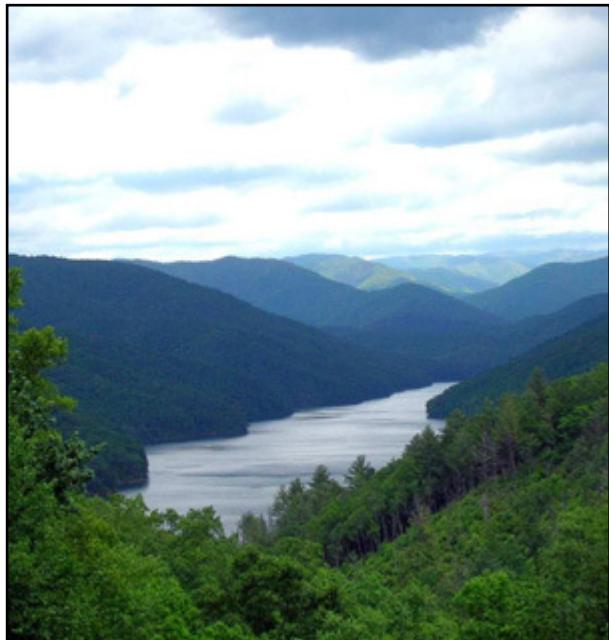


Madison County Comprehensive Plan



*A Plan to Guide Future Growth and
Development*

Madison County Comprehensive Plan – Table of Contents

1. Introduction

- 1.1. What is a Comprehensive Plan?**
- 1.2. How was this Comprehensive Plan Developed?**

2. Background Information and Trends

- 2.1. Introduction**
- 2.2. Population and Demographics Data and Trends**
- 2.3. Incomes and Economic Status**

3. Long-term Vision for the County

- 3.1. Developing the Vision**
- 3.2. Future Vision for Madison County**
- 3.3. Realizing the Vision**

4. Existing Land Use –

- 4.1. Summary and Analysis of Current Land Use**
- 4.2. Current Zoning Categories and Map**

5. Environmental Issues and Natural Resources –

- 5.1. Environmental and Natural Resources Issues**
- 5.2. Strategies for Preserving Natural Resources while Accommodating Growth and Development**

6. Economic Development Strategies

- 6.1. Economic Trends and Resources**
- 6.2. Employment Trends and Analysis**
- 6.3. Strategies for Strengthening Business Districts and Providing More Job Opportunities in Madison County**

7. Agriculture

- 7.1. Current State of Agriculture in Madison County**
- 7.2. Historical Context**
- 7.3. Current Programs Supporting and Promoting Local Agriculture**
- 7.4. Future Vision for Agriculture and Rural Community Life in Madison County**
- 7.5. Issues and Opportunities – Current and Emerging**
- 7.6. Recommended Strategies to Sustain Agriculture in the County**

Madison County Comprehensive Plan – Table of Contents

8. Transportation System –

- 8.1. Overview of the Existing Transportation System and Plans**
- 8.2. Scenic Byways**
- 8.3. Transportation Recommendations**

9. Housing

- 9.1. Summary of Existing Housing Stock**
- 9.2. Projected Future Housing Needs**
- 9.3. Strategies to Improve Housing Options and Affordability**

10. Infrastructure

- 10.1. Existing and Planned Water and Wastewater Infrastructure**
- 10.2. Future Water and Wastewater needs**
- 10.3. Feasibility of Coordinated/Consolidated Regional Water and Wastewater Systems**
- 10.4. Communications Infrastructure**
- 10.5. Electricity Infrastructure**
- 10.6. Natural Gas Infrastructure**
- 10.7. Infrastructure Recommendations**

11. Growth Management and Future Land Use

- 11.1. Alternatives for Managing Growth**
- 11.2. Preserving Rural Character and Natural and Cultural Resources**
- 11.3. Recommendations for Future Land Use**
- 11.4. Possible Considerations for Maintaining and Managing Growth and Development**

12. Intergovernmental Coordination

- 12.1. Opportunities for Coordination on Infrastructure, Schools and Other Government Services**
- 12.2. Recommendations**

Maps

Chapter 1. Introduction and Summary of Planning Process

1.1 What is a Comprehensive Plan?

A comprehensive plan is a plan that guides development and change for a community. It provides the basis and direction for a community's land development and land use policies and regulations. The plan examines the interrelationships between land use, transportation, utilities, the local economy, recreation, community character, etc. A comprehensive plan geographically covers the entire community and it has a long time horizon, typically 10 to 20 years. It represents the interests of the citizens as a whole.

A few good reasons to plan:*

- A good planning process involves a wide variety of citizens and interests. Once a community reaches consensus, the vision created in the plan can make future decision-making easier and less politically charged.
- A good plan ensures that a community can provide services like police, fire, and refuse collection efficiently while maintaining a relatively low tax rate for its citizens.
- Resources provided by state and federal governments are increasingly tied to good plans and planning processes. Highway funds, water and sewer grants, and other funding are easier to bring to your community if you have a well-crafted plan that shows extensive community involvement.

* From the NC Citizen Planner Training Program (NC Chapter of the American Planning Association, 2000), available at www.nc-apa.org, under "Resources," "Citizen Education."

What is covered in Madison County's Comprehensive Plan?

The plan includes a future vision for the County and goals which will help realize the vision and address concerns raised by citizens and county government. The vision was developed from input that was provided by citizens and officials at community meetings and through email, conversations and other meetings.

The plan contains data and analyses on Madison County's population, the local economy, land use, housing, environmental issues and infrastructure. The plan's chapters are arranged by topic area. Each chapter provides background, details and recommendations for a particular topic or set of topics. The plan contains recommendations for ways to manage growth, changes in policies and regulations, improvements to infrastructure and opportunities for intergovernmental coordination/collaboration.

How does the Comprehensive Plan relate to zoning, subdivision and other ordinances?

A Comprehensive Plan defines goals and objectives for a community. It can also outline the investments, policies and regulations that are needed to achieve the goals. The Comprehensive Plan typically will outline what regulations and ordinances could be developed or are in place. A zoning ordinance is the most commonly used tool to implement the goals of a comprehensive plan, while an economic development strategy can be another.

1.2 How was this Comprehensive Plan developed?

Madison County contracted with Land-of-Sky Regional Council to develop the Comprehensive Plan. County Commissioners appointed a Steering Committee to guide and oversee the planning process. The Steering Committee consisted of the Planning Board and representatives from the Economic Development Board and Tourism Development Authority. Council staff worked closely with County staff and officials and have solicited input from individuals and organizations across the county. At least 175 people attended one of ten community input meetings which were held in June and July, 2008 in many communities throughout the county. Input was also gathered from county employees, county-appointed boards and citizens during this timeframe. Information about the plan, the process, input received and other related information has been available on the County's website, www.madisoncountync.org, throughout the planning process. The County and Land-of-Sky Regional Council have encouraged public input throughout the planning process.

The plan was drafted in topical sections, and as sections were reviewed by the Steering Committee, they were presented to the Commissioners and made available for public review and input. This drafting and reviewing/revising process occurred between September, 2008 and October, 2009.

Although the plan is not a document dictating how a community is developed nor is it a regulatory document, it does however outline a vision to be worked toward over a specific amount of time. The plan has detailed goals and provides ideas to help realize those goals.

Chapter 2. Background Information and Trends

2.1 Introduction

Madison County was formed in 1851 from Buncombe and Yancey counties and was named for President James Madison. Madison County is a rural, mountainous county in western North Carolina. It is located in the heart of the Appalachian Mountains and contains relatively steep mountains and beautiful rivers. Residents live in one of many small communities or in one of the three unique small towns – Marshall, Mars Hill and Hot Springs. The county's culture is rooted in its heritage and residents have a strong desire to preserve the history and culture of the county as it grows and develops. See Maps 1 and 2 for orientation of the county in western North Carolina and the locations of the towns and townships.

A Brief History of Madison County

Note – Most of this section was derived from *This is Madison County*, by Jinsie Underwood (1974, Mars Hill).

Although there is no evidence of Indian towns or settlements in Madison County, Cherokee Indians lived in communities throughout the southern Appalachians and moved around in Madison to hunt and fish. The County's first settlers came in the mid- to late-1700s, as the Indians in the region were defeated and pushed westward. There was a great wave of land speculation following the end of the Revolutionary War that continued into the early 19th century. Fertile land along the river valleys, good quality timber and cheap land prices also contributed to the rapid population growth in Madison County throughout the 1800s. However, the biggest factor that brought people into and through Madison County was the French Broad River and the trail along its banks that was used first by the Indians, then later by traders and settlers.

In 1824, the NC General Assembly created the Buncombe Turnpike Corporation and the trail along the French Broad River became a more formal transportation route and toll road, from the Tennessee line to the South Carolina state line. This turned into a major trade route, especially for drovers of hogs and other stock, and settlements (including the early towns which would become Marshall and Hot Springs) grew up along it where people could stop for the night, eat and rest.

The railroad brought an abrupt end to the turnpike traffic in the late 1800s, but was a major factor in the prosperity of Marshall in the first quarter of the 20th century. Marshall became a large trading center and businesses and industries flourished. This, along with the big wave of lumbering that swept through the region in the early 20th century, provided many jobs to local residents and brought more people to live in the county.

The Town of Warm Springs (what is now known as Hot Springs) was discovered early and was nationally known as a health and tourist center since the early 1800s. The Warm Springs Hotel brought many visitors to the Town – up to 1,000 at a time for special events – and also brought prosperity to the town. Businesses and other guesthouses served the many and regular visitors. The hotel burned and was rebuilt a few times over the years, but the site is still a place where visitors come to enjoy the natural hot springs and natural beauty.

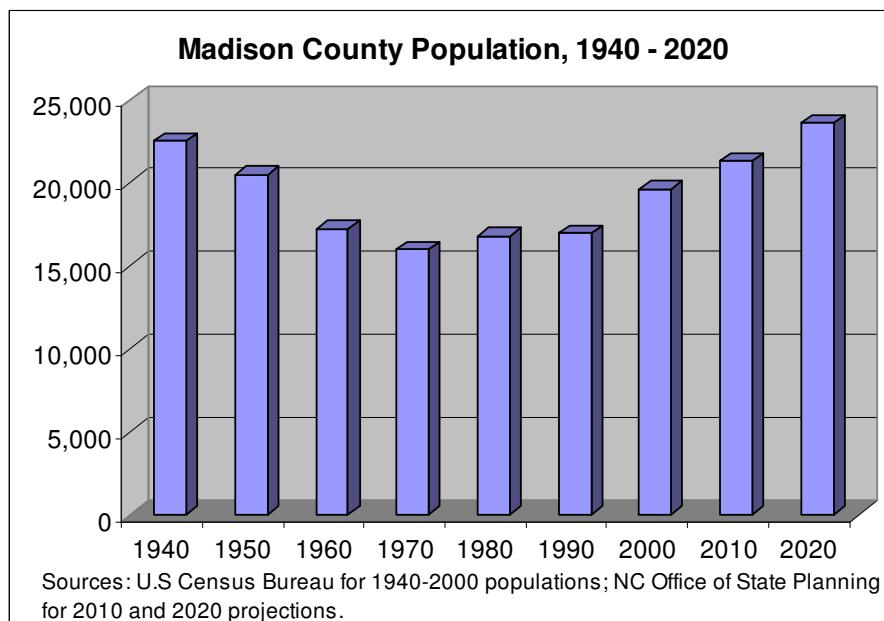
Mars Hill began as a farming community and grew up around the school that eventually became Mars Hill College. The school was established in the mid-1800s and the town was incorporated in 1893. Both the town and school have grown over the years and Mars Hill College remains a prominent part of the Town.

The automobile and its popularity, in parallel with the decline of the railroad, brought a great amount of change to Madison County and caused a downturn in the economic prosperity it had enjoyed. No national or regional thoroughfare connected the county to areas with which it was formerly connected until the mid-1950s. Due to its challenging terrain and lack of adequate access to transportation, retail and manufacturing businesses tended not to locate in the county and residents either commuted to other counties or left the county to find work elsewhere.

