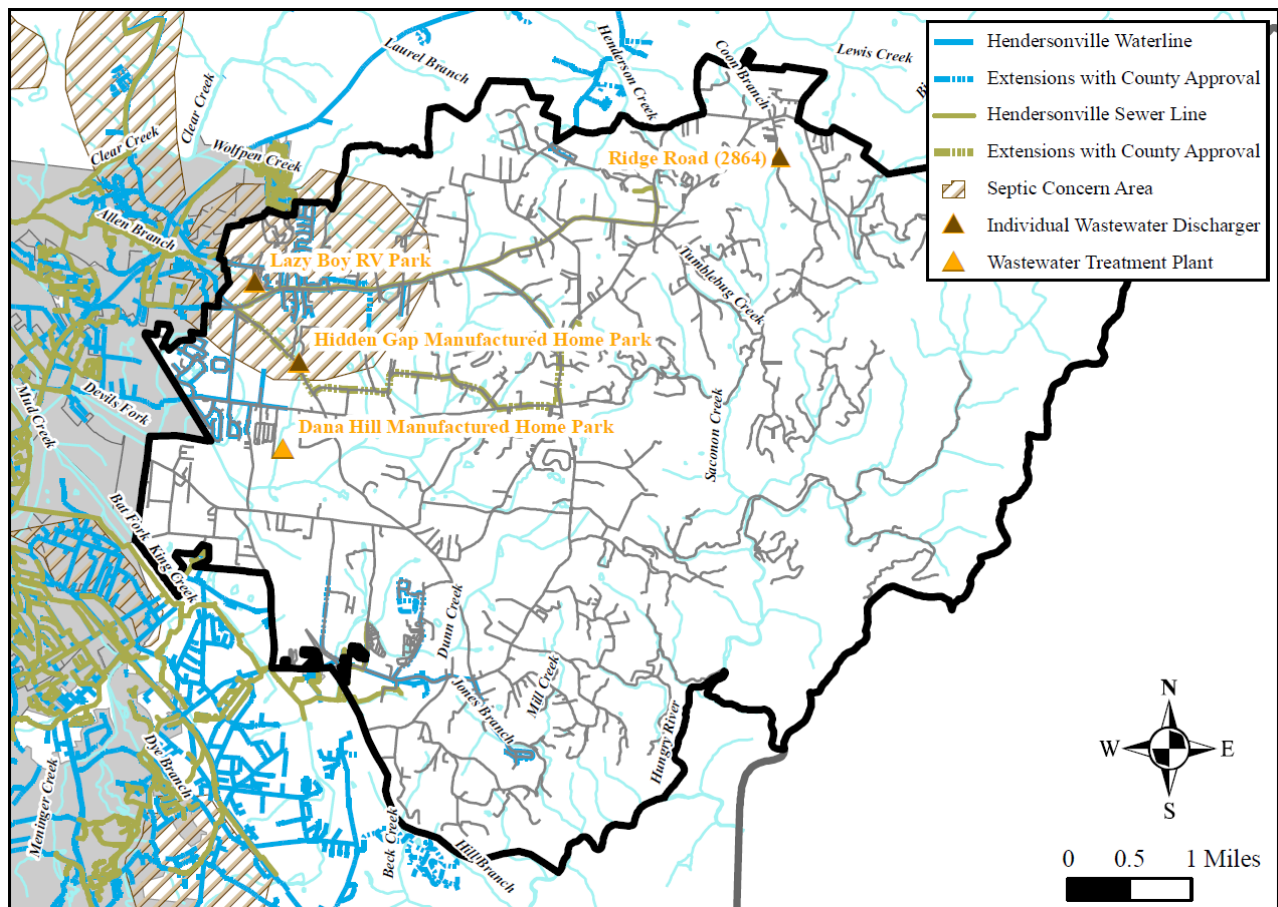
**Emergency Medical Services (EMS).** The Planning Area does not contain a separate EMS station.

**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 12-hour shift. Eighteen (18) 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 Sugarloaf, Dana, Upward and Howard Gap Roads, and the residential subdivisions adjacent to the roads (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 provides public sewer to portions of the Planning Area. The sewer lines run along Sugarloaf and Blue House Roads. A sewer line extension has been approved by the Henderson County Board of Commissioners that may extend sewer service to the properties surrounding the intersection of Dana/Upward/Ridge/Oleta Roads. Sewer lines are largely available west of the Planning Area.

The Planning Area also includes a large portion identified as a septic concern area (lands with significant concentrations of septic failures). One (1) permitted wastewater treatment plant and three (3) individual wastewater discharges are located in the Planning Area (two (2) individual wastewater discharges are found in the septic concern 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.

### ***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. School outdoor recreation facilities should be available for community use when not being used by students or otherwise by the school system.*** Protecting school grounds from damage and vandalism should be a priority. The County may wish to consider hiring staff to monitor the facilities when not being used by students or the school system.

***Goal CFPS2. Redevelop the Dana Community Park, as depicted in the Conceptual Master Plan, to serve as a focal point for the community.*** The Dana Community Park redevelopment involves County participation but requires private donations and community support to implement the complete concept.

The redevelopment of the park in line with the Conceptual Master Plan (see Figure 3.4.3) will result in:

- Upgrades to the existing community building to increase its usefulness, including:
  - Wrap-around porch or patio,
  - Façade improvements,
  - Air conditioning,
  - Kitchen upgrades, and
  - Externally accessed restroom facilities adjacent (and in addition to) the existing internal restroom facilities.

- Varied recreational opportunities in defined areas of the park, including:
  - A large agricultural themed playground consistent with the community’s character,
  - Multi-sport hard court field,
  - Integrated walking trail,
  - Picnic tables, and
  - Open lawns.
- User safety improvements through:
  - Controlling points of access,
  - Separating and defining recreational uses,
  - Placing the playground and parking areas in close proximity to each other (and with visibility from the street), and
  - Installing additional lighting.
- Pedestrian connections that integrate the park with “Downtown Dana”.
- Opportunities for alternate use including community gatherings and events or community tailgate marketing.

The playground, walking trails, trees, and externally accessed restroom facilities should be considered phase one of the project and should be installed first.

**Figure 3.4.5. Dana Community Park Conceptual Master Plan**



**Refer to Pg. 68 for a Large Scale Plan**

**Goal CFPS3. Consider establishing a park on the grounds surrounding the Upward Community Center.** The County should work with the Upward Community Club Incorporated, to develop the approximately 1 ½ acre site with a park oriented to young children. Playground equipment should be installed.

**Goal CFPS4. Consider providing sidewalks in commercially zoned areas within the Dana Planning Area.** Sidewalks should be provided to encourage pedestrian friendly development, especially in the heart of Dana and near the Upward Road interchange. Sidewalks should also be extended to nearby schools and parks, even if located along properties with noncommercial zoning.

Note: Encroachment agreement with NCDOT would be required. Sidewalk maintenance would be required and may be provided by the County and/or the individual being required to install the sidewalk. The County should consider developing a plan to show the location of sidewalks for access to commercial areas, schools, and parks.

**Goal CFPS5. Support extensions of public water and public sewer into the Dana Planning Area.**

### 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 2030: 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 recommends potential improvements to roadway facilities affecting the Planning Area. These are not necessarily included in the Long Range Multi-Modal Plan or TIP. The following are those recommended road improvements by the Comprehensive Transportation Plan (See Map 6, NCDOT Comprehensive Transportation Plan (Pg. 65)):

Highway Project C1

Interstate-26: US Highway 25 to Interstate-40. Recommendation is to widen Interstate-26 to 6 lanes along the length of the corridor with associated interchange improvements as warranted (coordinate with highway project C4, among others).

Highway Project C4

Upward Road (SR 1783): US Highway 176 to Howard Gap Road. Recommendations are to widen the corridor to four (4) lanes with a median and maintain a high level of access management and traffic signal optimization (coordinate with highway projects C1 and C9 and bicycle project C19).

Highway Project C9

Howard Gap Road (SR 1006): Upward Road (SR 1783) to US Highway 25. Recommendations are to: (1) widen substantial portions of Howard Gap Road to four (4) lanes with a median; (2) make necessary significant geometric improvements (including construction on new alignment) at many locations; and (3) improve intersections and access management. With the addition of turn lanes (where necessary), some segments may be able to retain a 2-lane cross-section temporarily or indefinitely (coordinate with highway project C4, among others).

Highway Projects C20 & C21 – Inner Loop.

(C20) Airport Road (SR 1755): US Highway 176 to Tracy Grove Road (SR 1793). Recommendations include adding turn lanes, widening shoulders, improving geometrics and intersection operations as appropriate, and possible reconfiguration of the intersection of Airport Road with New Hope Road to eliminate the dogleg (coordinate with highway project C21 and bicycle project C12, among others).

(C21) Tracy Grove Road (SR 1793): Airport Road (SR 1755) to Dana Road (SR 1525). Recommendations include adding turn lanes, widening shoulders, and improving geometrics and intersection operations as appropriate (coordinate with highway project C20 and bicycle project C12).

Highway Project C30

Sugarloaf Road (SR 1734): US Highway 64 to Pace Road (SR 1726). Recommendations include adding turn lanes, widening shoulders, and improving geometrics and intersection operations as appropriate (coordinate with highway project C9 and bicycle project C20).

Bicycle Projects C3, C10, C11 and C20. Recommendations include upgrading the facilities with wide shoulders or striped lanes and appropriate signage.

(C3) Howard Gap Road (SR 1006): Upward Road (SR 1783) to US Highway 25.

(C10) Crest Road (SR 1803), Upward Road (SR 1783), Ridge Road (SR 1783), et. al.

(C11) New Hope Road (SR 1757), Airport Road (SR 1755) & Tracy Grove Road (SR 1793).

(C20) Sugarloaf Road (SR 1734): US Highway 64 to Ridge Road (SR 1783).

**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. The Planning Area contained four (4) of these identified intersections (See Table 3.5.1).

<b>Table 3.5.1. Planning Area Intersections with a High Frequency of Vehicle Crashes</b>		
<b>Rank (of 75)</b>	<b>Intersection</b>	<b>Number of Crashes</b>
<b>3</b>	Interstate-26 and Upward Road (SR 1783)*	39
<b>17</b>	Sugarloaf Road (SR 1006) and Howard Gap (SR 1734)**	21
<b>30</b>	Dana Road (SR 1525) and Upward/Ridge Road (SR 1783)***	15
<b>46</b>	Dana Road (SR 1525) and Mid Allen Road (SR 1893)****	12

\*Highway Project C4 includes intersection improvements at this site.

\*\*This intersection was improved (signalized) in early 2007 (immediately following crash data collection).

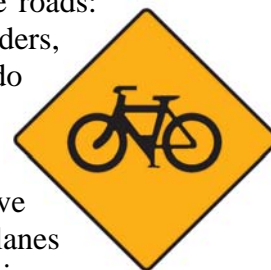
\*\*\*NCDOT anticipates traffic signalization at intersection when funding becomes available (anticipated March 2011).

\*\*\*\*According to NCDOT, improvement to this intersection would require lowering Dana Road which may have significant impacts to adjoining property owners.

Source: Comprehensive Transportation Plan adopted January 18, 2008; NCDOT District Engineer.

**Bike Routes.** NCDOT designated bike routes in the Planning Area include all or portions of: Crest, Upward/Ridge, Pilot Mountain, Staton, Tracy Grove, Airport, and New Hope Roads (See Map 5, Recreation and Multimodal Transportation (Pg. 64)). 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.



Improvements to the roads may be recommended as noted in the Comprehensive Transportation Plan (See Bicycle Projects C10 and C11 above). 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. 64)). Three (3) of the existing four (4) fixed routes travel through the Planning Area: Red, White and Green. The Red, White and Blue Routes operate on weekdays between the hours of 6:30 a.m. and 6:30 p.m. The Green Route is a one (1) vehicle fixed-route service transit system operating on weekdays between the hours of 9:00 a.m. and 5:00 p.m.

Eligible citizens of the Planning Area and County (senior citizens and disabled persons) 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.



## **Transportation Goals and Objectives**

**Goal T1. Improve the transportation network in the Dana Planning Area.**

**T1.1. The County, through its involvement in the French Broad River MPO, should prioritize projects within the Dana Planning Area in accordance with Plan goals. The**

Comprehensive Transportation Plan (CTP) recommends the following improvements in the Planning Area, which the Dana Community Plan supports:

1. C1 (Interstate-26 – US Highway 25 to Interstate-40);
2. C4 (Upward Road (SR 1783) – US Highway 176 to Howard Gap Road);
3. C20 (Airport Road (SR 1755) – US Highway 176 to Tracy Grove Road);
4. C21 (Tracy Grove Road (SR 1793) – Airport Road to Dana Road); and
5. C30 (Sugarloaf Road (SR 1734) – US Highway 64 to Pace Road).

With regard to CTP recommended improvements to Howard Gap Road (from Upward Road to US Highway 25), the Dana Community Plan supports:

1. Minor improvements in the short term\* (remaining two (2) lanes within the Planning Area with widening, straightening, improving alignment, and improving intersections); and
2. Significant improvements in the long term (including widening the portion within the Planning Area to four (4) lanes).

\*Note: Short term refers to the timeframe contemplated by this Plan, and understood to be approximately 15 years.

**T1.2. Improve identified intersections based on recommended studies.** The conditions of the following intersections pose automobile, bicycle, and pedestrian safety concerns and should be studied and improved:

1. Tracy Grove Road/Howard Gap Road (improvements to angles with the consideration of a roundabout or realignment);
2. Dana Road/Upward Road/Ridge Road/Oleta Road (the addition of signalization);
3. Dana Road/Mid Allen Road (improvements to site visibility including trimming vegetation, and the addition of intersection indicators (rumble strips, signage, signalization, etc.)); and
4. Dana Road/North Allen Road (the addition of intersection indicators (rumble strips, signage, signalization, etc.)).

**T1.3. Facilitate safer automobile movement and alleviate traffic stacking issues on Ridge Road, Academy Road, and Blue House Road during school peak hour traffic.** Improvements to Ridge Road, based on recommended studies, should address stacking issues at Dana Elementary School and alleviate congestion resulting from these issues along Academy and Blue House Roads. The addition of a turn lane to alleviate stacking concerns may be warranted.

**T1.4. Provide an additional Interstate 26 interchange between the existing interchanges at Upward Road and US Highway 64 East.** An interchange, located at either Tracy Grove Road or Dana Road would provide additional connectivity for the Dana Planning Area and County. The selected interchange road (Tracy Grove Road or Dana Road) should be widened at least from the interchange to its intersection with US Highway 64 East.

**T1.5. The County, through its involvement in the French Broad River MPO, should prioritize bicycle projects within the Dana Planning Area in accordance with Plan goals.** The Comprehensive Transportation Plan (CTP) recommends the following bicycle improvements in the Planning Area, which the Dana Community Plan supports: C10 (Crest Road (SR 1803), Upward Road (SR 1783), Ridge Road (SR 1783), and others); and C11 (New Hope Road (SR 1757), Airport Road (SR 1755) and Tracy Grove Road (SR 1793).

CTP recommended improvements to Howard Gap Road (C3) and Sugarloaf Road (C20) are supported but should not be prioritized over projects C10 and C11.

**T1.6. Review public transit periodically to identify service provision changes or increases.**

### 3.6: ECONOMIC DEVELOPMENT<sup>3</sup>

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.