In recent years, there has been renewed interest in development and rehabilitation projects in the three towns and Mars Hill College has continued to expand. Interstate 26 was completed through the county in 2003, and a beautiful Welcome Center was built north of Mars Hill that offers visitors a wealth of information about things to do in and around Madison County. However the county has remained predominantly rural, with a strong agricultural base and strong communities.

2.2 Population and Demographics Data and Trends

As shown in the accompanying graph, population in Madison County has both decreased and increased over the past sixty or more years. In 2007, its population was 20,502. Madison County's population reached its peak of 22,522 in 1940. For the next thirty years it lost population and then began gaining it back slowly through 1990. Between 1990 and 2000 there was a large increase (16%), when it went from 16,953 to 19,645 people. Almost all of this growth (98%) was from people moving into the county from other places. The

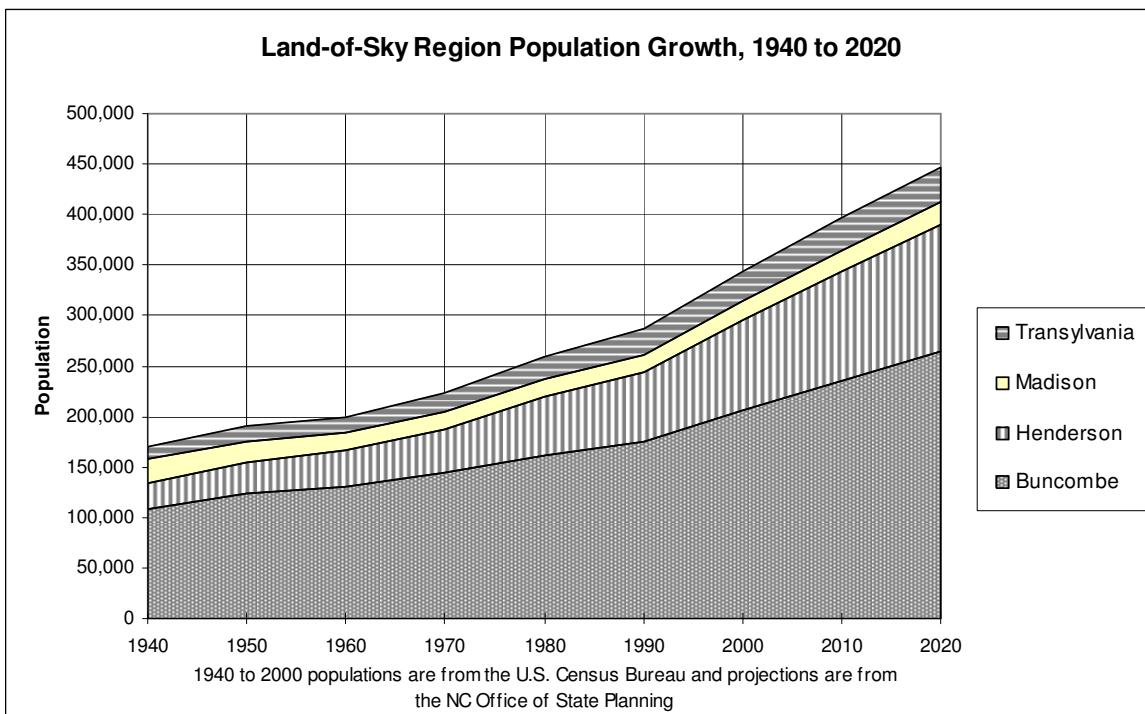


County's population is expected to continue to grow at a steady rate; the population is projected to reach about 23,500 in the year 2020 and 25,000 by 2030.

The towns in Madison County are small and each has its own unique character. The towns of Hot Springs and Mars Hill both lost a large percentage of their populations between 1980 and 1990, but then grew and gained a lot of it back between 1990 and 2000. The towns' populations in 2000 made up 16.5% of the county's total population. The rest of the people are spread out throughout the more rural areas of the county, and there are some strong communities found throughout the county.

Population in Madison County, Region B and North Carolina, 1980-2000					
	1980	1990	2000	Percent Change	
				1980-1990	1990-2000
Hot Springs	690	478	645	-30.7%	34.9%
Marshall	793	809	840	2.0%	3.8%
Mars Hill	2,126	1,611	1,764	-24.2%	9.5%
Madison County	16,827	16,953	19,635	0.7%	15.8%
Region B	259,758	286,577	344,472	10.3%	20.2%
North Carolina	5,880,000	6,632,448	8,049,313	12.8%	21.4%
United States	226,546,000	248,709,873	281,424,603	9.8%	13.2%

Source: U.S. Census 1980, 1990 and 2000



The County is part of the four-county region known as Region B or the Land-of-Sky Region. The other three counties in this region are Buncombe, Henderson and Transylvania. This region has experienced moderate to high levels of growth each decade since the mid-1900s. It also has experienced a growth rate similar to the state of North Carolina over the past few decades. It is projected to continue to grow as shown in the graph below.

Population Density

In this rural county, population density has been consistently low compared to other counties in North Carolina and in the Land-of-Sky Region (Region B). Madison County's density is similar to counties in the mountainous western part of North Carolina. In 1990 there were 37.7 people per square mile in Madison County. This rose slightly to 43.7 in 2000 and to 45 people per square mile in 2007. Even with the projected growth for Madison County, the density is only expected to rise to 54.3 by the year 2030. This low density is partly due to the steep terrain in much of the county and the significant amount of protected land (16% of County's land area) in federal/state ownership.

Population Density History and Projections for Region B						
	Estimated			Projected		
Area	1990	2000	2007	2010	2020	2030
Buncombe County	266.3	314.5	338.08	349.6	389.6	427.9
Henderson County	185.7	238.5	270.91	284.6	331.8	379.6
Madison County	37.7	43.7	45.99	47.2	50.9	54.3
Transylvania County	67.5	77.5	80.26	81.7	85.5	87.8
Region B	139.2	168.6	183.8	190.8	214.5	237.4
North Carolina	136.1	135.2	184.12	191.9	219.9	248.2

The numbers indicate the number of people per square mile in the given geographic area.

Sources: U.S. Census Bureau and NC Office of State Planning

Race and Ethnicity

1990 Population	White		Black		Hispanic Origin (of any race)		Native American, Asian, Some Other Race		
	Place	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Hot Springs	474	99.2		0	0	1	0.2	4	0.6
Mars Hill	1,515	94		82	5	11	0.6	14	0.8
Marshall	802	99.1		4	0.4	2	0.2	3	0.3
Madison County	16,744	98.8		136	0.8	86	0.5	73	0.4
North Carolina	5,008,491	75.6		1,456,323	21.9	76,726	1.2	163,823	2.5
United States	199,686,070	80.3		29,986,060	12.1	22,354,059	9	19,037,743	7.6

The above table shows the racial breakdown in 1990 for the towns in Madison County, the County as a whole and for the state and country for comparison purposes. It shows that the County is predominantly White (98.8%), with a very small number of Black, Hispanic or other races. There were small increases in the non-White population between 1990 and 2000. The group that grew the most was the Hispanic population; it made up 0.5% of the population in 1990 and 1.4% (or 266 people) in 2000. The Hispanic population has been growing fairly rapidly in western North Carolina. The Census Bureau acknowledges that it was likely undercounted in both 1990 and 2000, so there are probably more than this number of Hispanics in the county.

The table below shows the racial breakdown for the County in the year 2000 in a slightly different, more detailed way. It also shows the numbers of American Indians, Asians and Hawaiian and Pacific Islanders, which are small but may become more significant in the future.

Race Breakdown by County and Region									
2000 Census		RACE							Hispanic or Latino (of any race)
		ONE RACE				Hawaiian & Pacific Islands	Some other race	2 or more races	
Area	Total Pop	White	Black or Afr Amer	Am Indian	Asian				
Buncombe percent	206,330	183,761	15,425	803	1,368	79	2,365	2,529	5,730 2.8%
Henderson percent	89,173	82,505	2,725	245	546	16	2,237	899	4,880 5.5%
Madison percent	19,635	19,169	162	53	45	2	88	116	266 1.4%
Transylvania percent	29,334	27,476	1,235	83	111	7	92	330	298 1.0%
REGION B percent	344,472	312,911	19,547	1,184	2,070	104	4,782	3,874	11,174 3.2%

Source: U.S. Census Bureau (www.census.gov); Table DP-1. Profile of Demographic Characteristics

NOTE: These data are from SF-1, which is the 100% count data file.

Age Groups

The following table contains information on population by age groups. The largest age group in Madison County contains people between the ages of 18 and 44, accounting for 36.8% of the County's population. The next largest age group contains people between the ages of 45 and 64, with this group making up 26% of the population. After this, people under 18 years old account for 21.3% of the population. The older adult population, between ages 65 and 84, makes up a smaller but significant percentage (13.7%) of the population. The median age for people in Madison County is 39.3, slightly higher than the median age for North Carolina and the U.S. (35.3).

It is interesting to note that Mars Hill has a large proportion of younger people (age 18-44) but this is due to the number of college age students attending Mars Hill College. On the other hand Marshall has the largest proportion (21.2%) of people over 65 years of age. Also, Madison County as well as other western North Carolina counties, have a larger percentage of older adults than seen in other areas and than the average in the U.S. because the area has been popular as a retirement destination.

Population by Age Groups - 2000										
	Age Groups									
	< 18 Years		18 to 44		45 to 64		65 to 84		85 +	
	Total	%	Total	%	Total	%	Total	%	Total	%
Hot Springs	138	21.4	220	34.1	171	26.5	103	16	13	2
Mars Hill	207	11.7	1,045	59.2	277	15.7	198	11.3	37	2.1
Marshall	182	21.7	295	35.1	185	22	153	18.2	25	3
Madison County	4,172	21.3	7,232	36.8	5,102	26	2,697	13.7	432	2.2
State of NC	1,964,047	24.4	3,307,356	41.1	1,808,862	22.5	735,221	9.1	233,827	2.9
United States	72,142,757	25.6	112,550,338	40	61,749,839	22	25,886,932	9.2	9,092,040	3.2

Source: U.S. Census Bureau; Summary File 1

Education – School Enrollment

The Madison County School System is “student-focused, providing comprehensive educational experiences in a safe environment that equips and empowers students to be responsible citizens” (www.madison.k12.nc.us). The school system is fully accredited by the State of North Carolina and follows the NC State curriculum. Madison County School System has approximately 2,600 students enrolled in four elementary schools, one middle school and one high school. Student enrollment numbers by school and by grade are shown in the following tables.

Number of Students by School - Sept. 2009	
School	Number of Students
Brushy Creek Elementary	480
Hot Springs Elementary	136
Laurel Elementary	95
Mars Hill Elementary	553
Madison County Middle School	601
Madison County High School	710
Early College	46
<i>Total number of students</i>	<i>2621</i>

Source: Madison County School System

Prior to 1975 there were five high schools – in Hot Springs, Laurel, Mars Hill, Marshall and Spring Creek. These high schools were consolidated into one high school, located just off the 25-70 by-pass in Marshall. The middle schools were consolidated into one middle school in 1992. While consolidation has led to efficiencies in administration and the provision of education and related services, it has also resulted in long bus rides for a number of students.

Number of Students by Grade			
Grade	No. of Students	Early College Students	Grand Total
K	203		
1	213		
2	209		
3	218		
4	187		
5	234		
6	199		
7	201		
8	201		
9	229	17	
10	157	29	
11	172		
12	152		
Total	2575	46	2621

Source: Madison County School System
September 2009

The average bus ride for middle and high school students is currently 1.5 hours, and the average distance traveled one way on the bus is 23 miles. A number of county residents expressed concerns about the long rides students must take to and from school.

Education – Graduation and Post-Graduation

Graduation rates and educational attainment data are indicators of workforce preparedness and skill levels/types of an area's population. Prospective employers, when considering an area to locate, look at these data to see if the skills and education levels meet employment needs.

Madison County had a slightly higher high school graduation rate than the other mountain counties (looked at as a group) and the state of North Carolina at the end of the 2007-08 school year. However the percentage of students who pass both the English and Math end of grade exams was slightly lower than the mountain region and the state (see table below). The County's average SAT score – 1,457 – was also a bit lower than the state average of 1,489.