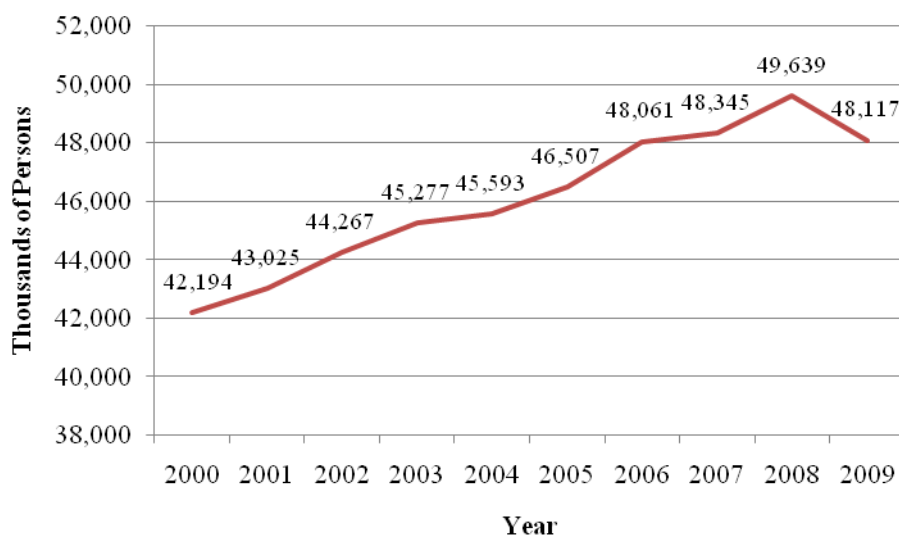
**Workforce.** The workforce includes employed and unemployed workers aged 16 years or older. In 2008, the Planning Area contained 9.6% of the County's population and 10.1% of the County's workforce. A larger percent of the Planning Area population participates in the workforce than is seen countywide (48.9% and 46.9% respectively) (See Table 3.6.1).

Table 3.6.1. Workforce Population 2008			
Place	Total Population	Workforce Population	Participation Rate
Henderson County	102,482	48,087	46.9%
Planning Area	9,916	4,845	48.9%

Source: Census data (2000 Block Group Data and 2008 American Communities Survey) with extrapolations by Henderson County Planning Staff.

Employment Securities Commission data suggest the Henderson County workforce population decreased from 2008 to 2009 by approximately 3% (or 1,522 persons) (See Figure 3.6.1). Data indicates that this is the only occurrence of workforce population decline during the past 10 years. A number of factors may have caused this reduction.

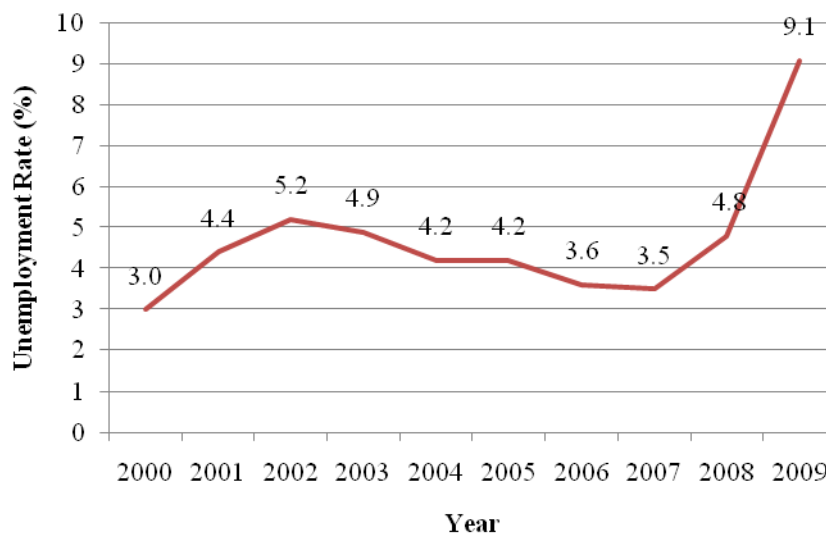
**Figure 3.6.1 Henderson County Workforce**



**Unemployment.** Unemployment is a significant concern given current economic conditions. According to Employment Securities Commission data, at no other time during the past 10 years has unemployment been: (1) lower than in 2000 (3%), or (2) higher than in 2009 (9.1%).

<sup>3</sup> Data were compiled from Census data (2000 Block Group Data and 2008 American Communities Survey) 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 diploma and advanced degree 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+ (2000)**

Place		Planning Area	Henderson County	North Carolina	United States
<b>Total Population Aged 25+</b>		5,417	65,039	5,282,994	182,211,639
<b>Schooling</b>	<b>None</b>	103 (1.9%)	433 (0.7%)	62,106 (1.2%)	2,617,960 (1.4%)
	<b>Some, No Diploma</b>	1,324 (24.4%)	10,522 (16.2%)	1,092,618 (20.7%)	33,097,665 (18.2%)
	<b>High School Diploma*</b>	1,959 (36.2%)	18,972 (29.2%)	1,502,978 (28.4%)	52,168,981 (28.6%)
<b>Degree</b>	<b>Some College, No Degree</b>	1,026 (18.9%)	14,761 (22.7%)	1,080,504 (20.4%)	38,351,595 (21.0%)
	<b>Associate's</b>	381 (7.0%)	4,655 (7.2%)	358,075 (6.8%)	11,512,833 (6.3%)
	<b>Bachelor's</b>	417 (7.7%)	10,150 (15.6%)	808,070 (15.3%)	28,317,792 (15.5%)
	<b>Master's</b>	138 (2.5%)	375 (0.6%)	253,794 (4.8%)	10,770,947 (5.9%)
	<b>Professional School</b>	49 (0.9%)	1,269 (2.0%)	78,279 (1.5%)	3,619,535 (2.0%)
	<b>Doctorate</b>	20 (0.4%)	522 (0.8%)	46,570 (0.9%)	1,754,331 (1.0%)

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

Source: Census data (2000 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 5% increase in total employment from 2000 to 2007<sup>4</sup>. Relative to the original number of employees in the industry:

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

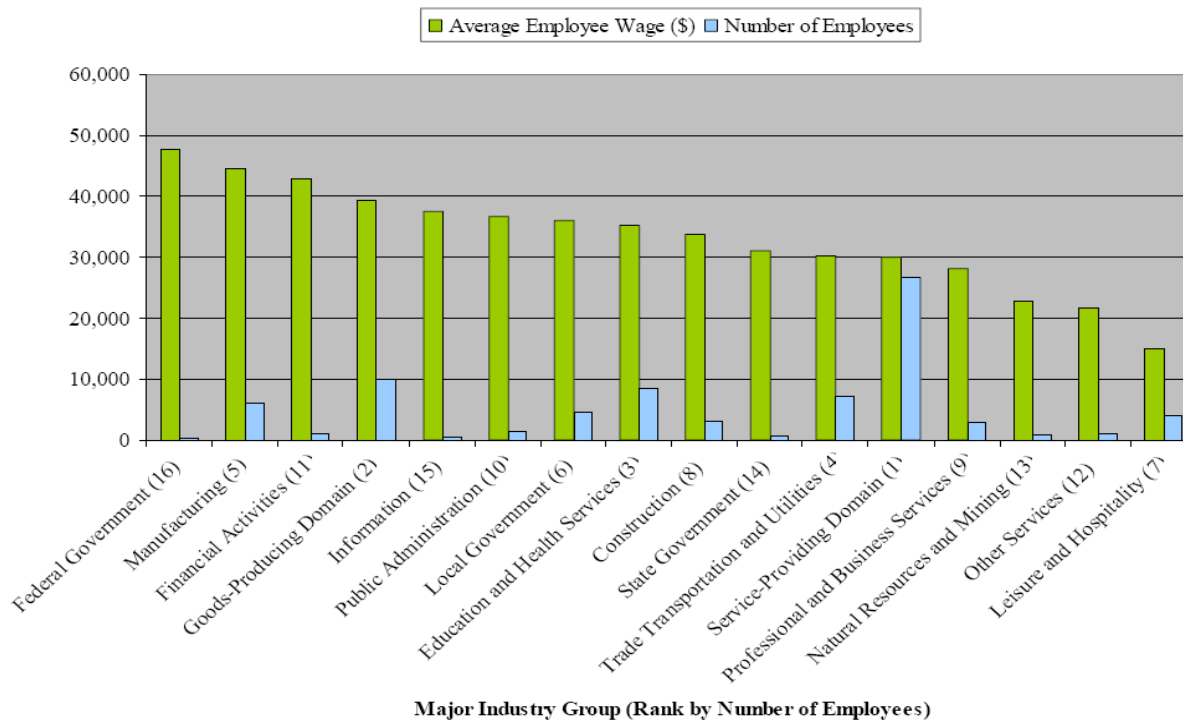
<sup>4</sup> The Employment Securities Commission has not made available more recent data which would reflect any impacts of the recent economic challenges.

**Table 3.6.3. Henderson County Employment by NCESC Major Industry Group 2000 and 2007**

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

Source: North Carolina Employment Securities Commission (2008).

Declines in manufacturing, federal government, and goods-producing domain industries' employment is significant for the County as these have been among three (3) of its top four (4) highest paying industries (See Table 3.6.3 and Figure 3.6.3).

**Figure 3.6.3. Henderson County Average Wage by NCESC Major Industry Group 2007**

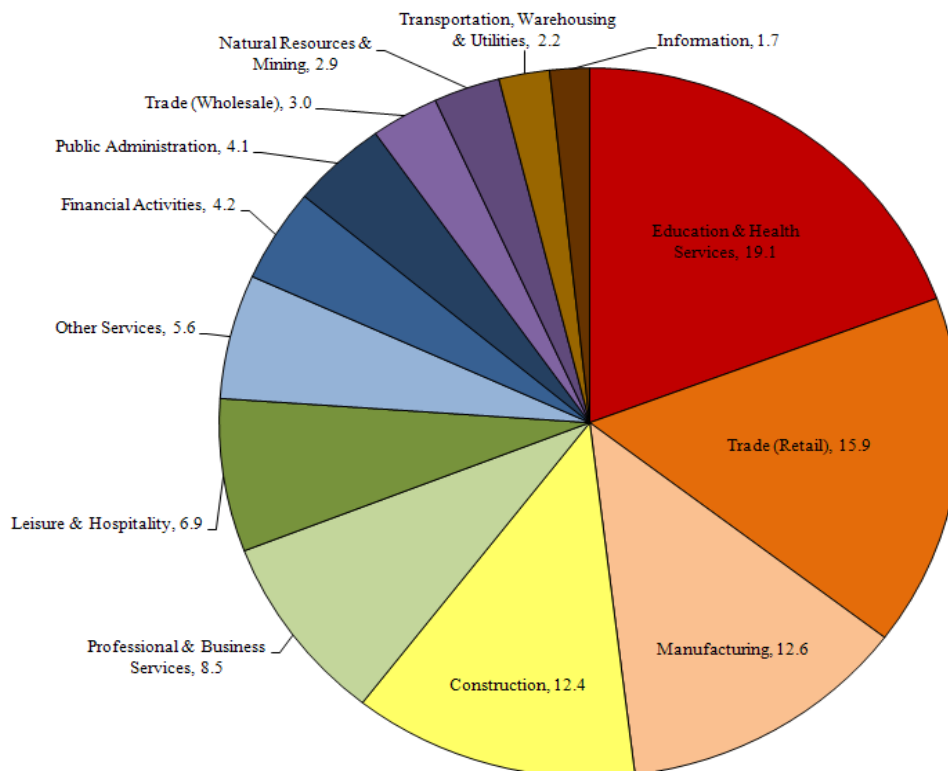
The average wage for County employees increased in all major industry groups through 2007. The service-providing domain, which is ranked first in number of employees, saw a 20% increase in wages, to an average wage of \$29,928. The federal government industry, which employs the fewest County citizens, experienced the most significant wage increase to \$47,736 (See Table 3.6.4).

**Table 3.6.4. Henderson County Average Wage by NCESC Major Industry Group 2000 and 2007**

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

Source: North Carolina Employment Securities Commission (2008).

**Planning Area Employment by Major Industry Group.** The Employment Security Commission does not provide Planning Area specific data; however, the Census (2000 County and 2008 American Communities Survey) 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 2008**

According to Census data, 47.6% 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).

Education and Health Services. Approximately 19.1% 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 (\$35,271) (See Figure 3.6.3). Projections for the region indicate approximately 26% more individuals will be employed in education

and health services by 2016 (See Table 3.6.5).

**Retail Trade.** Approximately 15.9% of the Planning Area workforce is involved in retail trade (which usually is categorized under the service-providing domain). This industry ranks twelfth in the County in terms of average employee wage (\$29,928 in the service-providing domain) (See Figure 3.6.2). Projections for the region indicate approximately 22% more individuals will be employed in the service-providing domain (which includes retail trade) by 2016 (See Table 3.6.5).

**Manufacturing.** Approximately 12.6% of the Planning Area workforce is involved in manufacturing. This industry ranks second in the County in terms of average employee wage (\$44,595) (See Figure 3.6.3). Projections for the region indicate approximately 8% of positions currently available in the manufacturing industry will be eliminated by 2016 (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 (information, natural resources and mining, and manufacturing industries) will reduce employment by 2016. Among these, the manufacturing industry and information industry are currently ranked 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 (12.6%).

Industries within the region projected to expand 25% or more by 2016 are professional and business services, leisure and hospitality, education and health services, and construction industries. 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 (19.1%). Construction ranks fourth in Planning Area employment (12.4% 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 leisure and hospitality industries will affect the Planning Area less given that only 8.5% and 6.9% (respectively) of the Planning Area workforce participates in these industries. The benefits from the expansion of these industries will be limited as they are among the bottom four (4) lowest average wage industries (See Figure 3.6.3).

**Table 3.6.5. Projected Employment by NCESC Major Industry Group for Henderson, Buncombe, Madison and Transylvania Counties**

Major Industry Group	Total Employed		Percent Change (%)
	2006	2016	
Professional and Business Services	15,390	21,230	38
Leisure and Hospitality	20,460	26,180	28
Education and Health Services	38,910	48,950	26
Construction	10,190	12,710	25
Services-Providing	132,390	161,370	22
Financial Activities	5,590	6,690	20
Other Services (Nongovernment)	7,650	8,870	16
Trade, Transportation and Utilities	31,540	35,590	13
Government	10,760	11,780	9
Goods-Producing	31,570	32,490	3
Information	2,090	2,080	-0.5
Natural Resources and Mining (includes Agriculture)	1,650	1,610	-2
Manufacturing	19,730	18,170	-8

Source: North Carolina Employment Securities Commission, 2008

Industries expanding employment will help offset reductions in other industries; however, growing industries may not provide wages equivalent to or better than shrinking industries.

**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 panned for gold along Big Hungry and Little Hungry Creeks, produced charcoal when the growing season ended, and/or operated mills. 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 is strategically located along Interstate-26, surrounding one (1) of only three (3) interchanges in the County, and offering one of the County's most interconnected local road networks. Economic development aggregates and the Planning Area's existing commercial and industrial businesses make it more attractive to potential future development. Finally, the Planning Area contains a more diversified workforce than occurs in other areas of the County. 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. The Upward Road interchange along Interstate 26 should be recognized as a principal gateway into Henderson County, Dana, Hendersonville, and Flat Rock.*** This interchange and surrounding area should be developed to draw businesses, tourists, County residents, and the residents of the surrounding region.

**E1.1. Economic development at a regional scale should be focused at the interchange and in the surrounding area.**

**E1.2. Aesthetic improvements to the interchange should be considered.** Improving the aesthetics of the interchange will encourage economic growth at the interchange and will promote a positive perception of the Dana Community, Henderson County, and nearby municipalities. The County should consider:

1. Participating in a joint effort with NCDOT, municipalities, business owners, and citizens to make aesthetic improvements to the interchange,
2. Employing design professionals to develop a plan for landscaping, lighting, and signage treatments at the interchange and in surrounding areas, and
3. Encouraging consistent land development regulation application by the County and City of Hendersonville for properties located at the interchange and in surrounding areas.

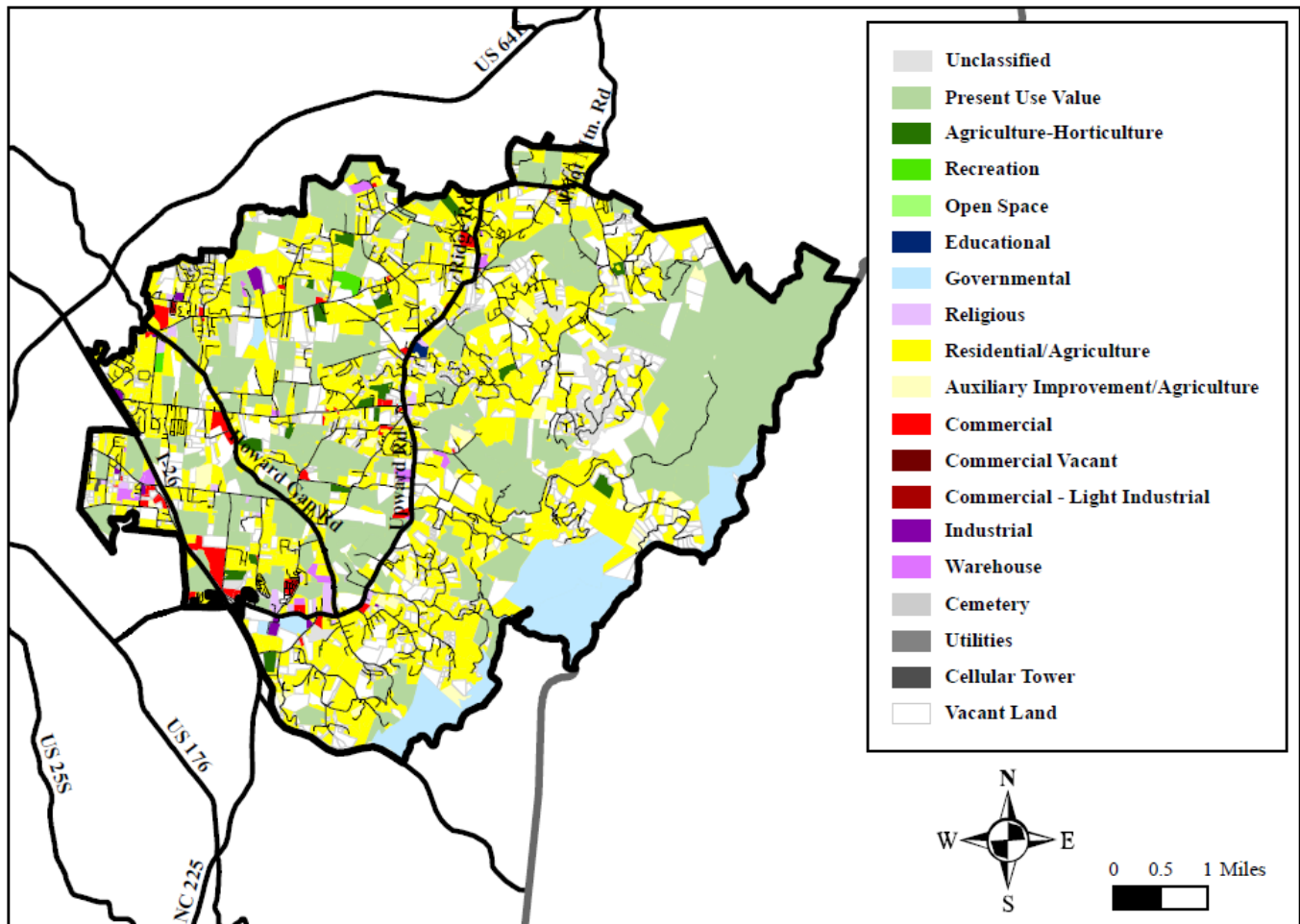
***Goal E2. Encourage higher density residential development in the areas near and mixed within nonresidential development at the interchange.*** Residential development of this type will provide consumers for and employees of the nonresidential development at the interchange.

***Goal E3. Promote high-tech and research and development operations in the Dana Planning Area in light of the Planning Area's adjacency to Blue Ridge Community College.***

### 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 single family residential. Together all residential land uses (including single-family and other) comprise 48.84 percent of all lands within the Planning Area. Approximately one (1) in every five (5) acres in the Planning Area is classified as vacant by the Tax Assessor's Office.



**Table 3.7.1. Acreage by Land Use Classification**

<b>Land Use Classification</b>	<b>Approximate Acreage</b>	<b>Percent of Total Acreage (%)</b>
Residential (Single Family Traditional and Modular)	6,756.95	32.94
Vacant Land	4,288.71	20.91
Residential (Other)	3,261.66	15.90
Auxiliary Improvement	2,663.67	12.99
Present Use Value (Agriculture-Horticulture)	1,254.95	6.12
Governmental (Green River Game Lands)	1,221.31	5.95
Commercial/Commercial Vacant	290.16	1.41
Agriculture-Horticulture	258.15	1.26
Warehouse	115.45	0.56
Religious	107.43	0.52
Governmental (Other)	69.31	0.34
Unclassified	60.11	0.29
Industrial	59.85	0.29
Recreational	44.68	0.22
Cellular Tower	41.41	0.20
Educational	12.76	0.06
Cemetery	4.88	0.02
Open Space	0.77	<0.01
Utilities	0.51	<0.01

Source: Henderson County Tax Assessor data (July 2010).

**Table 3.7.2. Residential (Other) Land Use Subclasses**

<b>Residential (Other) Land Use Subclass</b>	<b>Approximate Acreage</b>	<b>Percent of Total Acreage (%)</b>
Manufactured Home	1,770.66	54.29
Manufactured Home (Real Property)	745.31	22.85
Manufactured Home Park	482.49	14.79
Leasehold	222.80	6.83
Duplex	18.06	0.55
Townhome	16.25	0.50
Multifamily	5.54	0.17
Condominium	0.55	0.02

Source: Henderson County Tax Assessor data (July 2010)

The Planning Area includes nine (9) zoning districts (See Map 7, Official Zoning (Pg. 66) and Table 3.7.3). Zoning districts include four (4) residential, three (3) commercial, office institutional and industrial zoning districts.

**Table 3.7.3. Current Zoning Composition**

<b>Zoning District</b>	<b>Total Acreage</b>	<b>Percent of Total Acreage</b>
Residential District One (R1)	1,115.93	5.36%
Residential District Two Rural (R2R)	11,149.55	53.58%
Residential District Three (R3)	6,110.31	29.37%
Residential District Four (R4)	1,256.87	6.04%
Office Institutional (OI)	68.12	0.33%
Local Commercial (LC)	304.27	1.46%
Community Commercial (CC)	141.14	0.68%
Regional Commercial (RC)	137.97	0.66%
Industrial (I)	523.84	2.52%

Source: Henderson County Official Zoning Map (July 2010).

**Residential Land Use and Development.** Approximately 94.35% of the Planning Area is zoned residential (See Table 3.7.3). Planning Area residential lots average 2.87 acres in size, indicating a low-density development pattern.

There are 2,338 single-family (traditional and modular) residences in the Planning Area (2010). Single-family (traditional and modular) residential uses account for 67.44% 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-third (29.93%) 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 113 commercial and industrial land uses, each falling within one (1) of 21 specified categories of land use. Planning Area commercial uses include retail sales and services, warehousing and storage, and offices, among other uses (See Table 3.7.4). Manufacturing and production operations where the principal industrial use of land within the Planning Area.

<b>Table 3.7.4. Commercial and Industrial Uses within the Planning Area</b>		
<b>Land Use*</b>	<b>Occurrence</b>	<b>Locations**</b>
Retail Sales and Services	24	A(2,3,7,9,10,12,15,16), B(1,7,9,15,16,17), F(4,8,10), H1, I1
Warehousing and Storage	23	A(3,17,23,24), B(11,12,18), C(1,3,4,5), E(1,14), F(15,16), G(2,5,6,10,11), H2, I(3,5)
Office	19	A(1,2, 3,15,20,25), B(2,3,4,14), F9, G(3,9)
Automobile and Equipment Service	12	A(5), B(5,6), F(5,11,12), G1, I2, J(1,2)
Manufacturing and Production Operations	7	A(13,18), B8, D1, G(4,8), I4
Convenience Store	3	F(4,6), I2
Kennel	3	A26, B13, C6
Self-Storage Warehousing	3	B10, F13, G13
Food Manufacturing	2	C2, G12
Fuel Pumps	2	F6, I2
Junkyard	2	F(2,3)
Motel/Hotel (Includes Cottage Rentals)	2	A8, H4
Physical Fitness Center	2	A(2,3)
Recreational Vehicle Park	2	A14, G7
Childcare Facility	1	A1
Governmental (Post Office)	1	F5
Indoor Recreation Facility	1	B7
Motor Vehicle Sales or Leasing	1	A4
Produce Stand	1	A10
Product Processing & Storage Facility	1	A19
Under Construction	1	A11

\* Identified by June 2010 windshield survey. Categorized based on LDC Table of Permitted/Special Uses (§200A-62).

\*\* Locations identified on in *Dana Community Plan Supplemental Materials*, Commercial, Industrial and Warehouse Land Use Inventory Maps.

The Planning Area has significant commercial/industrial heated square footage, with just less than 1.6 million heated square feet (See Table 3.7.5). The estimated Planning Area population for 2010 (10,470 persons) indicates there are over 152 square feet of commercial/industrial space per resident. Approximately 50 of the 152 square feet are commercial.

<b>Table 3.7.5. Heated Square Footage by Nonresidential Use Type: Commercial, Industrial, Warehouse, or Vacant</b>	
<b>Nonresidential Use Type</b>	<b>Total Heated Square Footage</b>
Commercial	526,745 sq. ft.
Industrial	361,253 sq. ft.
Warehouse	698,216 sq. ft.
Vacant	12,732 sq. ft.
<b>Total</b>	<b>1,598,946 sq. ft.</b>

Source: Henderson County parcel data (July 2010).

This 1.6 million square feet of commercial/industrial space is divided among 92 sites located throughout the Planning Area (See Table 3.7.6). Two (2) out of each five (5) sites contain 10,000 heated square feet of commercial/industrial space or more.

<b>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</b>	
<b>Heated Square Footage (sq. ft.)</b>	<b>Number of Properties</b>
0 to <10,000	55
>10,000 to <30,000	25
>30,000 to <80,000	7
>80,000	5

Source: Henderson County parcel data (July 2010).

Commercial. Commercial lands account for approximately 1.41% of classified lands in the Planning Area (See Table 3.7.1). The most significant concentration of Planning Area commercial uses occur near Interstate-26, along both Upward and Tracy Grove Roads. Additional commercial uses are scattered throughout the Planning Area, primarily along Dana, Ridge, and Sugarloaf Roads (See Figure 3.7.1).

Many Planning Area commercial uses are within commercial zoning districts. The Planning Area contains an OI, CC, RC and seven (7) LC zoning districts (See Table 3.7.7 for general district descriptions and requirements). These zoning districts were originally designated on September 19, 2007 (though some have been expanded through rezoning processes).

<b>Table 3.7.7. Commercial, Office Institutional and Industrial Zoning Districts within the Planning Area</b>					
<b>District</b>	<b>Allows for and Provides...</b>	<b>Scale</b>	<b>Maximum Size (sq. ft.)</b>		
			<b>Single Tenant Structure or Secondary Tenant in Multitenant Structure</b>	<b>Principal Tenant in a Multitenant Structure</b>	<b>Multitenant Structure (Total All Tenants)</b>
OI	Office, institutional and residential development	Compatible with the surrounding community	Unlimited	Unlimited	Unlimited
LC	Retail sales and services, public and private administrations, offices, other uses done primarily for sale or profit, and residential development	Local or neighborhood	10,000 sq. ft.	30,000 sq. ft.	80,000 sq. ft.
CC		Local and community	30,000 sq. ft.	80,000 sq. ft.	Unlimited
RC		Local, community and regional	Unlimited	Unlimited	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 July 6, 2009.

**Industrial.** Ten (10) parcels in the Planning Area contain industrial uses of which six (6) are zoned Industrial (I) (See Figure 3.7.1). The I 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 LC zoning district. Manufacturing and production operations smaller than 10,000 square feet are permitted within the LC zoning district. Site D1 currently exceeds, but site G4 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 two (2) identified industrial uses are located in residential zoning districts (R1 and R2R). Industrial uses are not permitted in the R1 district (B14 is located in the R1 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. It appears site A25 exceeds the maximum square footage; however, the preexisting status in the zoning district may allow for expansion of the operations with some limitation.

**Vacant Lands.** Vacant lands account for approximately 20.91% of Planning Area classified lands, making it the second most prevalent land use. Vacant lands occur throughout the Planning Area with the largest contiguous tracts located in eastern portions of the Planning Area (See Figure 3.7.1). The majority of Planning Area vacant lands (2,445.81 acres) are located in the R2R Zoning District (See Table 3.7.8).

<b>Table 3.7.8. Zoning Districts and Vacant Land</b>			
<b>Zoning District</b>	<b>Total Acreage</b>	<b>Vacant Land Acreage by District</b>	<b>Percent of Zoning District Acreage Vacant</b>
R2R	11,148.99	2,445.81	21.94
R3	6,109.69	1,465.42	23.99
R1	1,116.60	144.93	12.98
I	547.62	111.85	20.42
LC	304.27	65.12	21.40
RC	140.12	42.62	30.42
R4*	1,242.01	6.07	0.49
CC	141.14	5.46	3.87
OI	68.12	0.25	0.37
<b>Total</b>	<b>20,818.56</b>	<b>4,288.71</b>	<b>20.59</b>

\* The remainder of the lands in this tract is within the Green River Gamelands which, while vacant, is classified as "Governmental" by the Tax Assessor's Office.

Source: Henderson County Tax Assessor data (July 2010).

**Residential Build-Out Scenario.** The Planning Area provides a low-density residential development pattern. Existing residential zoning districts contains lots which average 4.08 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 five (5) acres (See Table 3.7.9).

<b>Table 3.7.9. Existing Residential Zoning, Lots, Residences, and Density</b>					
<b>Residential Zoning District</b>	<b>Total Acreage in Lots*</b>	<b>Total Number of Lots</b>	<b>Average Lot Size</b>	<b>Number of Residences</b>	<b>Density (units/acre)</b>
<b>R1</b>	1,040.02	638	1.63	647	0.62
<b>R2R</b>	11,318.83	3,703	3.05	2,838	0.25
<b>R3</b>	5,990.46	541	11.07	318	0.05
<b>R4</b>	1,227.38	8	153.42	0	0
<b>Total</b>	<b>19,576.69</b>	<b>4,800</b>	<b>4.08</b>	<b>3,803</b>	<b>0.19</b>

\*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 (July 2010), Henderson County data (parcel data and Building Services data) (July 2010) 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.

<b>Table 3.7.10. Projected Build-Out at Standard Residential Density</b>				
<b>Residential Zoning District</b>	<b>Permitted Standard Density (units/acre)</b>	<b>Principal and Accessory Residences Permitted</b>	<b>Existing Residences</b>	<b>Unbuilt Potential</b>
<b>R1</b>	4	8,010	647	7,363
<b>R2R</b>	1	11,634	2,838	8,796
<b>R3</b>	0.66	8,682	318	8,364
<b>R4</b>	0.20	520	0	520
<b>Total</b>		<b>28,846</b>	<b>3,803</b>	<b>25,043</b>

Source: Census data (1970 County and 2007 American Communities Survey) and Henderson County data (parcel (July 2010) and structure (July 2010)) with extrapolations by Henderson County Planning Staff.