Locality	High School Graduation Rate	Percent Pass End of Grade Exams	Avg SAT Score
Madison	74.0%	56.2%	1,457
Mountain*	72.4%	56.7%	
North Carolina	70.7%	61.2%	1,489

* Mountain region contains the 24 western mountain counties

Source: NC Department of Public Instruction (2008)



Madison County High School

The County's graduation rate decreased for the 2008-2009 school year to 64%, while the state's graduation rate increased slightly to 71.7%. The graduation rate was very different for males and females in Madison County – 78.4% of the females graduated while only 51.8% of the males graduated in 2009 (NC Department of Public Instruction, Four-year cohort graduation rate, 2009).

Data from the 2000 U.S. Census show that many adults in Madison lacked a high school diploma (30.7%). This is relatively high compared to the state (22%) and the average across the mountain counties (25.6%). Related to this, Madison had a lower percentage of adults with Baccalaureate degrees and graduate or professional degrees. (see following table)

Educational Attainment in 2000					
Locality	Percent with less than HS Diploma	Percent with HS Diploma	Percent with some college	Percent with Assoc Degree	Percent with Bachelor's Degree or higher
Madison	30.7%	31.8%	16.3%	5.0%	16.1%
Mountain*	25.6%	30.6%	19.6%	6.6%	17.6%
North Carolina	21.9%	29.6%	19.0%	6.8%	22.5%

* Mountain region contains the 24 western mountain counties

Source: US Census Bureau

Note: Educational attainment is for persons >=25 years old at the time of the 2000 Census

2.3 Incomes and Economic Status

The tables below include data for two adjacent counties – Yancey and Haywood – and the counties in the Land-of-Sky Region, as well as North Carolina as a whole. In general terms, incomes in Madison County tend to be less than incomes in the surrounding counties and in North Carolina. Madison County is similar to Yancey County in terms of Median Household Income and Per Capita Income and both of these are much lower than the other counties and than the NC figures.

Place	Income Levels in 2000 and 2008			
	Median HH Income		Per Capita Income	
	2000	2008	2000	2008
Buncombe	\$36,682	\$47,170	\$20,384	\$26,101
Haywood	\$33,959	\$42,359	\$18,554	\$23,159
Henderson	\$38,263	\$49,090	\$21,110	\$27,041
Madison	\$30,951	\$37,889	\$16,076	\$20,127
Transylvania	\$38,733	\$50,000	\$20,767	\$26,199
Yancey	\$29,587	\$36,284	\$16,335	\$19,731
North Carolina	\$39,184		\$20,307	

Source: NC Department of Commerce, County Profile December 2008

U.S. Census Bureau for 2000 data

The poverty rates shown in the second table correlate with the lower income levels. Madison County has a relatively high overall poverty rate (15.4% of the population) and a very high elderly poverty rate (19.2%) as compared to the state and the other counties. Yancey County has a higher child poverty rate and a higher percentage of people receiving food stamps than the other counties and the state.

Poverty Levels and Information - 2000					
Place	Population in Poverty	Poverty Rate	Child Poverty Rate	Elderly Poverty Rate	Percent Receiving Food Stamps
Madison	2,880	15.4%	17.6%	19.2%	9.8%
Haywood	6,112	11.5%	17.4%	10.3%	10.3%
Yancey	2,780	15.8%	22.1%	16.3%	13.7%
Buncombe	22,920	11.4%	15.3%	9.8%	8.6%
Henderson	8,526	9.7%	14.5%	8.3%	5.5%
Transylvania	2,708	9.5%	11.8%	7.0%	8.8%
North Carolina	958,667	12.3%	15.7%	13.2%	9.9%

Source: NC Rural Center Data Bank / U.S. Census

Chapter 3. Long-term Vision for the County

3.1 Developing the Vision

Ten community input meetings were held in June and July, 2008 in locations throughout the County. They were located in places central to most of the communities in the County (community centers, schools, fire departments) in an attempt to get participation from residents in all the communities. Some meetings were large and others small, with a mix of long-time residents and newer residents at almost all of the meetings. A total of at least 175 people attended these meetings. Input was also gathered from county employees, county-appointed boards and citizens during this timeframe.

The meeting agenda and format was the same for all of the meetings. After welcoming people and introducing staff and steering committee members, attendees introduced themselves and sometimes shared where they lived and how long they lived in Madison County. Then Linda Giltz explained the scope of the Comprehensive Plan, the planning process and schedule for completing the plan. After questions and answers, the rest of the meeting was devoted to gathering input and listening to attendees' ideas and suggestions.

The questions that people were asked to think about and respond to were:

- *What do you love about your community and about Madison County?*
- *What is your vision for Madison County 20-30 years in the future?*
- *What are your concerns about the future of this community and/or Madison County?*
- *Other ideas or suggestions you have for this county plan?*

3.2 Future Vision for Madison County

Many common themes were expressed for all these questions, in all the meetings. The things people love about their communities in Madison County include:

- The people – friendly; good neighbors; trustworthy; hard-working; strong families
- The natural resources and beauty – mountains, rivers, trees, nature, clean water and good drinking water, scenic views
- The distinct and unique small towns and rural setting; small, safe and close-knit communities
- Quiet, remoteness, dark skies
- Farms and farming communities
- Rich heritage and music and arts/crafts traditions

When asked to think about what they would like to see in place and in the landscape 20 to 30 years in the future, people in all the meetings said that we need to preserve all those things we

love about the County today (i.e., the things they listed in response to the first question). In addition to those, other things people want to see include:

- More job opportunities (that pay a “living wage”) and businesses in the County, and “closer to home.” Children choosing to stay and live and work in Madison County.
- Improved communications infrastructure throughout the County.
- Both commercial and subsistence farming is thriving and supported at the county level. Agriculture is seen as a viable and respected way to make a living.
- The Towns are vibrant, community centers containing businesses and services needed and used by surrounding residents. New businesses have located in/near the towns and aren’t spread across the landscape.
- Smaller, local businesses predominate, with little or no very large retail stores or centers.
- More youth graduate from high school and students have shorter rides to and from school.
- Youth have more places to recreate and learn new skills that are closer to home.
- Views and rural character have been preserved by implementing design guidelines/standards for new development and other policy and/or regulatory changes.
- Traditions, history, and culture are being passed on to young people and are a strong part of community life.
- Public transportation service exists that provides transportation between the three towns and to/from Asheville.

A number of concerns were also expressed and appear to be shared by people throughout the County. These concerns are being considered along with the future vision in shaping the data gathering, analysis and recommendations in this plan. Concerns include:

- The ability for local people to continue to be able to afford to live here (and pay taxes), with the increased value of land and sales prices for land and homes. People are also concerned about the increased amount of real estate speculation occurring in the county, which drives up the price of land.
- Losing agriculture as a way of life; losing the agricultural communities and farmland.
- Large subdivisions and gated communities and other large developments that do not fit the character of Madison County.
- Ridge top development and visible development on mountainsides.
- The need to better understand water capacity/availability and consider new developments’ impacts on water supply as part of the development review and approval process.
- Loss of heritage and traditions that make up the culture of Madison County.
- Need for a balance amongst property rights, preservation and development.
- Need more, accessible health care services in the County.

3.3 Realizing the Vision

County Commissioners recognized that a plan was needed to address the multiple issues related to growth and change that the County has been experiencing in recent years. This plan is a guide and a resource for the Commissioners as they consider investments, changes in policies and ordinances and other actions affecting the future of Madison County.

The recommendations in this Plan consider the County's history, existing conditions and changes that have been occurring and are likely to occur in the future. The recommendations are also related to realizing the future vision and addressing concerns of county residents. The plan will provide for possible recommendations and guidance to help the County:

- ❖ Preserve the rural character, natural resources and scenic beauty of Madison County;
- ❖ Preserve agriculture and the agricultural communities in the County;
- ❖ Assist and support commercial and subsistence farmers, so agriculture thrives and continues to be a vital part of the County's economy;
- ❖ Identify where and what types of development occur in the county and plan for growth;
- ❖ Recognize emerging economic opportunities and identify the best locations for businesses/employers;
- ❖ Enable the development of more affordable housing options in the County;
- ❖ Plan for and provide services and infrastructure in more coordinated efforts with the towns; and
- ❖ Identify changes to current policies, procedures and ordinances to accomplish the above goals and protect public health and safety.

Chapter 4. Existing Land Use

4.1 Summary and analysis of current land use

Madison County has a rural, mountainous landscape, with much of the land covered with farms, forests and residences on large parcels. It also contains about ten small communities with small community centers in addition to the three small towns of Hot Springs, Mars Hill and Marshall. Commercial development occurs primarily on the main transportation corridors – US 25/70, NC 213 – as well as in the towns. Public facilities such as schools and medical facilities are also predominantly located in the same places as commercial development and near community centers. There is a small amount of industrial land use and there are few manufacturing businesses in the County.

Looking at current zoning combined with vacant parcels provides a pretty good picture of existing land use in the County. The **Current Zoning and Land Use Map** (Map 3) shows the current zoning of all the parcels in the County and also shows which parcels are either vacant or contain a non-livable structure (i.e., structure value less than \$1000). There are some discrepancies on the map, primarily with commercial (Retail Business) zoning along US 25-70 and NC 213. Some businesses which have been operating for a number of years were not marked as retail businesses on the original zoning map. They are marked as retail businesses on the Current Zoning and Land Use Map and will be noted as such on the next revised zoning map. There are clusters of businesses along US 25-70 near NC 213, in/near Marshall and in the Walnut community and along NC213 near US 25-70, in the Grapevine community and in and near Mars Hill.

The following sections describe the current zoning districts and where this zoning exists in the County.

Amount of Land in Each Zoning District

The various zoning districts are described in Section 4.2 below. The County has established nine zoning districts, however only five of them are currently in use:

- Residential-Agricultural (R-A)
- Residential-Resort (R-2)
- Retail Business (R-B)
- Industrial (I-D)
- Manufactured Home Park (MHP)

Almost all of the land that is in the County's zoning jurisdiction – 96% - is zoned Residential-Agricultural (R-A). Of the

Land Area and Parcels by Zoning District			
Zoning	# Parcels	Acres	Percent by Area
Rural-Agricultural (R-A)	18,327	294,138.76	96.0%
Retail Business (R-B)	197	2,342.92	0.8%
Residential-Resort (R-2)	2,289	8,258.10	2.7%
Industrial (I-D)	61	988.66	0.3%
Manuf. Home Park (MHP)	87	821.07	0.3%

remaining land, almost 3% is zoned Rural-Resort (R-2) and most of this is in and around Wolf Laurel and also in a development along NC 208 in the top central part of county. Very small amounts are zoned for retail businesses, industrial uses and manufactured home parks.

Amount of Land that is Vacant

Madison County contains a lot of open land with fields, forests and mountains. A large amount of the land in the County does not have any buildings on it (or if there are old structures, they have no value according to the County tax office). About half, 51 percent, of the parcels in the County are vacant, representing 56 percent of the land in the County.

Amount of Land by Jurisdiction

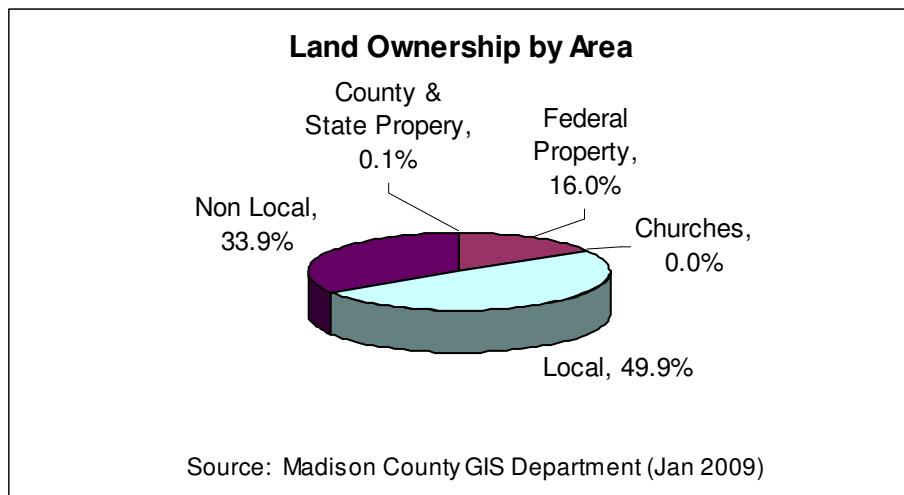
The three towns in Madison County are both small in population and small in size. Collectively they constitute only two percent of the County's land area. Marshall is the largest town, with almost 2,500 acres in its town limits. Mars Hill is a little smaller at 2,034 acres and Hot Springs is about half as large as the other two, at a little over 1,000 acres. Additionally, Mars Hill has extraterritorial jurisdiction (ETJ) over an area surrounding the Town limits, which gives the town the authority to control zoning and land use in this area. Mars Hill's ETJ extends approximately one mile out from the edges of its Town limits.