Approximately 25,043 additional residential units would be required to reach standard residential density within existing residential zoning districts. By the year 2065 (within 55 years), the Planning Area would reach full build-out with 28,846 residences and a population of 62,018 persons. This would be an average density of one (1) unit per each 0.68 acres of land.<sup>5</sup>

**Land Use Trends and Zoning Application.** Large tracts of agricultural and rural lands 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 Interstate-26 interchange and interconnected local road network accommodate and encourage continued residential, commercial and industrial growth. The Community Plan's support of the proposed improvements to Interstate-26, Howard Gap Road, and Sugarloaf Road, combined with the improvements to Upward Road which are underway, will continue to support development in the Planning 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 westernmost portions of Upward, Dana and Sugarloaf Roads. Public sewer is currently available within the Planning Area, running along Sugarloaf Road and Blue House Road. Where these systems expand development can more easily be accommodated.

The expansion of residential land use is most prevalent in the Planning Area. Over one-half of the Planning Area's existing residential units were built within the last 29 years. It is estimated that by the year 2025 an additional 7,765 individuals will move to the planning area, occupying an additional 4,206 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.

Topographical impediments to development exist, specifically in the eastern portions of the Planning Area. 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 east of the Ridge 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 LUD 1. Industrial (I) Zoning District Map Amendment.** To increase opportunities for industrial development within the Planning Area and in the vicinity of the Interstate-26 interchange at Upward Road, I zoning should be applied to those properties bounded by McMurray Road and Ballenger Road and located between the existing Regional Commercial (RC) and Industrial (I) zoning (See Map 8, Land Use Recommendations (Pg. 67)).

**Goal LUD 2. Residential One (R1) Zoning District Map Amendment.** To provide for increased residential density in the vicinity of existing commercial and industrial development, where

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<sup>5</sup> Assuming the following: (1) persons per household remains constant from 2020 forward (2.15 persons per household); (2) population growth continues to trend based on Census data (See Table 2.16); and (3) each residential unit accommodates only one (1) household;



water and sewer infrastructure are anticipated, R1 should be applied to those properties located along Howard Gap Road and South Orchard Road and between Upward Road and Orchard Road (See Map 8, Land Use Recommendations (Pg. 67)).

### 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. Its most defining natural feature is “The Ridge” which follows the crest of the Blue Ridge Mountains along Upward Road and Ridge Road. The rolling hills to the west of the Ridge and more rugged mountain ranges to its east provide scenic views unique to the area. Early settlers recognized the area’s climate as ideal for farming. Apple and other types of farming remain central to the rural character of the Planning Area. The rolling hills, which are more easily developed, contain a significant portion of the County’s residential and nonresidential development. The more rugged terrain east of the Ridge remains largely undeveloped with extensive woodlands, particularly in the Green River Game Lands.

Another defining characteristic of the Planning Area’s rural character is its strong sense of community and the community gathering places that facilitate interaction and community building. The community has also established its own community centers and gathering places including the Dana Park (currently leased by the County) and Upward Community Center.

Businesses also play a key role in keeping the community connected. Nonresidential (commercial, office institutional, and industrial) development has long been a part of the Planning Area. Existing nonresidential uses are scattered primarily along Upward/Ridge Road, Dana Road, Tracy Grove Road, and Sugarloaf Road. These include a mix of strip developments, manufacturing and production operations, and warehouses. Many of the nonresidential uses are located in traditionally industrial structures (metal prefabricated buildings). Still other nonresidential uses are located in more architecturally traditional structures with similar building materials (brick, stucco, horizontal siding, and metal roofs) and color palettes (beige, white, red and blue). The Planning Area’s more extensive nonresidential development patterns reflect the



economic significance of the Planning Area to the County.

The Planning Area also surrounds several additional nonresidential uses, primarily 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), which 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.

**Community Character and Design Goals and Objectives**

**Goal CCD1. Community character should be protected for the Dana Planning Area, with particular attention to the “Downtown Dana” area and Interstate-26 interchange at Upward Road.** The County should consider providing guidelines, standards and regulations for nonresidential development in the Planning Area.

The following should be addressed throughout the Planning Area, with various methods, and with variations by area (i.e. Downtown Dana and the I-26 interchange at Upward Road may address these issues differently from one another or use different methods to achieve the same goals):

- Building orientation (fronting the street and located proximate to the street);
- Façade articulation (changing alignment and/or building material used);
- Glazing (preventing long facades without windows);
- Parking orientation (locate in the side or rear of the business);
- Provision of pedestrian access within and between developments; and
- Signage (in scale with building) and landscaping installation.

The County should also consider addressing the following for the “Downtown Dana” area (see Figure 3.8.1) specifically:

- Architectural character consistent with rural residential development of the area including: building materials (wood siding, stone, brick), porches and covered walks, and roofs (pitched roofs and metal roofs); and
- Preservation of the views of Refuge Baptist Church (addressing building height and setback to achieve visibility)

Finally, the County should consider addressing the following for nonresidential development located at the I-26 interchange at Upward Road (See Figure 3.8.2): interconnectivity/traffic flow management (through the addition of street connections and roundabouts or other traffic calming measures) and architectural character including building materials (wood siding, stone, brick), porches and covered walks, and roofs (pitched roofs and metal roofs).



Figure 3.8.1. Desired Downtown Dana Character





**Figure 3.8.2. Desired Typical Development Pattern at Interstate-26 Interchange at Upward Road**



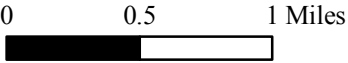


# Dana Community Planning Area

## Planning Area Boundary

- Major Roads
- Streets
- Major Streams
- Community Plan Boundary
- City of Hendersonville
- Village of Flat Rock
- Municipal ETJ
- Parcels

1 inch = 0.72 miles



This map is prepared from the inventory of real property found within this jurisdiction, and is compiled from recorded deeds, plats, and other public records and data. Users of this map, are hereby notified that the aforementioned public primary information sources should be consulted for verification of the information contained on this map. The County and mapping company assume no legal responsibility for the information contained on this map.



Dana Community Planning Area

Sensitive Natural Areas

- Major Roads
- Streets
- Community Plan Boundary
- Streams
- 2006 Impaired Waters (303d)
- Class C Trout Waters
- Continental Divide
- Protected Ridges Buffer
- Green River Game Lands
- Dana National Wetlands Inventory
- Dana Natural Heritage Sites\*
  - State
  - Regional
  - Broad River Basin
  - French Broad River Basin
  - City of Hendersonville
  - Village of Flat Rock
  - Municipal ETJ

\*NC Natural Heritage Inventory Significance of Site

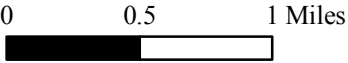
State: The site contains the "best" occurrences within the state that are not already considered of national significance; again, "best" is usually restricted to just the top five such examples.

Regional: The site contains the "best" occurrences within a given region that are not already considered of national or state significance. "Region" is usually defined as an area including the counties contiguous with the county of interest usually a four or five county area.

Local: The site is a biological resource within the county but not of regional significance. Note: not all locally-significant sites have been digitized, and data on these sites are often less extensive.

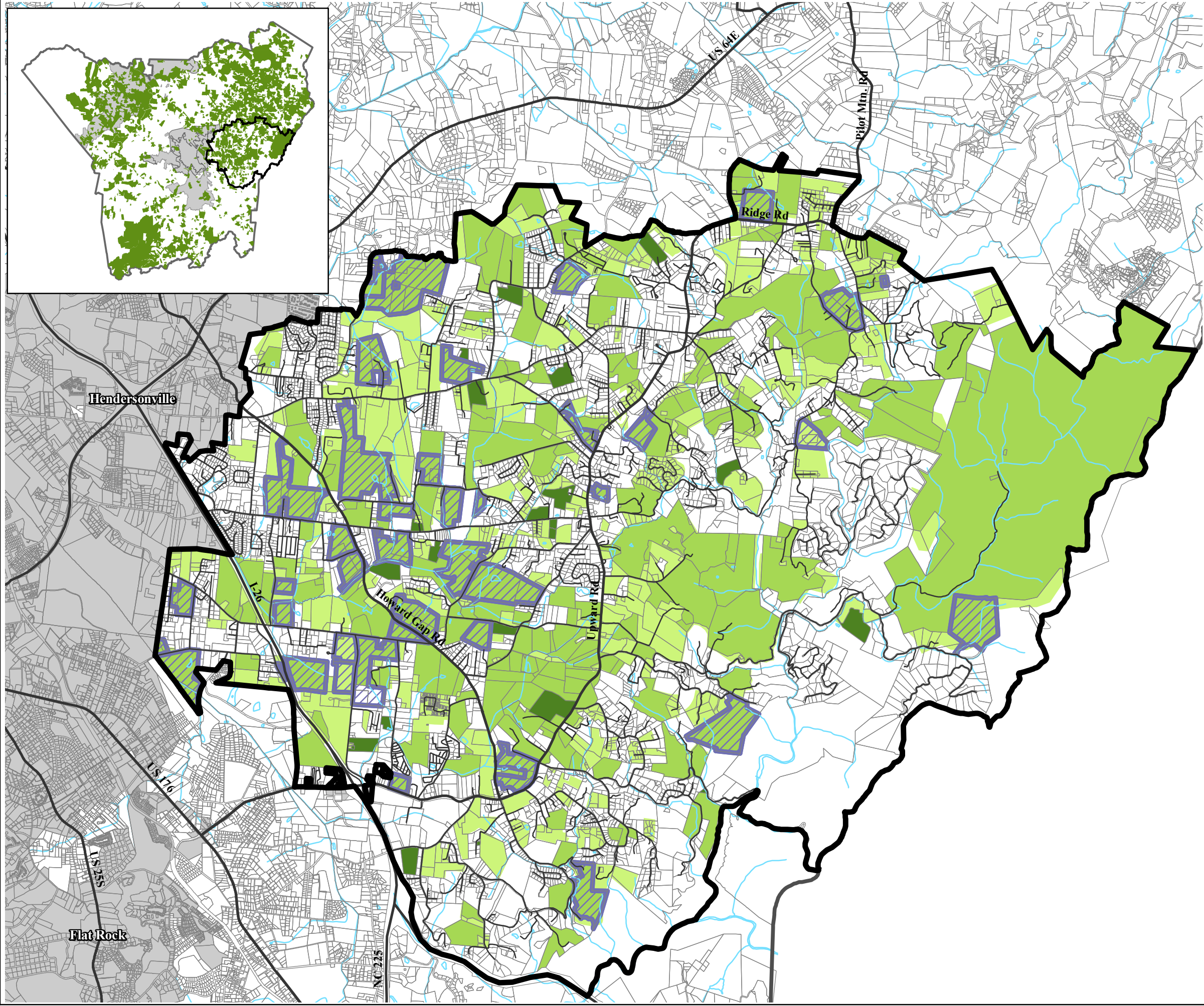
National: The site contains the "best" occurrences of a particular Natural Heritage Program element (species or community) known to exist anywhere within its range; usually "best" is defined as the top five sites.

1 inch = 0.72 miles



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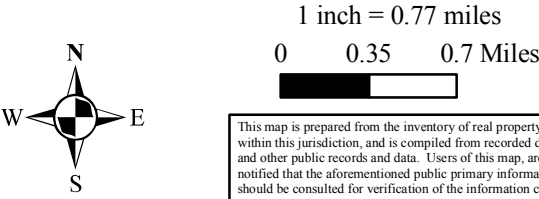
- ### Dana Community Planning Area
- #### Agriculture
- Major Roads
  - Streets
  - Official Blue Line Streams
  - Community Plan Boundary
  - Present Use Value Farmland/Forestland\*
  - Agriculture-Horticulture & Forestland\*\*
  - Voluntary Agricultural Districts\*\*\*
  - USDA FSA Farmland\*\*\*\*
  - Municipal Limits
  - Municipal ETJ
  - Parcels

\*Henderson County tax parcel data classifies these properties as participating in the present use value is a program. Under this County program eligible lands are taxed based on present use value instead of market value. Present use value is only applied to agricultural, horticultural, or forestland. Not all agricultural land is eligible. Approximately 7,384.38 acres of the Planning Area fall under the present use value category.

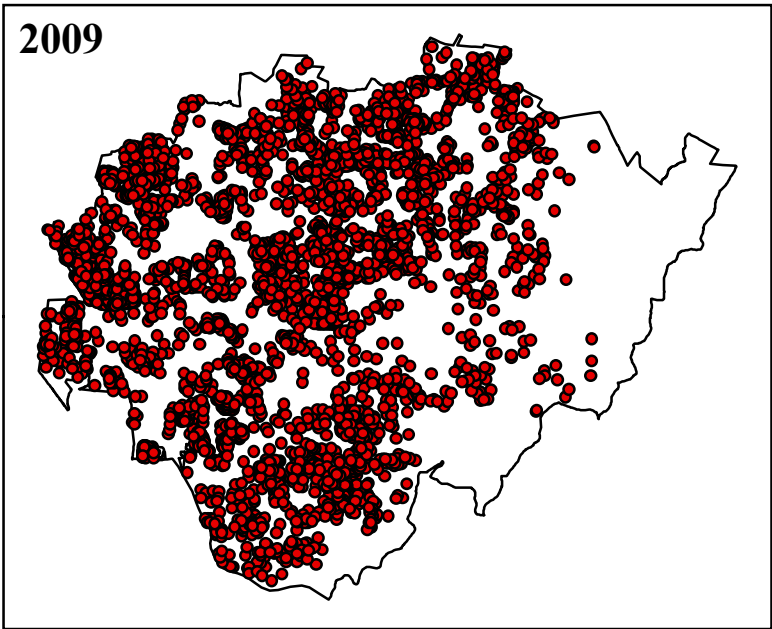
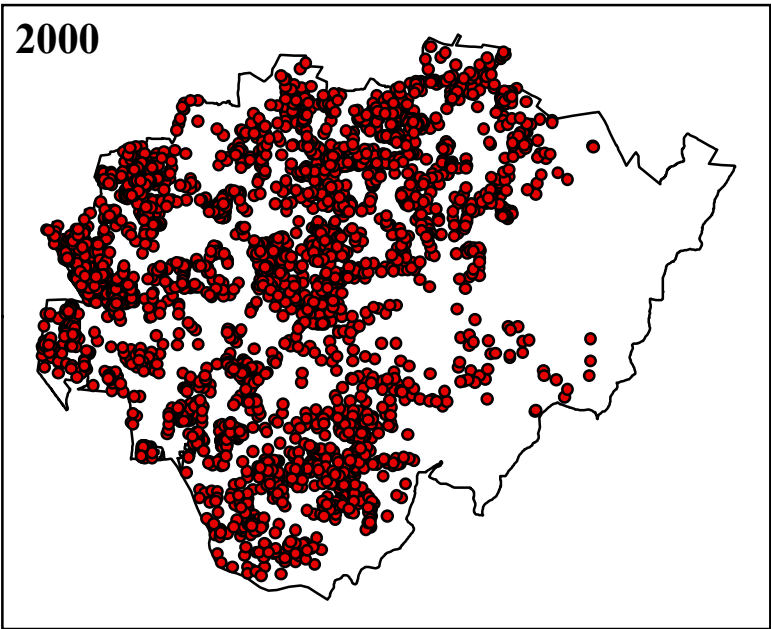
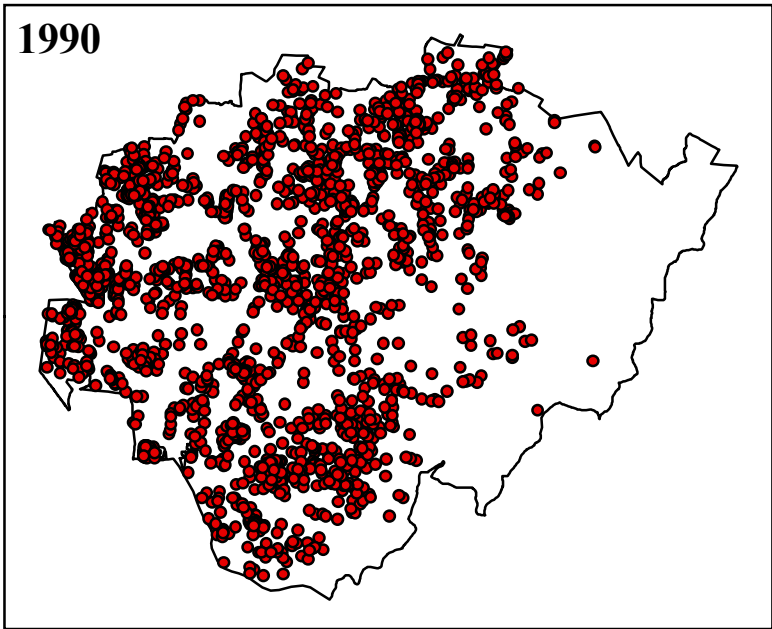
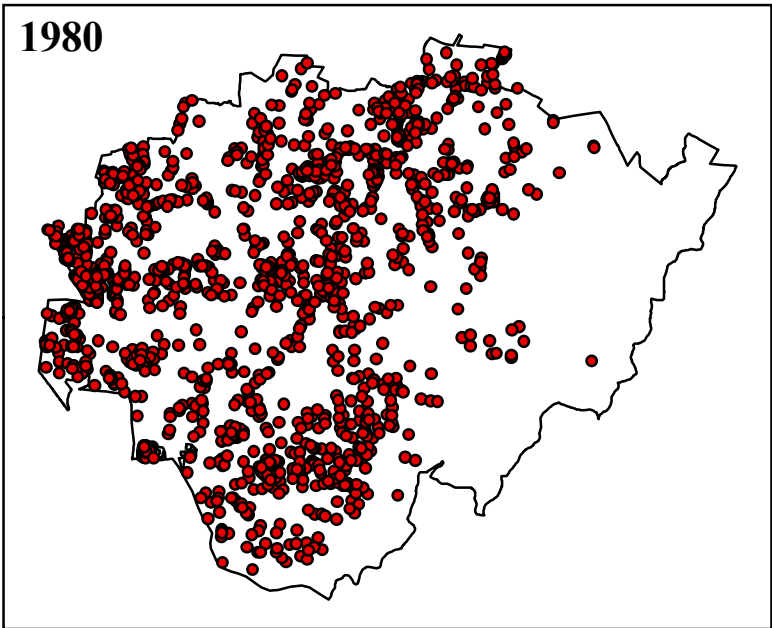
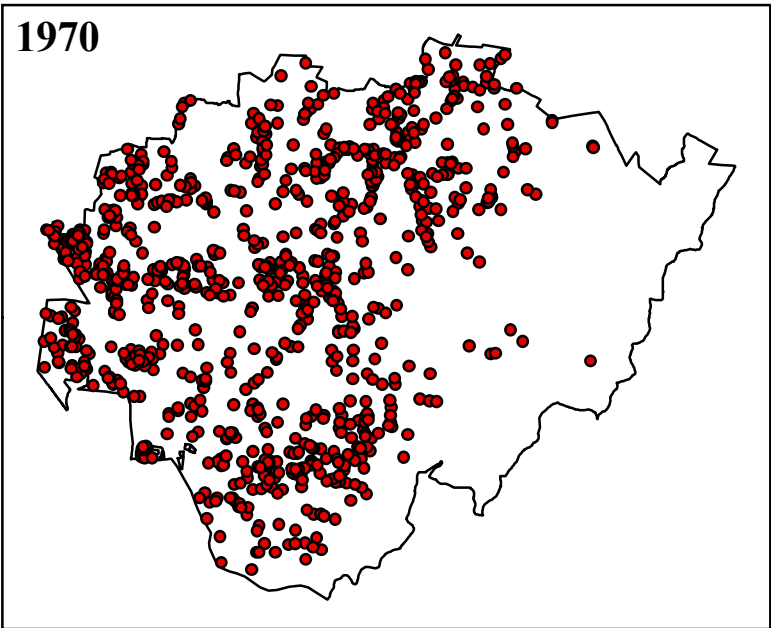
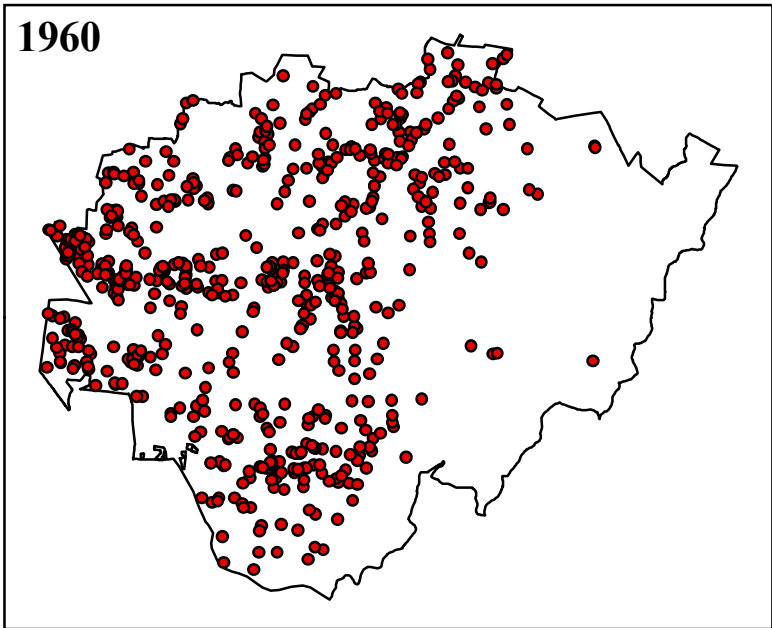
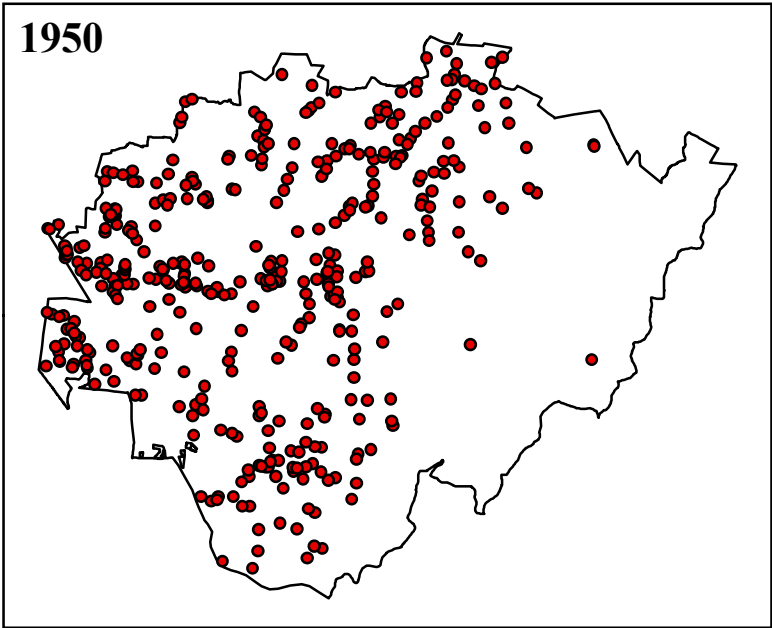
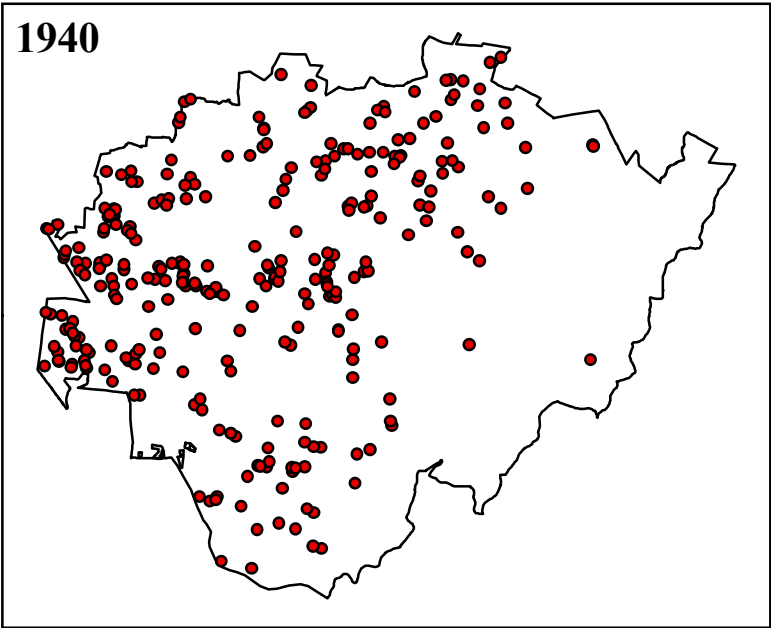
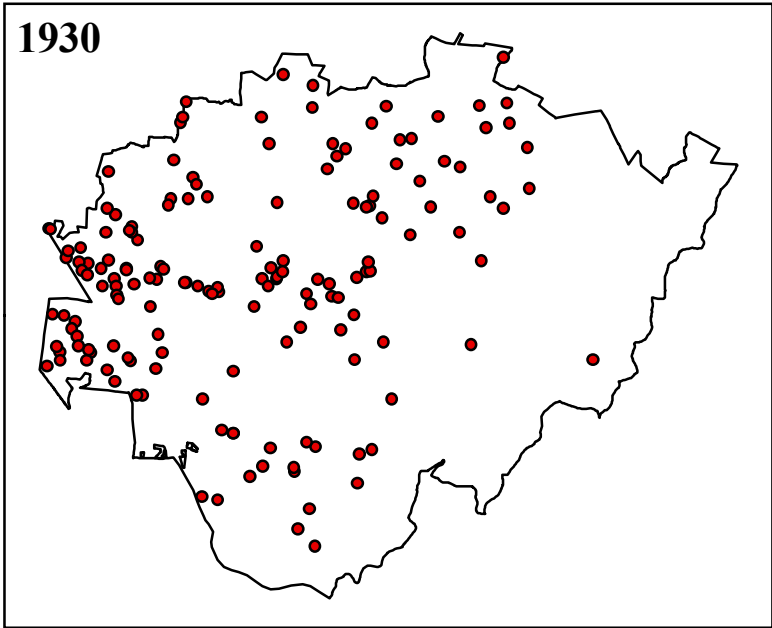
\*\*Henderson County tax parcel data classify these properties as agriculture-horticulture or forestland. Additional properties may be agricultural but have not received this designation. Approximately 251.39 acres of the Planning Area are classified by the tax assessor as agriculture-horticulture or forestland.

\*\*\*Voluntary Agricultural Districts identify and include farms which participate in this Henderson County program defined under Henderson County Code Chapter 92, Farmland Preservation. Additional properties may be agricultural but do not participate in this program. Approximately 1,542.69 acres of the Planning Area are within a Voluntary Agricultural District.

\*\*\*\*United States Department of Agriculture (USDA) Farm Services Agency (FSA) is responsible for administering and managing farming programs and identifies only that farmland which participates in these programs. Additional properties may be agricultural but do not participate in these programs. Approximately 9098.24 acres of the Planning Area are identified by the FSA as participating in these programs. The County attained the data in 2009, however, the USDA FSA is not permitted to provide additional information on this data, including information on the data's year.



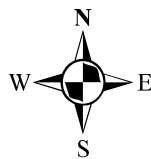




**Dana Community  
Planning Area**

**Housing Stock 1930-2009**

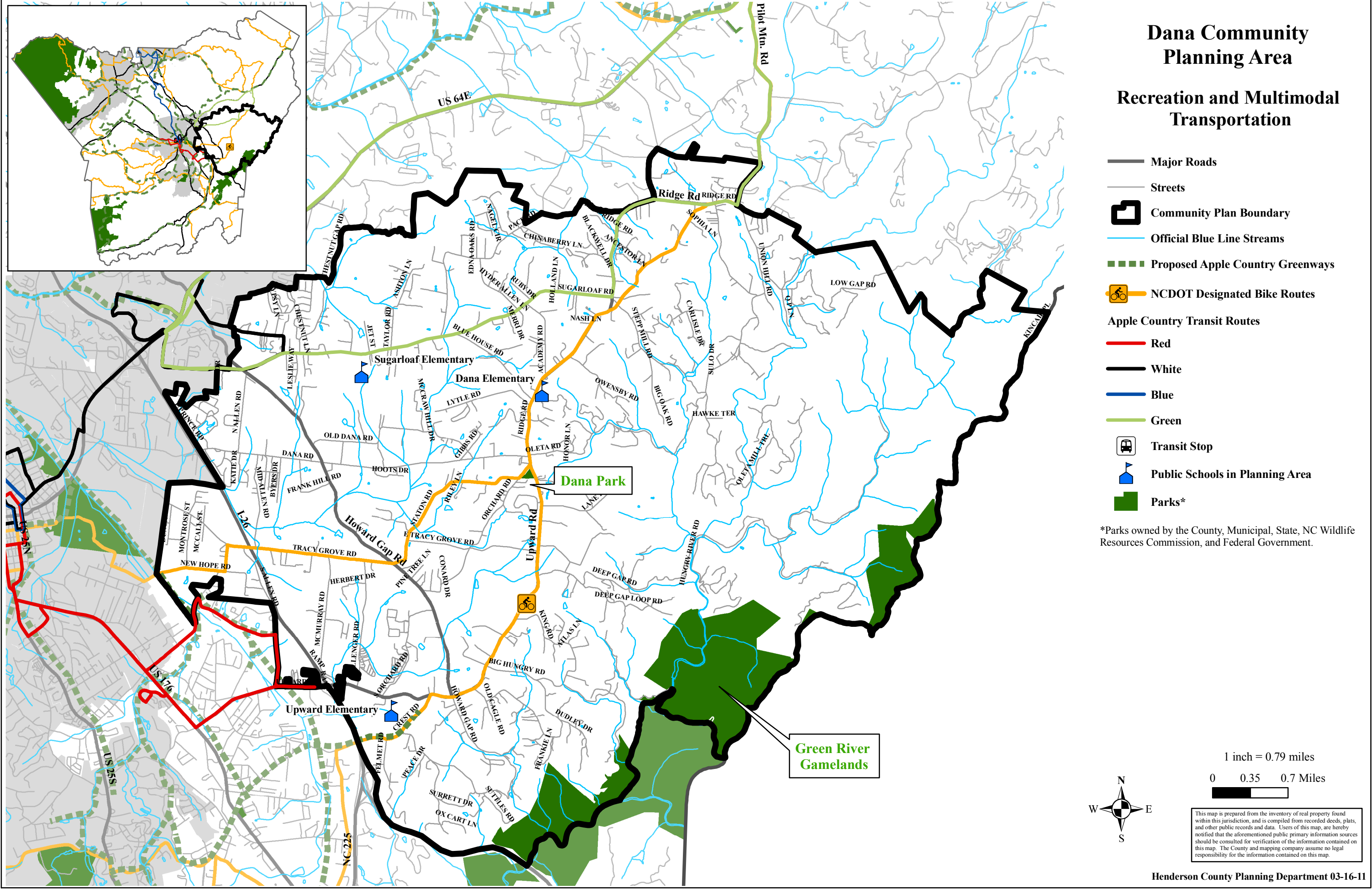
- Residential Structures
- Community Plan Boundary