Town/County	# Parcels	Acres
Hot Springs	644	2,034
Mars Hill	644	1,113
Marshall	654	2,444
<i>Totals for Towns</i>	<i>1,942</i>	<i>5,591</i>
Madison County	20,059	288,942

Source: Madison County GIS (Oct 2009)

Land Ownership

Madison County's north and northwest sections contain a large amount of US Forest Service land, accounting for 16% of the total land area in the County. The remaining land is almost all in private ownership. The following chart was developed by looking at mailing and physical addresses on record at the County tax office of property owners for all parcels in the county.



There are a lot of parcels along and near the southern border with Buncombe County near the Weaverville and Leicester communities and some owners have a Buncombe County address listed for their Madison

County parcel. So, although about 34% of the land and half of the parcels show up with a non-Madison County address, some of these are owned by local people who have a Buncombe County address. Refer to **Parcel Ownership Map** (Map 4) to see the distribution of local and non-local ownership. It is spread throughout the county, with higher concentrations along the border with Buncombe County.

4.2 Current Zoning Categories and Map

Madison County was the first county in western North Carolina to adopt a zoning ordinance, in 1975. It also has the following ordinances which govern aspects of land use: Subdivision Ordinance (adopted in 1998); Watershed Ordinance (adopted in 1998); Flood Damage Prevention Ordinance (adopted in 1987); Communication Tower Ordinance (adopted in 2000); Ridge Protection Ordinance (adopted in 1983); and an Off-Premise Sign Ordinance (adopted in 1998).

The Land Use Ordinance (a.k.a. the zoning ordinance) governs the types and intensity of uses that are allowed on parcels of land in the county. It also contains standards that must be met for development activities and structures. North Carolina state law exempts “bona fide farms” from county zoning (NC G.S. 153A-340), however non-farm residences or other non-farm uses on farm property are subject to regulations in the zoning ordinance. The towns of Hot Springs, Marshall and Mars Hill have their own land development ordinances that define the regulations within their jurisdictions.

Madison County has established the following Zoning Districts in their Land Use Ordinance:

- Residential-Open Space (R-8OS)
- Residential-Agricultural (R-A)
- Residential (R-1)
- Residential-Resort (R-2)
- Retail Business (R-B)
- Industrial (I-D)
- Manufactured Home Park (MHP)
- Floodplain (F-P)
- Industrial (Sludge) (I-S)

All these districts are not currently being utilized (applied to parcels); the only ones in current use are:

- Residential-Agricultural (R-A)
- Residential-Resort (R-2)
- Retail Business (R-B)
- Industrial (Sludge) (I-S)
- Manufactured Home Park (MHP)

The following paragraphs contain brief descriptions of each of these districts. Please refer to the Current Zoning and Land Use Map (Map 3) to see where these districts are located in the County.

Residential-Open Space (R-8OS) – This district is intended for areas that are to contain low-density, residential and open space uses. Areas with R-8OS designation are mainly areas with exceptionally steep slopes and without access to public water or sewer systems. A minimum of 80,000 square feet (approximately two acres) is required per dwelling unit.

Residential-Agricultural (R-A) – This district is intended for areas that are to contain low-density, primarily residential and agricultural uses. Other uses are allowed, including customary home occupations, professional offices, churches, schools, recreational areas and a few others. Areas with R-A designation are mainly areas without access to public water or sewer systems, and the district's purpose is to ensure that development occurs at a sufficiently low density to maintain a healthy environment. A minimum of one acre is required per dwelling unit.

Residential (R-1) – This district is intended to be a quiet, low-density neighborhood consisting of single-family residences along with limited home occupations and limited private and public community uses. Uses that are not permitted in this district include mobile homes, rest homes, clubs and lodges, backyard workshops and kindergartens and day nurseries. A minimum of one acre is required per dwelling unit.

Residential-Resort (R-2) – This district is intended for areas in which the principal use of the land is for residential purposes, with the provision of commercial services and group residential and recreational areas for resort users as well as the permanent residents. It allows for single-family, two-family and multifamily dwelling units, mobile homes, some agricultural uses, camping areas and facilities, residential vacation rentals and recreational and community facilities and areas.

Retail Business (R-B) – This district is intended for areas in which retail trade and consumer services exist and will expand as the community's and region's populations increase. Many retail and consumer service uses are permitted in this district. The minimum lot size is 20,000 square feet and maximum building height is 50 feet. Off-street parking and loading areas are also required in this district.

Industrial (I-D) – This district is established for areas where industries and warehouses are the primary land uses. These types of uses typically require large tracts of land. A large variety of industries are permitted in this district, including larger retail businesses that may not be permitted in the R-B district. Industrial uses with greater impacts of noise, traffic, odor, etc. are permitted under a Conditional Use process. The minimum lot size for this district is one acre and maximum building height is 50 feet. Off-street parking and loading areas are also required in this district.

Floodplain (F-P) – This district is intended to meet the needs of the rivers of the county to carry abnormal flows of water in time of flood, to prevent building or encroachments which will increase flood heights and damage, and to prevent the loss of life and excessive damage to property in areas of greatest flood hazards. Recreational, some agricultural, wildlife, parking and loading and similar areas are allowed in this district. The only structures that are allowed are bridges, dams, docks, piers, ramps and temporary facilities (e.g., carnivals, circuses).

Industrial Sludge Disposal (I-S) – This district is established for areas suitable for the disposal of municipal or industrial wastewater treatment residuals. These areas are located at an appropriate distance from densely populated areas, commercial centers, heavily traveled transportation corridors, area of recreational importance and water resources of county-wide significance. All uses that are permitted in the R-A district are permitted in this district. Landfills, sawmills and sludge disposal operations are permitted with a Conditional Use permit.

Manufactured Home District (MHP) – This district is established to ensure that citizen of the County may be provided with reasonably priced, adequate housing. Manufactured Home Parks are allowed in this district with a Conditional Use permit.

Chapter 5. Environmental Issues and Natural Resources

5.1 Environmental and Natural Resource Issues

Madison County is located in the heart of the Appalachian Mountains. The main “floor” of the county is about 2000 feet above sea level, with a number of mountain peaks reaching more than 4000 feet in elevation. In the central part of the county, the French Broad River flows through one of the largest gorges in the eastern U.S. Other streams that flow into the French Broad River form the many coves and valleys that are found throughout the county.

Madison County is rich in natural resources and wildlife. The County is covered with mountains and rivers, as can be seen in the accompanying maps. It also contains lots of good soil, extensive forests and receives adequate rainfall (average annual rainfall is 70 inches). The topography has shaped the settlement patterns and transportation routes over the years. The many rivers and streams (see Map 6 – Water Resources) provide water and habitat for wildlife, offer fishing, boating and other recreational opportunities and add to the scenic beauty of the area. The County contains many streams that are classified as “high quality waters” or “outstanding resource waters” and many with native trout and other fish communities.



Public Lands and Recreational Opportunities

National Forest properties make up one-sixth of the land in the County and can be found all along the northern county boundary. These large tracts offer important habitat especially for larger animals and for plants such as ginseng and goldenseal which need larger and less disturbed forest areas to survive. The National Forests also offer a wide range of outdoor recreational activities, including hiking, fishing, hunting, rafting/kayaking, horse-back riding and camping. They contain an interconnected network of trails, including the Appalachian Trail, which runs across the northern part of the county. The Town of Hot Springs has been designated a gateway to the Appalachian Trail and has a long history associated with the AT. See the accompanying Madison County Recreation Maps (Maps 5A and 5B) for locations of the various recreational facilities, hiking trails, bicycling routes and motorcycle routes. The beautiful scenery and windy, mountainous roads draw many motorcyclists to the county for recreational riding.

Biodiversity and Habitats

Madison County is part of the Southern Blue Ridge Ecoregion, as described in the NC Wildlife Action Plan (NC Wildlife Resources Commission, 2007). Habitats range from high peak spruce-fir forest to low floodplain valleys in the ecoregion. The spatial diversity of the region's topography (slope, aspect, elevation) with its unique geologic history has resulted in a broad array of biodiversity. The ecoregion also contains a wide range of climate types. The combination of these conditions, and that the ecoregion escaped glaciation, has provided specialized habitats for the evolution and survival of a vast number of species, including over 400 endemic species – the most found in any ecoregion in the United States (Ricketts et al., 1999).

Many of the factors affecting species in this region can be traced to larger habitat-level issues. The decline of high elevation forests is one of the most pressing habitat concerns in the ecoregion – the southern Appalachian spruce-fir forest is considered the second most endangered ecosystem in the United States (Noss et al., 1995). Loss of this forest type has limited habitat for many bird species endemic to this region. Other habitat loss issues include succession of high elevation heath and grass balds, homogeneous maturity of forested stands, and habitat fragmentation due to development (NC Wildlife Resources Commission, 2007).

The One North Carolina Naturally program of the NC Department of Environment and Natural Resources has an online mapping tool that shows various habitats and indicators of biodiversity, as well as other natural resources. Users can zoom into any area across the state. It can be accessed at <http://www.onencnaturally.org/pages/ConservationPlanningTool.html>. This tool plus the NC Wildlife Action Plan and its related datasets plus the regional data and tools described in section 5.2 below provide a wealth of data and resources for land owners, developers, planners and others on environmental factors and natural resources.

Land Cover

The Land Cover Map (Map 7) shows broad categories of the types of vegetation and/or development that cover the landscape of the county. A small amount of land is covered with highly or moderately intense development (roads, buildings, town centers, etc.). The French Broad River shows up as the largest body of open water. Much land along the valley bottoms is made up of cropland or pasture; that is where most of the farmland exists in the County. The vast majority of the land in the county is covered with forest.

Lands Adjacent to National Forest Lands

A large number of parcels under private ownership are adjacent to National Forest lands. The North Carolina Forest Service has developed a comprehensive education and implementation program which provides details on construction and landscaping practices and selective clearing to reduce the risk of structural fire damage as the result of a wildlands fire. A key tactic

is providing defensible space around all structures. For more information see www.dfr.state.nc.us and www.ncfirewise.org.

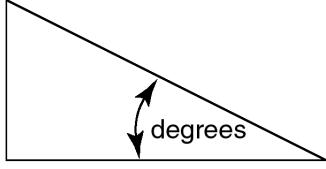
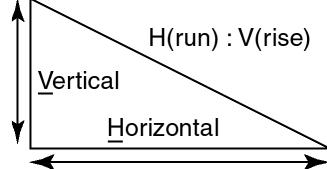
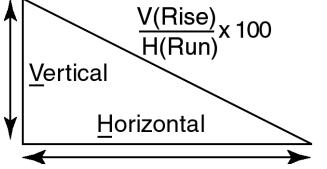
Topography

The abundance of mountains, rivers and coves provides dramatic scenery and also presents challenges to development. As can be seen on the Topography Map (Map 8), much of the land across the county has some slope to it. Many of the ridges are “protected mountain ridges” designated by the Mountain Ridge Protection Act of 1983, which means that buildings in the protected areas cannot exceed 40 feet in height and must not protrude more than 35 feet above the ridge. The ridge area that is covered in this legislation includes all land that is within 100 feet below the elevation of the crest of the ridge.

The largest area of mostly flat and lightly sloped land (much of it with slopes of 10 percent or less) is the area in and around Mars Hill. Other lightly sloped areas are found near the Buncombe County border, south of the Shelton Laurel Creek (NC 212), around US 25-70 and the French Broad River northwest of Hot Springs and along NC 209 through Spring Creek.

Slope is expressed in a couple different ways, depending on its context. The chart below provides a comparison of the different expressions. For example, a 45 degree angle/slope is the same as 1H:1V (rise over run) and 100 percent slope.