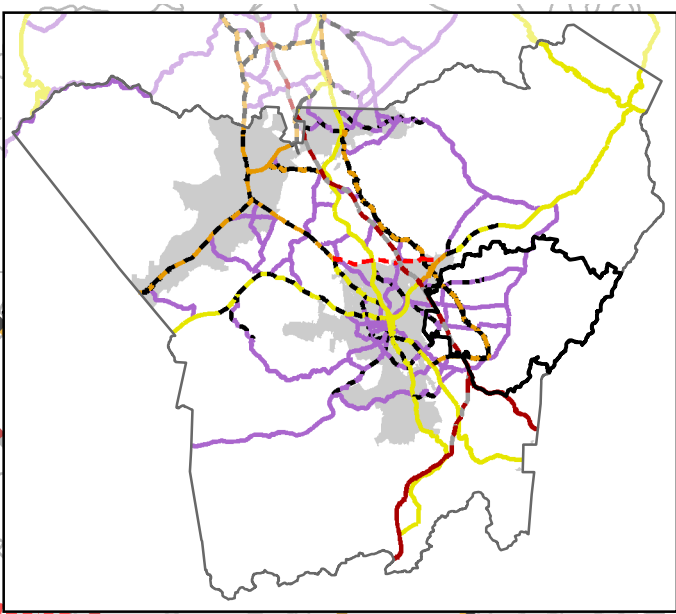
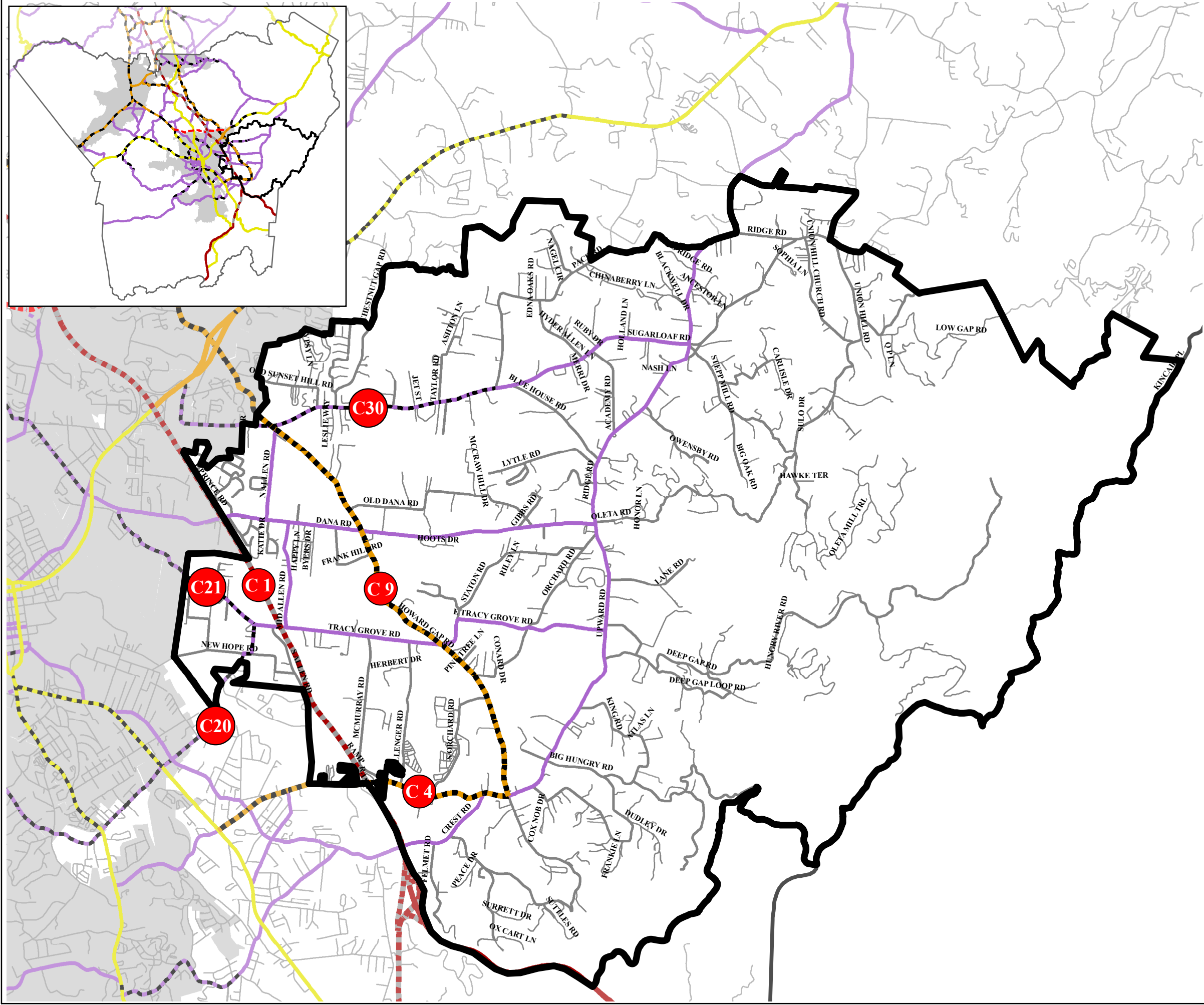
1 inch = 2.27 miles

0 1.25 2.5 Miles

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- ### Dana Community Planning Area
- ### NCDOT Comprehensive Transportation Plan
- Community Plan Boundary
- Street Classifications & Status**
- Freeways, Existing
  - Freeways, Needs Improvement
  - Freeways, Recommended
  - Expressways, Existing
  - Expressways, Needs Improvement
  - Expressways, Recommended
  - Boulevards, Existing
  - Boulevards, Needs Improvement
  - Boulevards, Recommended
  - Major Thoroughfares, Existing
  - Major Thoroughfares, Needs Improvement
  - Major Thoroughfares, Recommended
  - Minor Thoroughfares, Existing
  - Minor Thoroughfares, Needs Improvement
  - Minor Thoroughfares, Recommended
  - Public Streets (Minor Art., Local, Collector)
  - Private Streets

1 inch = 0.79 miles

0 0.45 0.9 Miles

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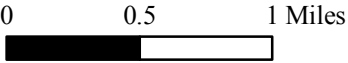


Dana Community Planning Area

Official Zoning

- Major Roads
- Streets
- Community Plan Boundary
- Zoning Districts
  - Residential 4
  - Residential 3
  - Residential 2 - Rural
  - Residential 2
  - Residential 1
  - R-40
  - WR
  - SW
  - O&I
  - Local Commercial
  - Community Commercial
  - Regional Commercial
  - Industrial
  - City of Hendersonville
  - Village of Flat Rock
  - Municipal ETJ
  - Parcels

1 inch = 0.72 miles



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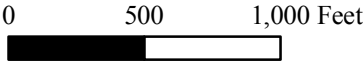


Dana Community  
Planning Area

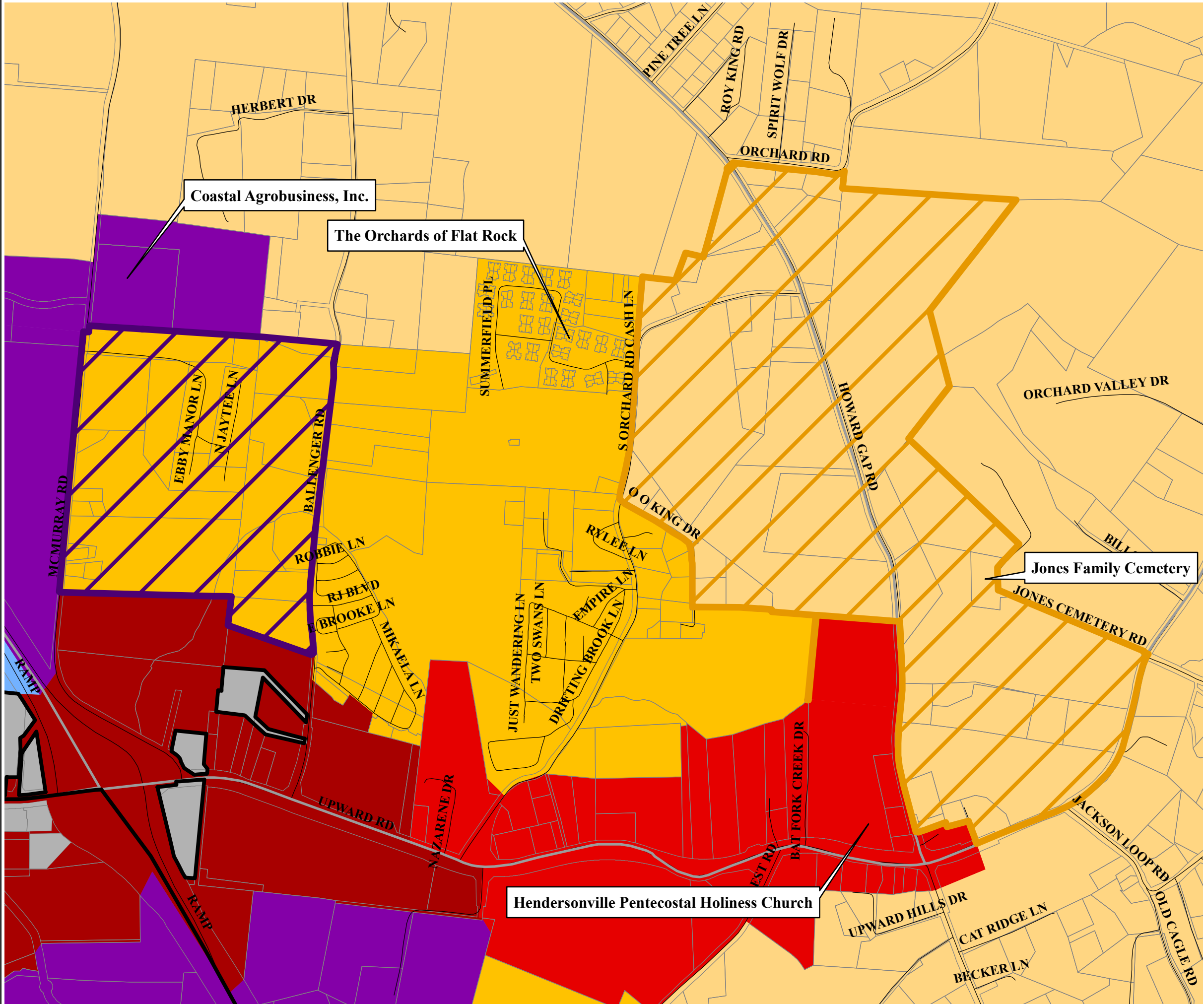
Land Use Recommendations

- Major Roads
- Streets
- Community Plan Boundary
- Proposed Zoning
  - Residential 1
  - Industrial
- Zoning Districts
  - Residential 4
  - Residential 3
  - Residential 2 - Rural
  - Residential 2
  - Residential 1
  - R-40
  - WR
  - SW
  - O&I
  - Local Commercial
  - Community Commercial
  - Regional Commercial
  - Industrial
  - City of Hendersonville
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  - Parcels

1 inch = 0.13 miles



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# Dana Community Park

Henderson County, North Carolina

Conceptual Master Plan - August 25, 2010



Proposed Character Images

**cds** Creative Development Solutions  
 landscape architecture | land planning | community and resort design  
 1003 4th avenue west, hendersonville, north carolina 28739  
 p 828 696 9992 | f 828 696 9954

This plan illustrates a preliminary concept for possible development scenarios of the project and is subject to future revisions and modifications to actual field conditions, and budget conditions. Illustrations are an artists' interpretation of the proposed property and should not be relied upon for accuracy.



# **Dana Community Plan Supplemental Materials**



**March 16, 2011**

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## **PUBLIC INPUT FROM THE COMMUNITY**

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### ***Public Input Meeting 1***

The County held an initial public input session for the Dana Community Plan on November 9, 2009 at 6:30 P.M. at the Dana Elementary School. Approximately 60 Dana residents, including the Community Advisory Committee, attended the meeting. After reviewing meeting format and ground rules the residents were divided into six (6) facilitated groups of 9 to 10 people. The facilitators asked and recorded responses to the following three questions:

1. What are the strengths of the Dana Community?
2. What are your concerns for the Dana Community?
3. What do you hope to see/envision for the Dana Community in 15 years?

Following group discussion the facilitators posted the responses for residents to cast votes. Each of the 60 citizens in attendance had the opportunity to cast three (3) votes for the issue or issues of highest importance. Of the 60 residents and committee members, it appears 42 voted, casting 136 votes. Table 1 indicates those comments which received votes and the number of votes received. The comments are organized into the following broader categories: Natural and Cultural Resources, Agriculture, Affordable Housing, Community Facilities and Public Services, Recreation, Transportation, Economic Development, Land Use and Development, Community Character and Design, and The Community. Tables 1A through 1I include all comments made at the public input meeting, presented by individual category.

### ***Public Input Online Survey***

The County solicited additional public input for the Plan by online survey from October 1, 2009 through December 15, 2009. Twenty-two (22) individuals who lived, worked or owned property in the Planning Area participated in the online survey. The citizens responded to a series of questions. Tables 2A through 2N include the responses received. Where appropriate, the comments are organized into the following broader categories: Natural and Cultural Resources, Agriculture, Affordable Housing, Community Facilities and Public Services, Recreation, Transportation, Economic Development, Land Use and Development, Community Character and Design, and The Community.

### ***Mailed and Distributed Survey***

The County solicited additional public input for the Plan by mailed survey on October 15, 2009. The County mailed 1000 surveys of which 270 were returned on or before October 30, 2009. An additional 52 surveys were filled out during Public Input Meeting 1. A total of 322 surveys were collected and analyzed. The responses are available in the "Dana Area Citizen Survey Report", on file at the Henderson County Planning Department.

### ***Public Input Meeting 2***

The Planning Are Committee and Henderson County Planning Department held a second public input session on November 8, 2010 at 4:30 p.m. at the Dana Community Center. At this meeting the public had the opportunity to review and provide input on the Draft Dana Community Plan prepared by the Dana Community Plan Advisory Committee. Approximately 75 Planning Area residents, including the Community Plan Advisory Committee, attended the drop in session. The Community Plan Advisory Committee considered the comments provided by the public on November 15, 2010, before sending forward its Draft Plan to the Planning Board and Board of Commissioners for their consideration.

Table 1. Public Input Meeting 1 Comments Receiving Votes<sup>1</sup>

Topic	Strengths	Concerns	15-Year Vision
Natural & Cultural Resources	Natural Beauty (6)	Access to scenic/natural areas (1)	Old Stepp Mill be restored and open to the public (8)
	Recreation (1)	Better watershed management (1)	
		Loss of natural beauty/natural areas (1)	
		Not restrictive enough on steep slope management (1)	
Agriculture	Agricultural/Apples (10)	Loss of farmland and orchards (1)	Maintain/preserve farms/rural community (21)
			Keep farmers farming (15)
			Keep agriculture without restrictions (1)
Housing		Abandoned/dilapidated homes (including manufactured/mobile homes) (4)	Fewer manufactured homes (5)
		Limit number and growth of manufactured home parks (1)	Increase housing cost mix (1)
Community Facilities & Public Services	Emergency Services (1)	Post Office location and size (4)	
		Incorporation: Not ready for incorporation (including annexation by City of Hendersonville) (2)	
		Taxes (increasing) (1)	
Transportation	Accessibility/Convenience (to I-26, County, municipalities) (1)	Dana/Upward/Ridge/Oleta Roads: Improvements needed, possibly signalization (3)	
		Stop sign needed at hill at Refuge Baptist Church because of a lack of visibility (2)	
		Upward Road traffic (2)	
Economic Development			Important to keep small-family owned businesses (1)
Land Use & Development	Freedom on my own land (4)	Preservation of private property rights/Government should not tell property owners what to do with land/Too much governmental control (15)	Keep big businesses out (1)
		No big box developments (5)	Slow growth (1)
		Growth Management (1)	
		Too dense (1)	
Community Character & Design	Rural (2)		
The Community	Family (1)		

<sup>1</sup> (#) Indicates the number of votes this item received. Items in **bold** capture received the highest votes (a total of 4 or more votes).