Slope Measurement – Comparison Chart

Degrees	Ratio	Percent
		
45	1 H : 1 V	100%
27	2 H : 1 V	50%
18	3 H : 1 V	33%
14	4 H : 1 V	25%

5.2 Strategies for Preserving Natural Resources while Accommodating Growth and Development

(1) PRE-DEVELOPMENT CONFERENCE AND SITE-SPECIFIC ASSESSMENT

5.2.1 Strengthen pre-development evaluation process for ALL types of development

Madison County Subdivision Control regulations require a pre-development evaluation (Section 7.5.1), where the developer meets with staff and shares a “Sketch Plan” that contains the information outlined in Section 7.6.1. The county should encourage developers to be more proactive in providing information and details regarding development.

The purpose of this pre-development conference is to create a dialogue, early in the development process, among local government staff, developers and project specialists. It is an opportunity for the developer to obtain advice and technical assistance from county staff and to understand the review process and requirements.

The developer should bring to the meeting:

- Vicinity map showing the location of the property in relation to neighboring tracts, roads, and waterways
- Base map showing property boundaries, total acreage, adjacent property owners, 2' or 5' topo, USGS blue-line streams, wetlands and other significant natural resources, zoning
- Aerial photo
- Concept Plan showing:
 - Proposed land uses;
 - Access road alignments and statement of maximum road grades and grading limits;
 - Location of suitable building areas, including proposed “building envelopes”;
 - Summary of infrastructure construction, density and minimum lot size;
 - Preliminary water supply assumptions;
- Preliminary statement regarding proposed water quality protection standards and how they will meet or exceed state/local standards
- Evaluation of water and sewer adequacy for proposed large developments

5.2.2 Suggest a full assessment and analysis of the property before proposing preliminary plan.

The County may want to request that the developer provide an overall assessment of the property performed by an engineer. This will allow both the county and the developer better information in deciding how the property is developed.

(2) CONSERVATION-BASED DESIGNS

5.2.3 Encourage designs that leave large, unfragmented natural areas intact.

The County should encourage designs that leave large, unfragmented natural areas intact – through education, incentives and requirements. Fragmentation of the landscape reduces the diversity of wildlife and contributes to the degradation of water resources. Different species require different habitats and larger animals, like bears, require a large area to survive. A certain level of biological diversity is essential for our environment to function. If too much diversity is lost, the food web breaks down and the ecosystem can no longer renew itself. Also as development occurs, pavement and other impervious surfaces disrupt the water cycle and channel pollutants into waterways.

5.2.4 Encourage and consider requiring conservation-based design and development plans, for all types of development.

The County can encourage conservation-based design and development plans, for all types of site development, as well as subdivisions. These practices strive to conserve a site's natural resources and features while designing the development on the site (see diagram s below). The newly adopted Planned Unit Development regulations encourage the use of conservation subdivision design.

Conservation areas should, where possible, provide for the following conservation purposes:

1. the preservation of land for outdoor recreation or for the education of the general public;
2. the protection of a relatively natural habitat for fish, wildlife, plants or similar ecosystems;
3. the preservation of open space (including farmland and forest land) where such preservation is:
 - pursuant to a clearly delineated Federal, State or local conservation policy, and will yield a significant public benefit;
 - for the preservation of an historically important land area or a certified historic structure;
 - to provide public access to public waters;
 - to provide public access to public trails;
 - to provide for fish and wildlife conservation; or
 - to provide other similar conservation purposes.

Conservation Subdivisions (also referred to as Open Space Subdivisions and Cluster Subdivisions) typically involve the permanent protection of a large majority of the site (more than 50%). The area selected for protection will generally have valuable environmental or ecological resources such as creeks, wetlands, forests, threatened wildlife habitats, or irregular/extreme topography. Ideally, the conserved areas should be linked to a broader

network of conserved lands (e.g. floodplains, forest stands) to preserve the larger ecosystems. The resultant lots are often clustered on a small percentage of the site and can be made up of a variety of lot sizes and densities.

Randall Arendt, a landscape architect from New England, developed the concept of Conservation Design, in his books, *Rural by Design* and *Conservation Design for Subdivisions*, and has authored numerous articles and given presentations on this topic. The main steps for conservation-based design are:

1. Identify all potential conservation areas
2. Identify all potential development areas
3. Locate the house/building sites
4. Design the street alignments and trails (as appropriate to project)
5. Draw in the lot lines (for subdivisions)



Conventional Subdivision (above left with 2 acre house lots) vs. Conservation Subdivision (above right with just under 3/4 of an acre, 30,000 sq. ft., house lots) with the SAME number of home sites (55) on a 130 acre site

Diagram above courtesy of LandChoices (www.landchoices.org) and diagram below courtesy of *Mountain Landscapes Initiative Toolbox* (www.mountainlandscapesnc.org).



Conceptual Agriculture-Oriented Neighborhood
(Macon County, NC)

A conceptual plan for a 100 homes oriented around small subsistence and organic hobby farms one to five+ acres in size to create the ideal arrangement for social and agricultural sustainability.

5.2.5 “Steer” commercial development to occur along existing roadways and in/near existing communities.

To preserve natural areas, minimize fragmentation and to enhance community character, focus new development along existing roadways and in and near existing communities and towns, through implementation of zoning recommendations in this plan (see Chapter 11), and as shown on the Proposed Future Land Use map (Map 16). The main transportation corridors shown on the map are good locations for new commercial and industrial development as well as a mix of other uses.

(3) BEST MANAGEMENT PRACTICES

5.2.6 Encourage the use of Best Management Practices (BMPs) for controlling erosion and storm water run-off.

Encourage the following Best Management Practices (BMPs):

- Encourage the use of Low Impact Development (LID) techniques to minimize stormwater impacts and run-off. The primary goal of LID techniques is to mimic the predevelopment hydrology of the site by using design techniques that store, infiltrate, evaporate and detain run-off. Techniques include reducing imperviousness, maintaining natural drainage courses, minimizing the use of pipes, minimizing clearing and grading and incorporating rain gardens and natural areas to trap and filter rain water.
- Limit land disturbance activities and limit the amount of land disturbed.
- Limit the amount of impervious surfaces — Studies show that watersheds with 10% or more imperviousness show declined biological health; aquatic habitat degradation correlates to increased rate of imperviousness.

A couple resources for these best management practices are:

- (1) *Low Impact Development: A Guidebook for North Carolina*, a new comprehensive resource authored by NC State University and published by the NC Cooperative Extension in June 2009 (www.ncsu.edu/weco/lid)
- (2) *Key EPA Internet-Based Tools for Watershed Management*, also known as the “Red Book,” which contains a wealth of best management practices for watershed management from around the nation.
(www.epa.gov/owow/watershed/wacademy/epatools/pdf/indepth_tutorial.pdf)

Selected Resources:

Arendt, Randall, 1996. *Conservation Design for Subdivisions: A Practical Guide to Creating Open Space Networks*. Island Press, Washington, DC.

Arendt, Randall, 1995. *Rural by Design: A Handbook for Maintaining Small Town Character*. Planners Press, Chicago, IL..

NC Wildlife Resources Commission, 2009. *Green Growth Toolbox*
(<http://www.ncwildlife.org/greengrowth/index.htm>).

North Carolina Wildlife Resources Commission, 2007. *North Carolina Wildlife Action Plan*, Raleigh, NC.

Ricketts, T. H., E. Dinerstein, D. M. Olson, C. J. Loucks, W. Eichbaum, D. DellaSala, K. Kavanagh, P. Hedao, P. T. Hurley, K. M. Carney, R. Abell, and S. Walters. 1999. *Terrestrial ecoregions of North America: a conservation assessment*. Island Press, Washington, DC.

Southwestern Planning and Economic Development Commission, the Community Foundation of Western North Carolina and The Lawrence Group Architects of North Carolina, Inc. , 2008. *Mountain Landscapes Initiative* (www.mountainlandscapesnc.org)

Chapter 6. Economic Development Strategies

6.1 Economic Trends and Resources

Madison has a long history of small-scale agriculture and a cultural heritage that is full of music, craft and strong communities. The towns also have long histories and unique characteristics – Mars Hill has a strong connection with Mars Hill College; Marshall has long been a center for commerce, trade and local government; and Hot Springs has been a tourist destination since the railroad enabled people to travel there more easily. Madison is a rural county, with close ties to the urban center of Asheville, for jobs, educational and medical institutions and goods and services. The County got more connected to the greater region and to tourists and others traveling through and nearby when Interstate 26 was completed in August, 2003. A new Visitor Center was built along the interstate north of Mars Hill that provides information on county and regional attractions and resources.

Madison County's economy is primarily made up of the following business sectors and their related revenues and jobs:

- Agriculture and related products and services;
- Construction;
- Outdoor recreation;
- Arts and music venues and events;
- Heritage and cultural tourism;
- Education; and
- Manufacturing.

The following sections will go into more details regarding employment, number of establishments of various types and the “support structure” for the various industries.

Economic activity can be looked at from a few perspectives – it provides jobs, produces revenue, increases the tax base, often increases other business activity and it represents opportunities for buying/selling products and services. **Economic development** includes efforts that seek to improve the economic well-being and quality of life for a community by attracting, creating and/or retaining jobs and businesses and preserving or improving residents' incomes and the community's tax base.

Economic development is critical to the success of the county not only for providing new jobs, but also for achieving a more balanced tax base. Property taxes make up almost half (approximately 46%) of the County's revenue and 34% of the total revenue comes from residential property taxes (data are from the 2008-09 fiscal year). County population is expected to grow at a moderate, steady rate of 6 to 10 percent each decade for the next couple decades according to the NC Office of State Budget and Management. As the population grows, demand for services and infrastructure increases. For fiscal sustainability and to support the population growth, a diverse tax base should be pursued and maintained. Tax revenues

from businesses can offset the increasing costs to service residential development in the county.

Attracting new business and providing support and assistance to help existing businesses grow need to be part of the County's economic development strategy. This will require identifying areas that are or can be served by adequate public infrastructure and are locations where the County wants to direct growth, along with promotional and recruiting activities targeted to the types of businesses that will fit in with the county's rural character. Factors that businesses consider when looking at places to locate include quality of life, workforce characteristics, road capacity and access, development policies and regulations, housing affordability, quality of the local school system, and more. The County will need to partner with the towns and utility and infrastructure providers to present an attractive set of qualities, infrastructure and amenities to potential new businesses.

Recent Economic Development and Marketing Studies

Two economic studies were completed for the County in recent years – a marketing strategy for the county was done in 2004 and a retail market analysis was prepared in 1998. Both studies are briefly summarized below.

The “*Retail Market Analysis*” (NC Department of Commerce, Mountain Resource Center, 1998) contains a series of tables showing 1996 retail sales by types of stores and by types of merchandise along with tables of population and demographics data. The data show that for most types of stores – all except food and drug stores – a significant amount of money was spent outside Madison County, creating approximately \$64 million in net “lost” sales for the year. Looking at various categories of merchandise, the categories with the highest amounts of net sales outside the county were: clothing; furniture and sleep equipment; drugs health and beauty aids; footwear; appliances and jewelry. The data show there are opportunities for additional retail sales in the county and which types of stores and retail categories have the most demand.

“*Marketing Madison County: An Economic Development Marketing Strategy for Madison County and the I-26 Corridor*” (Bullock & Haddow LLC, New Orleans, LA; 2004) was prepared for the Economic Development Board in 2004. It provides data on visitation to the county and the primary groups of people who visit Madison County and offers recommendations and strategies to attract more people and encourage them to stay longer and come back for future visits. In addition to marketing to tourists, the plan recommends that the County reach out to potential retirees, second-home buyers and individuals looking to start or re-locate their businesses. It also recommends developing new markets, related businesses and partnerships around its strong agricultural heritage and its wealth of artisans/artists and natural resources.

A term that has become popular describing this type of economic development is “asset-based development” – building economic development strategies on an area’s assets and strengths. Madison County has many assets and strengths. The County’s main assets are its:

- people;
- communities;
- natural resources;
- scenic beauty;
- farms, farmland and rural character;
- cultural heritage;
- high quality educational institutions; and
- peace and quiet found in multitude of remote locations.

The County's strengths include its:

- strategic location (near Asheville, access to/from I-26) for recreation and tourism;
- wealth of natural resources and outdoor recreation opportunities;
- strong agricultural economy and knowledge-base;
- strong tourism, business and community organizations;
- reliable workforce with a strong work ethic;
- relatively large number of artists and artisans.

The County will benefit from developing and implementing an economic development strategy and plan that is based on and builds upon its assets and strengths.

Current Staff, Boards and Programs

Madison County does not currently have a staff person dedicated to work on economic development. The County Manager plays a fairly active role in economic development and staffs the two county-appointed boards – the Economic Development Board (EDB) and the Tourism Development Authority (TDA). Cooperative Extension staff also play an active role in providing farmers with technical and business training, and looking for opportunities for new products, markets and services.

The **Economic Development Board (EDB)** is an all-volunteer board that reviews economic development issues in Madison County and advises the County Commissioners. Board members are appointed by the Commissioners for three year terms. The EDB has existed for about fifteen years and has had periods of activity and inactivity during the years. It currently meets monthly on the first Monday of the month at 4:30 p.m. at the Very Small Business Center. The EDB website is <http://www.madisoncountync.org/-Development.html>.

The **Tourism Development Authority (TDA)** is an all-volunteer, appointed board that promotes Madison County events, activities and businesses and produces promotional materials for these purposes. It coordinates with the Madison County Visitor Center and other organizations to distribute materials and promote events.

The TDA website - www.visitmadisoncounty.com – contains lots of ideas and information for people who are thinking of visiting the County.



The **Madison County Chamber of Commerce** is a membership organization that serves and supports the business community in the county. The Chamber promotes local businesses by producing a business directory and a visitor's guide, coordinating events which feature or promote local establishments, and encouraging communications and networking through newsletters and gatherings. The Chamber's website contains lots of information on businesses and things to do in the County – www.madisoncounty-nc.com.

The **Very Small Business Center** is a new business support center located in the Marshall High Studios on the island. It opened in the fall of 2008 and offers meeting space, a library of materials related to starting a small businesses and successful small businesses, and opportunities for networking and marketing. It has been supported with grant funds and its future will rely on securing a more permanent source of funding.

The **Madison County Arts Council** is a community-based non-profit organization that "provides services and resources to artists and organizations and presents and produces culturally diverse programming for the public." It is the only broad-based arts organization in Madison County. The Arts Council hosts numerous events and classes, serves as a clearinghouse for arts information and promotes the arts at the local and regional level. Their website is: www.madisoncountyarts.com.

Other Local/Regional Economic Development Resources

AdvantageWest Economic Development Group is western North Carolina's regional economic development commission. Chartered by the North Carolina General Assembly in 1994, AdvantageWest is a non-profit public-private partnership whose primary focus is marketing the North Carolina mountains to corporations seeking to relocate or open a new facility, expand an existing business within our region, and those who might otherwise improve the quality of life for citizens within our region through activities such as filmmaking, entrepreneurship and tourism. See www.advantagewest.com for more information.

HandMade in America was founded in 1993 with a belief that economic revitalization wasn't necessarily tied to luring "modern" industry to the region but in making known the hidden heritage and craftspeople that are so vitally a part of western North Carolina. "HandMade has evolved into a nationally recognized, multidimensional institution that has sparked initiatives and creative collaborations in education, small town revitalization and community development, economic development, environmentally sustainable strategies and enhanced opportunities for makers of the handmade object, heritage tourism, and incorporating crafts into building design and furnishing." (from www.handmadeinamerica.org) HandMade works across western NC, with its office in Asheville. HandMade has initiated or been involved with numerous projects in Madison County, including small town revitalization projects in all three towns, partnerships with Madison County Farms and Madison County Arts Council, the barn quilt project and the establishment of the Very Small Business Center at Marshall High Studios.

The **Madison Campus of Asheville-Buncombe Technical Community College (A-B Tech)** is a full service campus – students may complete the admissions and registration processes for classes at all three campuses in General Education Development (GED), continuing education, and curriculum without making a trip into Buncombe County. Free assessment and preparation sessions in reading, writing, social studies, mathematics and science for General Educational Development (GED) are offered throughout the year. Students who successfully complete the GED preparation can schedule and complete the GED examination at the Madison Campus.

Other continuing education course offerings include blacksmithing, oil and watercolor painting, introductory courses in computing, computer skills for the workplace, word processing, Excel, Access, PowerPoint, QuickBooks, ceramic tile installation, computer repair, internet marketing, solar electric systems, solar hot water and space heating systems, Spanish, effective teacher training, notary, nursing assistant, basic Emergency Management Technician, and welding. Many of these classes lead to employment in new jobs or upgrading skills for promotional opportunities. Free classes in computer empowerment, computer basics for the workplace, and pathways to employment are offered to residents who meet certain income guidelines. Curriculum (college credit) course offerings include English composition, public speaking, introductory algebra, college algebra, computing, psychology, history, anatomy and physiology, microbiology, early childhood, criminal justice, statistics, business courses, and welding. A list of courses offerings each term/semester is available at www.abtech.edu. Space limitations and the lack of science laboratories prohibit scheduling additional classes. Many other classes have been offered but were canceled due to lack of enrollment.

Free classes are offered to assist those already in business or those planning to begin a small business. These classes include, but are not limited to, business loan fundamentals, small business media marketing, business planning, tax implications for green business, buying and selling business basics, etc. Free small business counseling sessions are also available by appointment on a regular basis during any term.

The **Madison County JobLink and Career Center** are located at the Madison Campus of A-B Tech. The JobLink and Career Center assists in connecting those seeking employment with businesses/organizations seeking employees. Job applicants who need additional training are registered into the appropriate A-B Tech classes. Clients receive assistance with career planning, career development, resume writing, interview skills, and job placement. Tuition assistance is provided for students who meet certain income requirements.

USDA Rural Development (RD) administers rural business, housing, utilities and community development programs. The overall mission of USDA Rural Development is to improve the quality of life for rural Americans. The RD office that serves Madison County is located in Asheville. For more information on Rural Development programs and services, see <http://www.rurdev.usda.gov/nc/>.

6.2 Employment Trends and Analysis

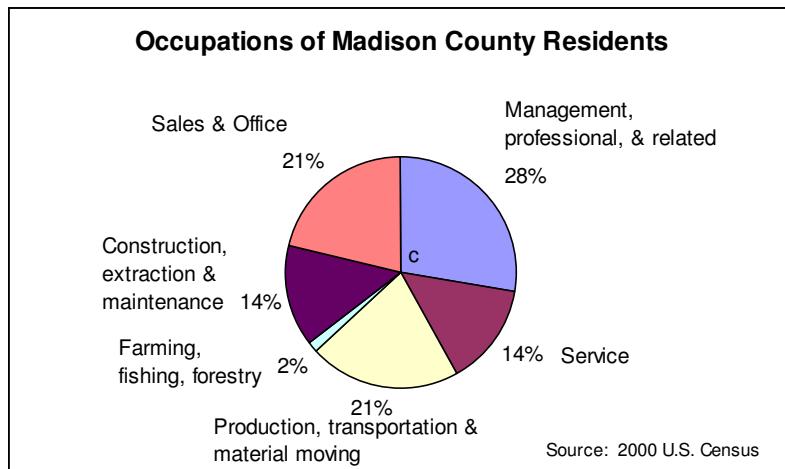
Employment

Data on types of industries, occupation and employment are gathered from at least two perspectives – one is based on the occupations of employed residents and the other is based on the employment in businesses and organizations that exist in the geographic area. For example, if 800 people, 16 years and older lived in a town and 750 of them were employed, one dataset would contain the occupations of all 750 workers. If this town had 50 places of employment, the second dataset would contain the number of people employed by these businesses/agencies, by the type of business, regardless of where the employees lived.

The following table shows approximately how many county residents work in each general type of occupation; it also breaks down employment by sex showing how many males and how many females work in each occupation. Percentages are shown to provide some perspective on which types of occupations employ a higher or lower percentage of residents and whether there is much of a difference in male vs. female employment. The highest number of people (2,436 people, representing 27.9% of the workforce) are employed in management, professional and related occupations; close to 2,000 people, or 21% of the workforce are employed in sales and office occupations and a similar amount are in production, transportation and material moving occupations.

Employment by Occupation for Madison County Residents	Total employed	Male	Female	Percent of Total	Percent Male	Percent Female
Employed civilian population 16 years and over	8,731	4,836	3,895		55.4%	44.6%
Type of Occupation						
Management, professional, and related occupations	2,436	1,045	1,391	27.9%	21.6%	35.7%
Service occupations	1,232	555	677	14.1%	11.5%	17.4%
Sales and office occupations	1,836	713	1,123	21.0%	14.7%	28.8%
Farming, fishing, and forestry occupations	131	131	0	1.5%	2.7%	0.0%
Construction, extraction, and maintenance occupations	1,235	1,205	30	14.1%	24.9%	0.8%
Production, transportation, and material moving occupations	1,861	1,187	674	21.3%	24.5%	17.3%

Source: 2000 U.S. Census, Summary File 3 (SF3; Sample Data), Table QT-P27



The total employed workforce for Madison County in 2000 was 8,731 people; about 55% of those employed were males and 45% were females. More women than men were employed in these occupations: management, professional and related; service; and sales and office. More men than women are employed in these occupations: farming, fishing and forestry; construction, extraction and maintenance; and production, transportation and material moving.

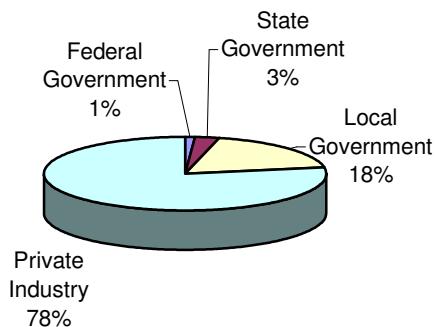
[NOTE: Census 2000 occupation classifications were based on the government-wide 2000 Standard Occupation Classification (SOC) system, whereas the 1990 census occupations were based on the 1980 SOC. The SOC was overhauled in 1998 (with additional revisions in 2000) to create a classification system that more accurately reflected the occupational structure in the United States at the time of the revisions. As a result, comparisons of occupation data from the 1990 census and Census 2000 are not recommended.]

Employment Opportunities in Madison County

At the end of 2008, the NC Employment Security Commission reported that 417 businesses or organizations in the County employed 4,310 people.¹ *Note that farms, unincorporated self-employed businesses and some other types of establishments are either not counted or the data is suppressed, and these categories make up a significant part of Madison County's economy (see footnote).*

Of these “counted” businesses, 380 private businesses provided the overwhelming majority of jobs – 78% – in Madison County. The Education and Health Services industry sector employs about 41% of all the “counted” jobs in the county. Other sectors that provide a significant amount of jobs are: Trade, Transportation and Utilities; Public Administration; and Travel and Leisure. Each of these industries employ between 425 and 500 people.

**Madison County Employment by Type of Industry -
As of September 30, 2008**



With the highest number of jobs provided by education and health services organizations, it is not surprising that the two largest employers are educational institutions – Mars Hill College and Madison County Schools. Madison County is the next largest employer, employing 276 people (190 full-time employees; 86 part-time employees). Map 9 shows where the educational institutions are located. Below is a list of the largest employers in the county (from the NC Employment Security Commission, June 2009):

¹ These are jobs reported to the NC Employment Security Commission (ESC). ESC data exclude proprietors, unincorporated self-employed, unpaid volunteer or family workers, farm workers, and domestic workers. Salaried officers of corporations are included. Government employment covers only civilian employees; military personnel are excluded. Employees of the Central Intelligence Agency, the National Security Agency, the National Imagery and Mapping Agency, and the Defense Intelligence Agency also are excluded.