Table 1A. Public Input Meeting 1 All Comments Received regarding Natural & Cultural Resources <sup>1</sup>	
<b>Strengths</b>	Natural beauty* (6)
	Recreational areas and waterfalls (1)
	Heritage/historical legacy*
	Recreation (Fishing, Camping, Hunting)
	Rivers and streams
	Scenic/wooded/forested areas and wildlife*
	Timber harvest creates greenspace
	Views of mountains/scenery*
	Water quality (including well water quality)*
	Watershed (undeveloped)
<b>Concerns</b>	Access to scenic/natural areas (1)
	Better watershed management (1)
	Loss of natural beauty/natural areas (1)
	Not restrictive enough on steep slope management (1)
	Need more wildlife habitat area
<b>15-Year Vision</b>	Old Stepp Mill be restored and open to the public (8)
	Preservation
	Re-open filled in lake's - allow water to naturally flow again

<sup>1</sup> (#) Indicates the number of votes this item received.

\* Indicates the item appeared on more than one list but may or may not have received votes.

Table 1B. Public Input Meeting 1 All Comments Received regarding Agriculture <sup>1</sup>	
<b>Strengths</b>	Agricultural/apples* (10)
<b>Concerns</b>	Loss of farmland and orchards (1)
<b>15-Year Vision</b>	Maintain/preserve farms/rural community* (21)
	Keep farmers farming (15)
	Keep agriculture without restrictions (1)
	Keeping agriculture/other uses separate
	Need farm animals/husbandry protected

<sup>1</sup> (#) Indicates the number of votes this item received.

\* Indicates the item appeared on more than one list but may or may not have received votes.

Table 1C. Public Input Meeting 1 All Comments Received regarding Housing <sup>1</sup>	
<b>Concerns</b>	Abandoned/dilapidated homes (including manufactured/mobile homes)* (4)
	Limit number and growth of manufactured home parks (1)
	Need for affordable medium-density housing
<b>15-Year Vision</b>	Fewer manufactured homes (5)
	Increase housing cost mix (1)

<sup>1</sup> (#) Indicates the number of votes this item received.

\* Indicates the item appeared on more than one list but may or may not have received votes.

Table 1D. Public Input Meeting 1 All Comments Received regarding Community Facilities & Public Services <sup>1</sup>	
<b>Strengths</b>	Emergency Services (1)
	Adjacent to BRCC
	Fire Departments
	Only county taxes
	Post office
	Schools*
<b>Concerns</b>	Post Office location and size (4)
	Incorporation: Not ready for incorporation (including annexation by City of Hendersonville)* (2)
	Taxes (increasing)* (1)
	Crime and drugs
	Degradation of the Dana Community Center
	Lack of parks/recreation
	Water/sewer issues
<b>15-Year Vision</b>	Post office needs to remain in the community, be expanded, and provide additional/safer parking*
	Increase law enforcement
	More parks and trails for children and everyone
	Parks management
	Parks and recreation for the elderly
	Sewer system for Dana School to post office

<sup>1</sup> (#) Indicates the number of votes this item received.

\* Indicates the item appeared on more than one list but may or may not have received votes.

Table 1E. Public Input Meeting 1 All Comments Received regarding Transportation <sup>1</sup>	
<b>Strengths</b>	Accessibility/Convenience (to I-26, County, municipalities)* (1)
<b>Concerns</b>	Dana/Upward/Ridge/Oleta Roads: improvements needed, possibly signalization* (3)
	Stop sign needed at hill at Refuge Baptist Church because of a lack of visibility (2)
	Upward Road traffic (2)
	Blue House Road/Sugarloaf Road intersection
	Dana Road and Tracy Grove Road need turning lanes
	Howard Gap Road traffic
	Howard Gap Road/Tracy Grove Road intersection need for signalization (stop light/blinking light)
	Oleta Road needs widening
	Road maintenance needs improvement
	Speed limit enforcement
	Traffic volume*
	Upward Road congestion at I-26 bridge
	Upward Road safety concerns with tractor trailers and speed
	Upward Road/South Allen Road intersection light synchronization
<b>15-Year Vision</b>	Howard Gap Road: do not widen
	Improve transportation (roads)
	Improve public transportation service (Apple Country Transit)

<sup>1</sup> (#) Indicates the number of votes this item received.

\* Indicates the item appeared on more than one list but may or may not have received votes.

<b>Table 1F. Public Input Meeting 1 All Comments Received regarding Economic Development<sup>1</sup></b>	
<b>Strengths</b>	Connection to the economy
	Education level of population
	Last area [of the County] that large tracts of property can be passed on to next generations
<b>Concerns</b>	Depreciation of land values
<b>15-Year Vision</b>	Important to keep small-family owned business (1)

<sup>1</sup> (#) Indicates the number of votes this item received.

\* Indicates the item appeared on more than one list but may or may not have received votes.

<b>Table 1G. Public Input Meeting 1 All Comments Received regarding Land Use &amp; Development<sup>1</sup></b>	
<b>Strengths</b>	Freedom on my own land (4)
	Maintain/preserve way of life: farming/family community
	Sustainability
<b>Concerns</b>	Preservation of private property rights/Government should not tell property owners what to do with land/Too much governmental control* (15)
	No big box developments (5)
	Growth management (1)
	Too dense (1)
	Expansion of commercial development into residential areas
	Low density
	Low density (5 or more acres for subdivision lots)
	Low density (larger lot sizes)
	Low density (minimum lot sizes larger than 1/4 acre)
	Need stronger restrictions on commercial development
	No gated communities
	No industrial development
	Overdevelopment
	Potential for high density housing
	Prevent lots with failed septic permits from being re-sold
	Too much residential development
<b>15-Year Vision</b>	Keep big businesses out (1)
	Slow growth (1)
	Neighborhood store at intersection of Dana Road/Upward Road
	No large industries

<sup>1</sup> (#) Indicates the number of votes this item received.

\* Indicates the item appeared on more than one list but may or may not have received votes.

<b>Table 1H. Public Input Meeting 1 All Comments Received regarding Community Character &amp; Design<sup>1</sup></b>	
<b>Strengths</b>	Rural* (2)
	Quaintness
	Desire for the area to stay like it is
<b>Concerns</b>	Leave community the way it is
	Maintain frontage and street views of property
<b>15-Year Vision</b>	Look like it did 30 years ago (local family-owned businesses)*
	Keep rustic forested look

<sup>1</sup> (#) Indicates the number of votes this item received.

\* Indicates the item appeared on more than one list but may or may not have received votes.

<b>Table 1I. Public Input Meeting 1 All Comments Received regarding The Community<sup>1</sup></b>	
<b>Strengths</b>	Family (1)
	Community: traditions, pride, closeness, friendliness*
	Churches
	Diversity
	Family atmosphere
	Neighborliness
	People
<b>Concerns</b>	Overpopulation/population increase*

<sup>1</sup> (#) Indicates the number of votes this item received.

\* Indicates the item appeared on more than one list but may or may not have received votes.



**Table 2A. Online Survey Responses Regarding Strengths, Concerns and 15-Year Vision Related to Natural and Cultural Resources<sup>1</sup>**

<b>Strengths</b>	Beauty of land
	Lots of land, beauty

**Table 2B. Online Survey Responses Regarding Strengths, Concerns and 15-Year Vision Related to Agriculture<sup>1</sup>**

<b>Strengths</b>	Agriculture
	Closeness, farming, strong sense of community
	Family and farming
	It is an agricultural community and private property rights are respected
<b>15-Year Vision</b>	A continuation of strong agrarian roots... Stay a farming community with limited development that would damage the community and families that live with in it
	Agricultural activities are emphasized and promoted to the rest of Henderson County
	Continued agricultural growth... We have a lot of apple orchards [and] I would like to see them flourish... By the same token if they choose to sell their land it is their right
	Preservation of the apple farms

**Table 2C. Online Survey Responses Regarding Strengths, Concerns and 15-Year Vision Related to Housing<sup>1</sup>**

<b>Concerns</b>	Too many mobile home parks are allowed... Substandard housing needs to be addressed
-----------------	---

**Table 2D. Online Survey Responses Regarding Strengths, Concerns and 15-Year Vision Related to Community Facilities & Public Services<sup>1</sup>**

<b>Concerns</b>	Being annexed by larger towns, encroachment/growth of other towns/communities overcoming our community and forcing their taxes upon us
	Crime prevention
<b>15-Year Vision</b>	A new community center for the Upward Community.
	Certainly within that timeframe a larger Upward School will be built.
	More services such as water and sewer, less fancy development and more neighborhoods.
	Need for increased law enforcement
	There are more things for everyone one to do not just certain types of people

**Table 2E. Online Survey Responses Regarding Strengths, Concerns and 15-Year Vision Related to Transportation<sup>1</sup>**

<b>Strengths</b>	Good highway access to I-26
<b>Concerns</b>	Heavier traffic through the area on Upward Road raises safety issues
	[Need] better roads
	Roads are becoming heavily traveled
<b>15-Year Vision</b>	Better roads and less traffic (populous)
	Hopefully new road construction will be done well enough that the area will not out grow the road system in 15 years
	[Limit] influx of traffic from the interstate

**Table 2F. Online Survey Responses Regarding Strengths, Concerns and 15-Year Vision Related to Economic Development<sup>1</sup>**

<b>Concerns</b>	Lower economic growth and disadvantaged population
-----------------	--

**Table 2G. Online Survey Responses Regarding Strengths, Concerns and 15-Year Vision Related to Land Use & Development<sup>1</sup>**

<b>Concerns</b>	Development and sprawl without services, junky neighborhoods with overcrowded trailers and apartments, fancy developments with residents that want to restrict long term property owner rights.....
	Growth that will not retain the beauty that we have.
	Growth, development
	I don't think that county government should be telling people what they can and cannot do with their land. We live in a free society and private property rights are a central part of that society. I have no right to tell my neighbor what he or she can do with their property.
	Keeping development down to preserve the country feel
	Large commercial growth
	Mobile homes, more mobile homes, clearing of land, loss of agriculture
	Overbuilding in the area without the proper roads and facilities.
	Overdevelopment
	Overdevelopment
	That we are growing but it seems like it is too fast
	Too much development
<b>15-Year Vision</b>	A small and well maintained business community with shops for ease of use
	Building codes that meet the needs of families that have lived here for a century
	I would like to see my property annexed into the City of Hendersonville where there are greater protections of the resources.
	Limited growth, and continued agriculture use
	More good restaurants, more activities to lure tourists to the area to spend their money
	New development should be monitored, especially manufactured housing and undesirable industries.
	Slow, controlled growth is okay... but keep the views and the land intact
	Well thought out growth and easy access to Hendersonville

**Table 2H. Online Survey Responses Regarding Strengths, Concerns and 15-Year Vision Related to Community Character & Design<sup>1</sup>**

<b>Strengths</b>	Quiet, rural character with emphasis on agriculture
	Rural area, dependable neighbors, family ties
	Rural Community, which needs to remain rural-family oriented
	Rural nature of area with quiet neighborhoods
	Semi rural, quiet, non-bustling
	Still somewhat rural
<b>15-Year Vision</b>	Remaining a rural area
	The area has been cleaned up but not over developed so it retains a rural feel

**Table 2I. Online Survey Responses Regarding Strengths, Concerns and 15-Year Vision Related to The Community<sup>1</sup>**

<b>Strengths</b>	Beauty of people
	Being a small town, we all feel like we know and trust one another. Strengths are being able to call on a neighbor if you need them.
	Hardworking people with strong moral values that have a sense of community...tight knit and friendly
	Strong values community pride
	Upward Community, although in a country setting, still has that comforting feeling you get from knowing that neighbors still help neighbors.

**Table 2J. Online Survey Responses Regarding Planning Area Uniqueness**

<b>How is your part of Henderson County unique from other parts of the County?</b>
Apple Farming
Beautiful views of the mountains from my home, quiet neighborhood and good neighbors. Very few developments and factories. Would like to keep it this way.
Eastern continental divide/eastern edge of plateau
It is still a rural farming community that is not overrun with housing developments and wide commercial entities...Target, Wal-Mart, Ingles on every street corner, etc.
Less industrialized, more rural, open
Much less developed, which is attractive.
Quiet area. Very near the city but with the feel of the country. We like it this way but we also need to continue progress in the area.
Rural and protected at this point in time.
So far we have been able to preserve two thirds of our farmland
The agricultural activities make this area valuable and unique to Henderson County.
The sense of community remains.
Upward is at the primary entrance from Polk County/I-26 East, gateway to the rest of the County.
We are a close knit community where everybody knows one another.
Where I live is actually all still dirt road. That is few & far between in Henderson County now.

**Table 2K. Online Survey Responses Regarding County Policies and Regulations**

<b>The County's policies and regulations should...</b>	<b>Average</b>
...work to preserve the County's rural character.	6.18
...work to preserve mountain views/ridge tops.	5.89
...encourage preservation of agriculture.	5.71
...require developers to provide more open space.	5.6
...strive to make affordable housing.	4.29
...allow more employment opportunities.	3.8
...allow more single family neighborhoods in the Planning Area.	3.44
...allow more commercial businesses in the Planning Area.	3.08
...allow more apartment neighborhoods in the Planning Area.	2.3
...allow more industrial centers.	1.5
...allow more manufactured home parks.	1.5

7 = Strongly Agree, 4 = Neither Strongly Agree nor Strongly Disagree, 1 = Strongly Disagree

<b>Table 2L. Online Survey Responses Regarding Provision of County Funds</b>	
<b>The County should provide funds to ...</b>	<b>Average</b>
...improve roads in the Planning Area.	5.3
...provide funds to protect farmland in the Planning Area.	4.8
...provide funds to protect open space in the Planning Area.	4.78
...extend County sewer service in the Planning Area.	4.6
...extend County water service in the Planning Area.	4.45
...extend Apple Country Transit bus routes in the Planning Area.	3.89
...build more walking trails in the Planning Area.	3.67
...build more multi-purpose ball fields (soccer, baseball, football) in the Planning Area.	3.23
...build more ball fields dedicated to a specific sport in the Planning Area.	2

7 = Strongly Agree, 4 = Neither Strongly Agree nor Strongly Disagree, 1 = Strongly Disagree

<b>Table 2M. Online Survey Responses Regarding Payment for New School Construction Costs</b>	
<b>Sometimes when new homes are built, public schools become overcrowded resulting in the need for new schools. How should this school construction be funded?</b>	<b>Percent</b>
By the developers, building contractors, and residents of the new homes	52.6%
By all of the taxpayers of Henderson County	47.4%

<b>Table 2N. Online Survey Responses Regarding Howard Gap Road Widening</b>	
<b>Should Howard Gap Road be widened to four (4) lanes?</b>	<b>Percent</b>
Yes	45.0%
No	55.0%

Structures Identified as Built Over 100 Years Ago\*



1



4



2



4



3



5









14



18



15



19



16



20



17



21





22



26



23



27



24



28



25

<b>Table A3.1. Cultural and Historical Sites Map Cemetery Identifiers</b>	
<b>Map ID</b>	<b>Cemetery</b>
C1	Refuge Baptist Church Cemetery
C2	Dana Methodist Church Cemetery
C3	Dana Baptist Church Cemetery
C4	JB Hill Family Cemetery at Owensby Road
C5	Basiewicz Family Cemetery (Single marker "Billy, July 14, 1965")
C6	Stepp-Hyder Cemetery at Round Hill
C7	Stepp Family Cemetery
C8	Stepp Family Cemetery at Golden Hill
C9	Stepp Family Cemetery at Red Hill
C10	Union Hill Baptist Church Cemetery
C11	David Family Cemetery
C12	Reece-Bradley Cemetery
C13	Hammett Family Cemetery
C14	Jones Family Cemetery at Upward Road
C15	Upward Kelley Holiness Baptist Cemetery
C16	Ronald Livesay Cemetery
C17	Gilbert-Justus Family Cemetery
C18	Tracy Grove Baptist Church Cemetery
C19	Bethel Wesleyan Church Cemetery
C20	Fair Haven Independent Baptist Church Cemetery



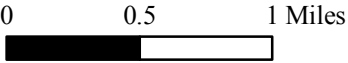


Dana Community  
Planning Area

Cultural and Historic Sites

- Major Roads
- Streets
- Dana\_Community\_Boundary
- Cemetery
- Properties with Structures 100 Years+
- City of Hendersonville
- Village of Flat Rock
- Municipal ETJ
- Parcels

1 inch = 0.72 miles



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# COMMERCIAL, INDUSTRIAL & WAREHOUSE LAND USE AND PHOTO INVENTORY

**Table 7. Commercial, Industrial & Warehouse Land Use Inventory**

Site	Name	Description	Heated Sq. Feet	Current Zoning
A01	1. Family Christian Center 2. Country Bear Daycare	1. Office (Religious) 2. Childcare Facility	16,000	RC
A02	1. Flat Rock Signs and Graphics 2. McCraw Insurance 3. Curves 4. Anew-Salon and Spa 5. Family Heritage 6. Eternal Sun 7. NC Vocational Rehabilitation 8. Champion Service Experts 9. Scuba 10. Study Hall	1. Retail Sales & Services 2. Office (Insurance) 3. Physical Fitness Center 4. Retail Sales & Services 5. Office 6. Retail Sales & Services 7. Office 8. Office 9. Retail Sales & Services 10. Office	20,000	RC
A03	1. Warehouse 2. Point the Way Health Consultants 3. Goodman Computer Technologies 4. Mountain Tek 5. Bodyshop Fitness Center	1. Warehousing and Storage 2. Office (Medical) 3. Office (Information) 4. Retail Sales & Services 5. Physical Fitness Center	46,294	RC
A04	Scot King Auto Sales	Motor Vehicle Sales or Leasing	0	RC
A05	Four Seasons Paint and Body	Automobile and Equipment Service	4,916	RC
A06	Game Room	Vacant	0	RC
A07	Waffle House	Retail Sales & Services (Restaurant)	1,706	RC
A08	Mountain Inn and Suites	Motel/Hotel	33,942	RC
A09	Bloomfields of Flat Rock	Retail Sales & Services	11,460	RC
A10	1. Morning's Glory Creations 2. McAbee's Fruit Stand	1. Retail Sales & Services (Gift Shop) 2. Produce Stand	6,504	I
A11	Vacant	Construction in Progress	0	I
A12	Pro Fit Golf	Retail Sales & Services	2,488	R1
A13	Matrac	Manufacturing and Production Operations	96,551	RC/I
A14	Twin Ponds RV Park	Recreational Vehicle Park	9,435	R1
A15	1. Richard D. Hatch and Associates 2. Antiques and Estate Auctioneers 3. Professional Appraisers and Liquidators	1. Office 2. Retail Sales & Services 3. Office	8,000	CC
A16	Country Marble	Retail Sales & Services (Tubs, Spas, & Vanities)	12,000	CC
A17	Western Carolina Produce Inc.	Warehousing and Storage	11,584	R1
A18	Leisure Craft Inc	Manufacturing and Production Operations	48,366	CC
A19	Asheville Packing Co.	Product Processing and Storage Facilities	28,840	CC
A20	Animals "R" Us	Office (Veterinarian)	6,204	R2R
A21	Blue Ridge Septic Inc	Vacant	1,942	CC
A22	Vacant	Vacant	2,250	CC
A23	Warehouse	Warehousing and Storage	19,580	R2R
A24	L & R and Sons	Warehousing and Storage	20,350	R2R
A25	DIBOCO Fire Sprinklers Inc	Office	21,900	R2R
A26	Paw Pleasers	Kennel	800	R2R

Table 7. Commercial, Industrial &amp; Warehouse Land Use Inventory

Site	Name	Description	Heated Sq. Feet	Current Zoning
B01	Holberts Plumbing Inc	Retail Sales & Services( Plumbing)	3,486	I
B02	John Ross Inc	Office (Landscape Construction & Design)	3,684	I
B03	Cooper Construction Company	Office (Construction)	<b>10,274</b>	I
B04	Christian World Adoption	Office	4,396	I
B05	1. Zack's Automotive 2. Vintage Motorgarage Co.	1. Automobile and Equipment Service 2. Automobile and Equipment Service	2,400	I
B06	1. Beemer Clinic Inc 2. Grandpa's Olde Cars	1. Automobile and Equipment Service 2. Automobile and Equipment Service	9,450	I
B07	1. STJ's Inflation Station 2. Petals Distribution Co. 3. American Parcel Service	1. Indoor Recreation Facilities 2. Retail Sales & Services 3. Retail Sales & Services	<b>26,800</b>	I
B08	M.T. Industries	Manufacturing and Production Operations (Telecommunications Plastic and Film Printing)	<b>16,000</b>	I
B09	Tracy Grove Business Center- Direct Line Parts	Retail Sales & Services	<b>19,200</b>	I
B10	Affordable Mini-Storage	Self-Storage Warehousing	<b>75,900</b>	I
B11	Warehouse	Warehousing and Storage	<b>12,440</b>	<b>R1</b>
B12	Henderson Farms	Warehousing and Storage	<b>15,265</b>	<b>R1</b>
B13	Red Barn Pet Care Center	Kennel	2,824	<b>R1</b>
B14	IDAG LLC	Office	8,470	<b>R1</b>
B15	Terminix Service Inc	Retail Sales & Services	4,040	<b>R1</b>
B16	1. Harding 2. Martial Arts	1. Retail Sales & Services 2. Retail Sales & Services	6,000	<b>R1</b>
B17	Club Cheer & Dance Inc	Retail Sales & Services	5,600	<b>R1</b>
B18	Warehouse	Warehousing and Storage	3,600	<b>R1</b>
C01	Red Hill Inc Apples	Warehousing and Storage	<b>17,450</b>	<b>R2R</b>
C02	Red Hill Inc Apples	Food Manufacturing (Packing House)	<b>13,824</b>	<b>R2R</b>
C03	Warehouse	Warehousing and Storage	3,897	<b>R2R</b>
C04	Warehouse	Warehousing and Storage	3,422	<b>R2R</b>
C05	Warehouse	Warehousing and Storage	<b>14,000</b>	<b>R2R</b>
C06	Hideaway Hill Pet Center	Kennel	8,880	<b>R2R</b>
D01	Byers Precision Fabrication Inc	Manufacturing and Production Operations	<b>55,310</b>	LC
E01	Henderson Best	Warehousing and Storage	<b>95,724</b>	LC/ <b>R2R</b>
F01	Vacant	Vacant	600	LC
F02	Junkyard Dawg Properties	Junkyard	0	<b>R2R</b>
F03	Junkyard Dawg Properties	Junkyard	1,500	<b>R2R</b>
F04	1. New Beginnings Thrift Store 2. El Charrito	1. Retail Sales & Services 2. Convenience Store	<b>23,211</b>	LC
F05	1. Dana Post Office 2. Balance Reparation	1. Governmental 2. Automobile and Equipment Service	5,040	LC
F06	Dana Food Center/Marathon	Convenience Store/Fuel Pumps	3,500	LC
F07	Rolling Ridge Inc	Vacant	2,440	LC
F08	Fabrex Company	Retail Sales & Services	<b>13,200</b>	LC
F09	Rolling Ridge Inc	Office	6,050	LC
F10	Bryant Heating and Cooling Systems	Retail Sales & Services	4,720	<b>R2R</b>
F11	Garage/Shop	Automobile and Equipment Service	1,530	<b>R2R</b>
F12	Ron's Auto Repair & Restoration Services	Automobile and Equipment Service	6,218	<b>R2R</b>

Table 7. Commercial, Industrial &amp; Warehouse Land Use Inventory

Site	Name	Description	Heated Sq. Feet	Current Zoning
F13	Dana Mini-Storage	Self-Storage Warehousing	7,500	<b>R2R</b>
E14	Warehouse	Warehousing and Storage	3,750	<b>R2R</b>
F15	Warehouse	Warehousing and Storage	3,898	<b>R2R</b>
F16	Apple Ridge Farm-Warehouse	Warehousing and Storage	<b>19,692</b>	<b>R2R</b>
G01	GB Enterprises (Sysco-American Truck Repair)	Automobile and Equipment Service	6,200	<b>R1</b>
G02	The Manual Woodworkers and Weavers Inc Distribution	Warehousing and Storage	<b>15,360</b>	LC
G03	Automated Designs Inc	Office	1,800	LC
G04	Automated Designs Inc- Custom Machinery and Equipment	Manufacturing and Production Operations	6,600	LC
G05	Southland Distributors	Warehousing and Storage	<b>193,280</b>	I
G06	The Warm Company	Warehousing and Storage	<b>90,000</b>	I
G07	Lazy Boy Travel Park	Recreational Vehicle Park	7,810	I
G08	Crop Production Services	Manufacturing and Production Operations	<b>19,468</b>	<b>R2R</b>
G09	Mountainscape Inc.	Office (Custom Homes)	1,792	LC
G10	Warehouse	Warehousing and Storage	8,000	<b>R2R</b>
G11	Coastal Agro Business	Warehousing and Storage	<b>35,850</b>	I
G12	AllJuice (Food and Beverage Corp.)	Food Manufacturing	<b>44,888</b>	I
G13	Storage Units	Self-Storage Warehousing	3,000	<b>R2R</b>
H01	La Montana	Retail Sales and Services	3,478	<b>R2R</b>
H02	Warehouse	Warehousing and Storage	7,774	<b>R2R</b>
H03	Vacant	Vacant	5,500	<b>R2R</b>
H04	Woodhaven Cottages	Motel/Hotel (Cottage Rentals)	2,165	<b>R2R</b>
I01	Hardin MFG Country Air	Retail Sales and Services	<b>23,760</b>	<b>R2R</b>
I02	1. Five Points Grocery 2. Welding and Auto Repair	1. Convenience Store/Fuel Pumps 2. Automobile and Equipment Service	5,246	LC
I03	Warehouse	Warehousing and Storage	<b>14,400</b>	LC
I04	Custom Part Inc	Manufacturing and Production Operations	<b>118,958</b>	LC
I05	Kings Warehouse	Warehousing and Storage	2,500	<b>R2R</b>
J01	McGraw's Garage	Automobile and Equipment Service	2,820	<b>R2R</b>
J02	J and Jake Auto Repair	Automobile and Equipment Service	2,000	<b>R2R</b>



























**F3**



**F7**



**F4**



**F8**



**F5**



**F9**



**F6**



**F10**





F11



F15



F12



F16



F13



G1



F14



G2





G3



G7



G4



G8



G5



G9



G6



G10





**G11**



**H2**



**G12**



**H3**



**G13**



**H4**



**H1**



**I1**





I2



I5



I3



J1



I4



J2

Dana Community  
Planning Area

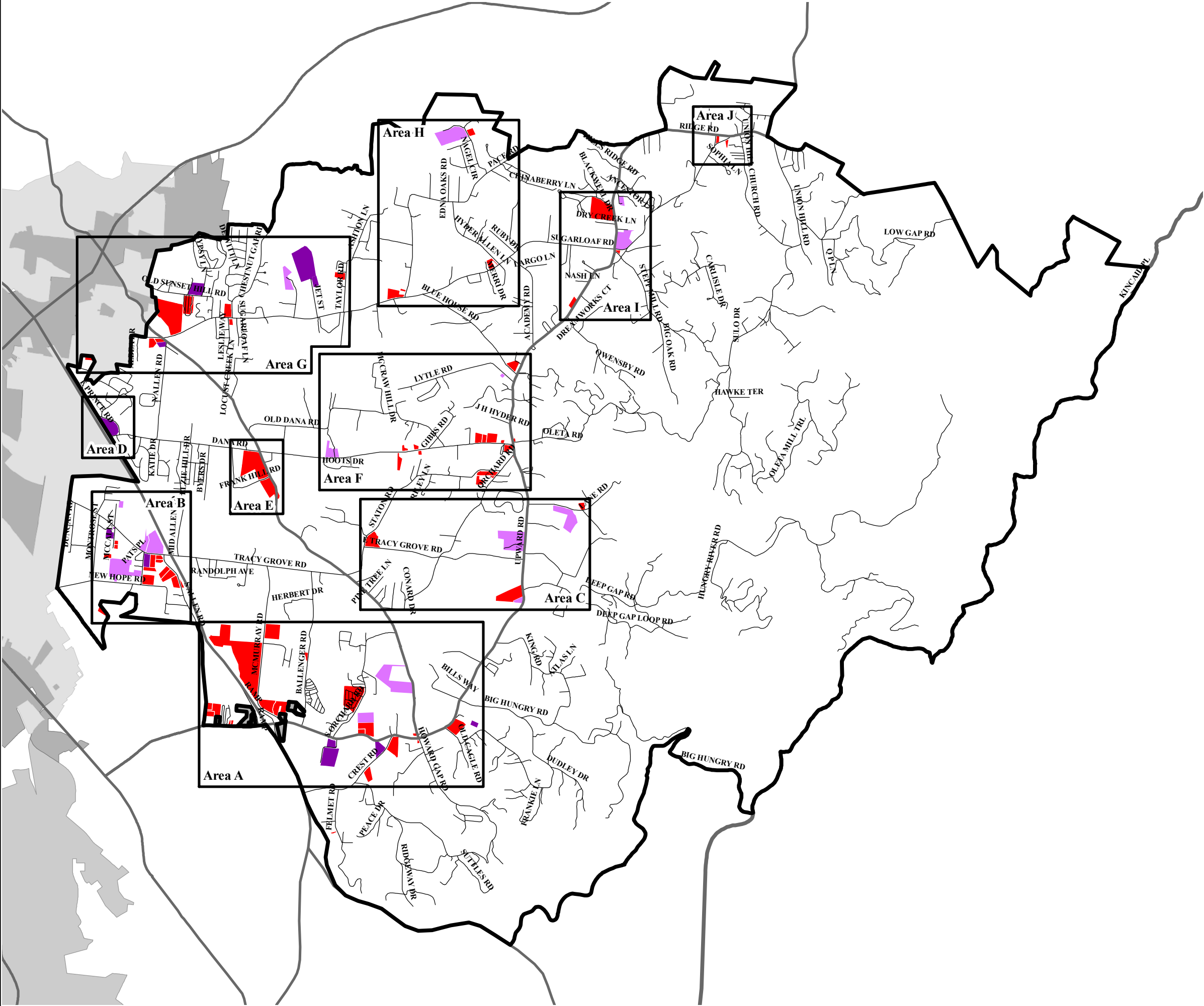
Commercial, Industrial &  
Warehouse Land Use  
Inventory

— Major Roads  
— Streets  
□ Community Plan Boundary

Nonresidential Land Uses

- Commercial
- Commercial Vacant
- Commercial - Light Industrial
- Industrial
- Warehouse

City of Hendersonville  
Village of Flat Rock  
Municipal ETJ



1 inch = 0.73 miles  
0 0.45 0.9 Miles



This map is prepared from the inventory of real property found within this jurisdiction, and is compiled from recorded deeds, plats, and other public records and data. Users of this map, are hereby notified that the aforementioned public primary information sources should be consulted for verification of the information contained on this map. The County and mapping company assume no legal responsibility for the information contained on this map.

## REFERENCES

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