Company/Organization	Industry Description	Employment
Mars Hill College, Inc.	Education & Health Services	500-999
Madison County Schools	Education & Health Services	500-999
Madison County	Public Administration	250-499
Pechiney Plastic Packaging Inc.	Manufacturing	100-249
Stacie's Personal Care Service Inc.	Education & Health Services	100-249
Ingles Markets Inc.	Trade, Transportation & Utilities	100-249
Hot Springs Health Program	Education & Health Services	100-249
Blue Ridge Group Homes	Education & Health Services	100-249
Paladine Industries	Professional & Business Services	100-249
Tullock Management Co.	Education & Health Services	50-99
NC Department of Transportation	Public Administration	50-99
French Broad Electric	Trade, Transportation & Utilities	50-99
Honeywell International Inc.	Manufacturing	50-99
Compass Group USA Inc.	Leisure & Hospitality	50-99
Hot Springs Resort & Spa Inc.	Leisure & Hospitality	50-99
Deringer Mfg Co.	Manufacturing	50-99
Madison Manufacturing Co.	Manufacturing	50-99

Wages

Wages paid by employers in Madison County are lower, on average, than wages across the state of North Carolina. They are similar to wages in other rural areas of the state. For the last quarter of 2008, the average weekly wage paid in Madison County was \$527 compared to \$793 for the state as a whole. Lower wages contribute to the lower per capita and median incomes found in the county. For example, in 2007, per capita personal income for Madison County residents was \$25,008; it was \$33,735 for North Carolina residents and \$38,615 for U.S. residents.

Employment vs. Unemployment

Madison County's unemployment rate has been relatively low over the past few years at around 4 percent. This changed in 2008, correlating with the larger economic downturn occurring across the United

States and the world.

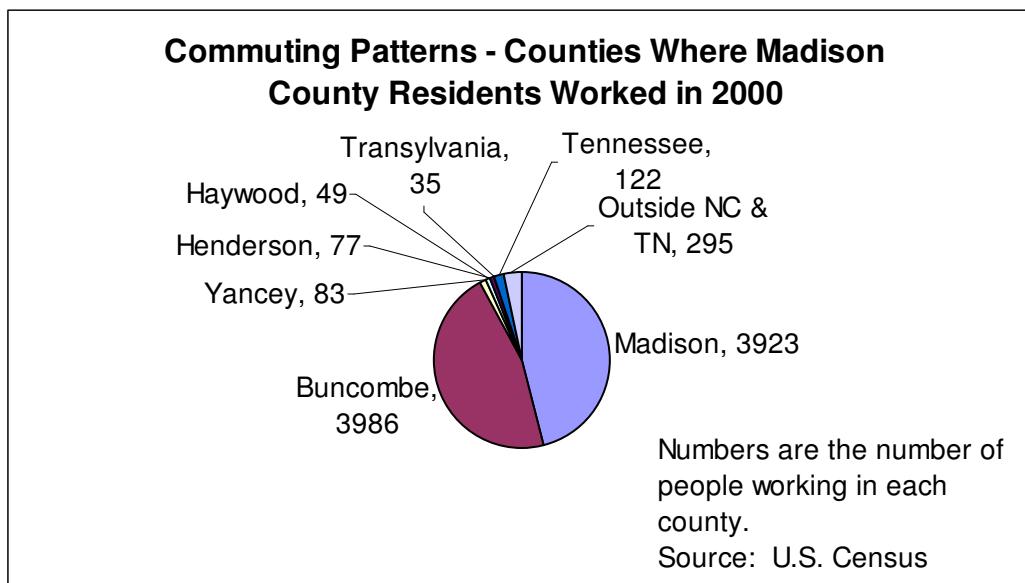
Unemployment rates in Madison County increased over the course of 2008, with the highest rate in December (7.5%). These higher rates are continuing and increasing in the first half of 2009.

Madison County	2007 Annual	2008 Annual	2009 1st Qtr
	Avg	Avg	
Labor Force	9,815	10,002	
Employment	9,426	9,421	
Unemployed	389	581	
Unemployment Rate	4.0%	5.8%	9.30%

Source: NC Employment Security Commission, Local Area Unemployment Statistics

Commuting Information

The 2000 U.S. Census reports that there were 8,570 county residents who worked. A minority of these people worked at home – 318 people, or almost 4%. The rest traveled for an average of 30 minutes to get to work. A little less than half of the workers (46%) worked in Madison County; the rest left the county to work, with the vast majority traveling to Buncombe County to work.



Looking at the other side of this issue, the 2000 Census reported that almost 1,300 people commuted into Madison County from another county to work. These people represent about one-fourth of the 5,210 jobs reported in the county. About two-thirds of these workers came from Buncombe County.

6.3 Strategies for Strengthening Business Districts and Providing More Job Opportunities in Madison County

The overall goal for economic development is to have increased and sustainable economic activity that benefits Madison County and its residents. Madison County's success and sustainability will rely on having a **diverse** set of businesses, products and services and a key economic development strategy is to build and support this diversity.

County residents want more opportunities to work in the County. Family life is strong in the county and parents would like to see their children and grandchildren stay in the County. In order for this to happen, more job opportunities and more affordable housing options are needed.

From the American Planning Association (APA) website, "Economic Development Toolbox:"

A strategy is a "collection of actions and activities that help achieve a predetermined goal" (Blakely and Bradshaw 2002, 167). The following describe **potential strategies local governments can use, either alone or with other institutions, to carry out their economic development vision:**

- Coordinate economic development programs and support services
- Business development
- Development incentives and financing
- Business attraction and retention
- Workforce education and training
- Land supply analysis for business growth
- Infrastructure investment
- Investment in quality of life factors conducive to business innovation

In order for the County to accomplish the overall goal, it will need to support economic development both directly by changing policies and regulations, and working with other organizations to improve infrastructure and workforce training. The following objectives and strategies will help to increase the job opportunities within the County and ensure that county residents have the skills to match the opportunities.

6.3.1 Support economic development programs and services with staff and funding.

- Dedicate a person to staff the EDB and TDA and to coordinate and develop economic development activities and initiatives.
- Develop a program that promotes the county as a desirable place to locate and do business. Direct the Economic Development Board and Tourism Development Authority to work together and collaborate with other organizations as appropriate (e.g., AdvantageWest, Carolina West and others) to develop this program.
- Develop a marketing program that targets new and summer residents, to provide information on local products and services and encourage them to "buy local."

6.3.2 Modify zoning regulations to encourage more business activity.

Modify zoning regulations and map to allow for a variety of businesses along the main transportation corridors in appropriate places (i.e., near towns, main intersections, flat stretches of roadway, etc.). Issues such as scale, orientation, building form, access and parking should be defined in ways to prevent business and commercial development from being built out of character.

Modify zoning regulations to allow for multiple streams of income (multiple uses) on properties zoned Rural-Agricultural (e.g., value-added products, arts/crafts, tourism, limited retail, etc.). The allowable uses should be consistent with maintaining the rural character and not large-scale operations that would consistently draw a lot of customers.

6.3.3 Develop incentives to encourage businesses to locate or expand in Madison County.

Incentives can include reduced fees, a streamlined development process, increased density/intensity, decreased parking requirements, etc. Development characteristics that may qualify for an incentive could include providing jobs, preserving a cultural/historic site, building a walkway and/or park, utilizing energy efficient or “green” technologies, and more

6.3.4 Establish partnerships with the towns and with other economic development and related organizations.

- Facilitate collaborations and partnerships of economic development, business, tourism, arts and agricultural organizations for the purposes of planning, marketing and “packaging” a variety of products/offerings, which will bring more revenue to businesses, farmers and to the County. (See 7.6.4 for more details)
- Consider forming a non-profit economic development organization to coordinate economic development activities and initiatives in the county. This type of organization exists in a number of other WNC counties – e.g., Haywood County Economic Development Commission (EDC), Yancey County EDC, Henderson County Partnership for Economic Development.
- Take advantage of marketing, recruitment, education and other services provided by AdvantageWest and Carolina West.
- Support and partner with the Madison County Arts Council and area artists to develop more outlets/venues for local artists to sell their art and crafts.

The arts community has been coordinating more with tourism marketing and opportunities and they have developed a couple new venues in Marshall – French Broad Fridays and studios and events at Marshall High Studios. The Madison Arts Council has developed a strong presence in downtown Marshall. Mars Hill College also offers a number of arts, music and cultural events at the college and the Owen Theater.

- Work with organizations to develop strategy that will help market what Madison County has to offer.

6.3.5 Work with infrastructure providers to improve communications and utilities infrastructure.

- Work with internet providers to increase the service areas and number of residents served for high-speed internet. Also work to keep costs low, so that the service is affordable to local residents and businesses.
- Work with the towns and other infrastructure providers to provide transportation, communications and water and wastewater infrastructure to locations identified for businesses, mixed-use, and higher density development on the Future Land Use Map.

6.3.6 Expand workforce training to meet the needs of current and future employment opportunities.

County staff and community input have identified the need for improved/additional training in math and reading comprehension as well as technical skills that are transferable to a manufacturing or technical work environment. Teamwork and supervisory skills were also identified as needs. The County should:

- Encourage the School Board and Superintendent to strengthen education in math and reading comprehension in K-12 curriculum and classes.
- Encourage adults who want to improve their math and reading comprehension skills to take advantage of A-B Technical Community College's course offerings in these subjects.
- Encourage the County Schools and A-B Tech to provide more technical and vocational training, including skills for agricultural and tourism enterprises as well as construction trade skills (plumbers, electricians, heating system specialists, etc.), as needed and feasible, to meet workforce needs.

Heritage High School in Burnsville has a good vocational education program that teaches construction and services skills through the building of houses. Note that A-B Tech offered a course to teach electrician skills in 2007, but terminated it due to lack of enrollment.

A-B Tech is partnering with Madison High School on a new vocational program that will teach these types of skills and also entrepreneurship, culinary skills, automated machinery and advanced customer service.

Madison High School students who complete certain vocational courses receive credit in technical and vocational programs such as early childhood, drafting, business, office administration, etc., if conditions of the NC High School to

Community College Articulation Agreement or Regional Articulation in Vocational Education (RAVE) are met. A transfer agreement has existed between A-B Tech and Mars Hill College for many years. A-B Tech students who complete the associate degree may transfer into Mars Hill College at the junior level.

- Facilitate partnerships between the County Schools, A-B Tech and Mars Hill College to develop training courses that will support local business development efforts, including entrepreneurship and the development of sound business plans.

Selected Resources:

Excerpts from a Washington Post article, dated April 23, 2009: "***Rural Riddle: Do Jobs Follow Broadband Access?***" (<http://www.washingtonpost.com/wp-dyn/content/article/2009/04/22/AR2009042203637.html>)

Simply bringing high-speed Internet to an area does not ensure additional jobs and business activity. Some economists say that bringing high-speed Internet to rural areas is much more complicated:

"For the idea that some sort of magical economic development will occur, there is no evidence that that can happen," said Robert W. Crandall, a senior fellow at the Brookings Institution who has studied the issue. Some potential subscribers may not see the benefit of getting online, while others may not be able to afford the monthly service fees. Residents with limited exposure to technology and low education levels may struggle to meet the job qualifications of tech-sector positions.

"It's Economic Development 101 to try to improve the supply of infrastructure to make a locality more attractive for businesses, but you do need a skilled workforce to fully exploit that," said John Horrigan, director of the Pew Internet & American Life Project. "In rural America, for broadband adoption, skills and relevance still remain a barrier."

Chapter 7. Agriculture

7.1 Current State of Agriculture in Madison County

The following section on farming and Cooperative Extension programs provides a finer level of detail and probably a more accurate picture of the current state of farming in the County than does the Census data. These data and observations were provided by Ross Young, Madison County Extension Director and David Kendall, Madison County Extension Agent.

Over the past ten years, the face of agriculture in Madison County has changed significantly. Ten years ago, this county boasted over 2,500 burley tobacco farms with gross receipts of \$6.2 million. There were 680 farms that had livestock, primarily cow-calf operations, contributing \$2.5 - \$3 million annually. Lots of other commodities were produced, including a wide variety of vegetables, trellis tomatoes, Christmas trees, nursery crops, fruits, and forages. The marketing system for most of these commodities was the wholesale market. Roughly \$15 million in farm income was received by farmers operating in a traditional, wholesale system.

Over the past 10 years, a number of factors have drastically affected Madison County agriculture: farmers aging out and retiring; land prices skyrocketing, resulting in some farms being sold for development; increased property taxes; increased fuel prices; and increased fertilizer prices. Each of these factors has worked against the sustainability of the traditional agriculture system enjoyed by farmers for almost a century. However, two additional factors had more of an impact to the change than the others combined: (1) the tobacco buyout program; and (2) a two-year drought.

The tobacco buyout, in essence ended a "franchise" that almost every farm in the county "owned," and opened the door for burley tobacco to enter the free market. Prior to the buyout, each farm within the burley belt had a designated quota dictating the number of pounds of tobacco that a farm could sell. Farms without an allotment and counties and states outside the burley belt were not allowed to raise tobacco. Although the buyout paid farmers for their "franchise," the compensation was not equivalent to the income they would have received if they had continued growing tobacco.

A two-year drought that began in the fall of 2006 has made it difficult for many farms but particularly the livestock farmers. A normal cow-calf operation was sustained 7 or 8 months out of the year by grazing on pastures. Supplemental feed, primarily hay, was harvested from designated fields that were not pastured. Farms that did not designate hay land bought hay from other producers at a relatively cheap price. This hay was used to feed cows through the winter. With the drought, very little grazing has been available to the cattle through the spring, summer, and fall. Farmers have been forced to feed hay to their cows during months that they would normally be grazing. This used up any winter supplies of hay that they had. Since the entire region experienced the drought, hay prices quadrupled all over the southeast. Available hay at reasonable prices had to be transported such long distances that the price for

transportation made hay costs increase fourfold. As a result of all these factors and especially the last two, many traditional farms have either gone out of business or drastically reduced their production.

Today, the annual farm receipts for Madison County are still roughly \$15 million. The difference is that the majority of that income comes from a very different agricultural system. The new system has a much greater emphasis on direct marketing as opposed to wholesale. The face of agriculture in Madison County today still has some remnants of the traditional make-up with approximately 50 tobacco farms producing \$2.5 million and 200 cattle operations generating about that same amount. The difference is made up by a very wide variety of commodities including but not limited to: commercial vegetables; organic vegetables; Christmas trees; nursery plants; greenhouse operations; hydroponics; agri-tourism; cut flowers; eggs; shiitake mushrooms; culinary herbs; medicinal herbs; pick-your-own berries; transplant operations; fruits; melons; cheese; meat goats; meat sheep; poultry; and a wide variety of specialty items that enter the realm of "value added" (e.g., jams, jellies, corn meal, dried items, and the like).

The skill set required for many of these new enterprises is much different than what was needed for traditional farmers. Marketing, packaging, delivering, websites, trade shows, tailgate markets, creating marketing brochures, public relations, and food safety are just a few examples of the new needed skills.



Shiitake mushrooms and sheep meat are two of the many newer commodities.

7.2 Historical Context

Madison County has been losing farmland at an increasing rate over the past 25 years. According to the Agricultural Census, in the twenty year period from 1982 to 2002, Madison County lost a little over twenty percent of its farmland and 34% of its farms. Then, in only five years – from 2002 to 2007 – it lost another twenty percent of its farmland (see tables below). As of 2007, the latest year available from Agricultural Census, 66,734 acres were reported as farmland, representing just 23% of the County's total land area.

Farms and Farmland in Madison County (1982-2002)	1982	1992	2002	Change 1982-2002	Percent Change
Number of Farms	1,481	1,178	973	-508	-34.3%
Acres in Farms	106,550	93,320	84,053	-22,497	-21.1%
Percent of Land in Farms	37.0%	32.4%	29.2%	-7.8%	
Average Farm Size (acres)	72	79	86	14	19.4%

Source: USDA Agriculture Census

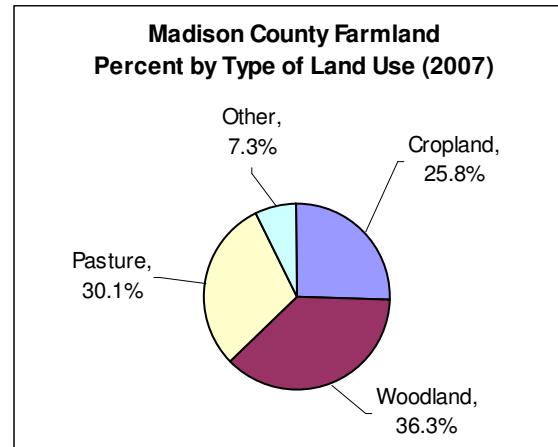
Farms and Farmland in Madison County (2007)	2007	Change 2002-2007	Percent Change
Number of Farms	801	-172	-17.7%
Acres in Farms	66,734	-17,319	-20.6%
Percent of Land in Farms	23.2%	-6.0%	
Average Farm Size (acres)	83	-3	-3.5%

Source: USDA Agriculture Census

Although the average farm size of 83 acres sounds large for Madison County, over half the farms are less than 50 acres in size (2007 Census). Across North Carolina, about half of the farms are also less than 50 acres, but due to some very large farms in the state, the average farm size for NC is 160 acres.

Across the U.S., the majority of farms are small (i.e., reporting less than \$10,000 in revenues from agricultural products) and a little less than half show a positive cash flow from farming. Also, most farmers report another occupation as their primary occupation. Fifty-five percent of farmers in the U.S. and sixty percent in Madison County, report something other than farming as their primary occupation.

Of all the farmland in Madison County in 2007, a little over a third was forest land, almost a third was pasture, one-fourth was cropland and the remainder was other types of farm use. These general percentages are probably still about the same in 2009. There were some



shifts between 2002 and 2007: both cropland and woodland decreased significantly and total pasture land almost doubled (11,850 acres to 20,087 acres of pasture).

The Agricultural Census also reports on some characteristics of farmers. The average age of farmers in Madison County is 58. This is very close to the average age of farmers in North Carolina and the U.S. (57.1). The average age of farmers in the U.S. has been steadily increasing for the past 25 years, from 50.5 in 1982 to 57.1 in 2007. Across the U.S. in the five years from 2002 to 2007, the number of farm operators 75 years and older grew by 20 percent, while the number of operators under 25 years of age decreased 30 percent.

7.3 Current Programs Supporting and Promoting Local Agriculture

Farmers themselves warrant the most credit for the transition that has taken place. However, other groups, agencies and organizations have made significant contributions to aid the transition.

The **Madison County Center of the NC Cooperative Extension** has had this transition as a primary educational element and as a primary focus throughout its programs. The following programs are all examples of existing and planned efforts focused on transition issues:

- Alternative Agricultural seminars;
- Business Planning sessions;
- Estate Planning sessions
- Marketing seminars;
- Organic farming practices seminars;
- Good Agricultural Practices (GAPs);
- Agri-tourism efforts;
- Value Added Demonstrations; and
- the development of Madison Family Farms Inc. – a program that provides a website, a value added center, and a total marketing program for farmers.

Madison County Center staff also have provided one-on-one consultations and farm visits throughout the transition phase. Center staff support the Madison County 4-H program, which serves youth aged 5-18 through clubs, special programs, & summer activities. Some of the 4-H activities and events teach agricultural skills.

Madison Family Farms is a nonprofit organization that “works to enhance and improve small family farms and the agricultural business climate in Madison and surrounding counties by providing basic facilities and services, information and education, marketing and public relations” (www.madisonfarms.org). Madison Farms was created in 2006 as a collaboration between Madison County farmers and Cooperative Extension in response to the aftermath of the 2005 Tobacco Buyout. It was created to serve as a resource for farmers who were transitioning from tobacco to a wide variety of crops. Farmers use Madison Farms Value-Added Center, co-located with the Cooperative Extension office, to process, package, store and distribute food to schools/colleges, hospitals, grocery stores and restaurants. The facility

provides space for educational programs and includes in-line walk-in chillers and freezer; a value-added kitchen with food dryers, lettuce spinner, commercial grade food processor, boiler and stove for canning, vacuum packer; outside shed with vegetable wash line and herb dryer; ice maker and scales. Truck loading docks provide for bulk delivery of feeds and fertilizers.

The **Appalachian Sustainable Agriculture Project (ASAP)** is a regional non-profit organization with a mission to “collaboratively create and expand regional community based and integrated food systems that are locally owned and controlled, environmentally sound, economically viable, and health-promoting.” A complete listing and description of their programs and related resources is available on their website (www.asapconnections.org). Some of their programs are:

- Appalachian Grown™ – ASAP certifies food and agricultural products grown or raised on farms in Western North Carolina and the southern Appalachian Mountains. Certified products may be labeled with the Appalachian Grown logo, to show consumers, retailers and wholesalers they are local agricultural products.
- Growing Minds (ASAP) – This is a program that works with schools to teach children about where their food comes from and to introduce them to gardening and local farms. It also works to get more local food into the school cafeterias.
- Mixing Bowl (ASAP) – a new program to connect farmers to chefs

Mountain Valleys Resource Conservation and Development Council, Inc. is a regional organization serving an eight-county area (Madison, Buncombe, Henderson, Transylvania, Polk, Rutherford, McDowell and Cleveland). The organization receives direct assistance from the USDA **Natural Resources Conservation Service (NRCS)**, which provides a Resource Conservation & Development (RC&D) Coordinator, office space and related support. The RC&D program seeks to encourage wise use of our natural and human resources as well as economic development that is balanced with the natural environment. Citizens representing each of the counties make up the Council, which is the governing body for the organization. The Mountain Valleys RC&D Council is a 501(c)3 non-profit, action-oriented organization which has over the past 30+ years, provided local project sponsors and partners with grant writing and project assistance on numerous projects. The Council's office is in Marshall, on Highway 25-70.

Mountain Valleys RC&D Area Plan for 2008-2013 has four main elements:

- *Community Development* activities to promote balanced economic development, environmental education, recreation development, natural and heritage resource preservation, and alternative energy.
- *Land Conservation* activities to achieve improved soil erosion control and soil health.
- *Water Management* activities to promote watershed planning, reduction of agricultural pollutants and control storm water and flooding.
- *Land Management* activities to moderate the impact of land development on water resources, enhance preservation of farm and forest lands and improve land use planning to address steep slope development and other resource concerns.

NRCS provides staff support for the County's farmland preservation programs and shares an office with the RC&D Council staff. The County has a **Voluntary Agricultural District (VAD)** program and an active **Agricultural Advisory Board** that administers and oversees the VAD program. NRCS staff provide support and technical assistance to the Agricultural Advisory Board.

All counties in North Carolina have **Soil and Water Conservation Districts (SWCD)**. District Board members are appointed and elected and. The District office has a couple staff members who assist private land owners with conserving their soil, water and other natural resources. They provide education, information, technical assistance, and economic incentives to county citizens and establish new programs in concert with other appropriate agencies and organizations to meet changing needs. Many of the programs and funding are through a partnership with USDA's Natural Resources and Conservation Service.

The **Farm Service Agency (FSA)** is an agency of the US Department of Agriculture. The FSA administers and manages farm commodity, credit, conservation, disaster and loan programs as laid out by Congress through a network of federal, state and county offices. These programs are designed to improve the economic stability of the agricultural industry and to help farmers adjust production to meet demand. Economically, the desired result of these programs is a steady price range for agricultural commodities for both farmers and consumers. State and county offices directly administer FSA programs. These offices certify farmers for farm programs and pay out farm subsidies and disaster payments. The FSA office that serves Madison County is located on Highway 25-70 in Marshall. For more information, see www.fsa.usda.gov.

The **North Carolina Farm Bureau** is a private non-profit, grassroots organization that actively promotes farm and rural issues through legislative, marketing and service programs. It is a membership organization, with over 490,000 members in NC. Members are eligible for many insurance programs and discounts on a variety of products and services. The Madison County office is located on Highway 25-70 in Marshall.

Programs offered by other agencies/organizations related to agriculture:

- Future Farmers of America – a program offered at Madison County High School, to provide training and opportunities to young people interested in farming.
- Organic Growers School (www.organicgrowersschool.org) – an annual conference held in the spring that offers educational sessions and workshops on all aspects of organic farming and gardening, for all types and scales of gardeners and farmers.
- Madison County Farm Day – an annual event held in October.

7.4 Future Vision for Agriculture and Rural Community Life in Madison County

This section is based on community input collected from individuals and community meetings held throughout the county during the planning process. It describes a collective vision of agriculture in Madison County in twenty or so years.

In the year 2025, agriculture is very visible throughout Madison County. Farming is a respected and viable way of life and way to make a living - this includes commercial and subsistence farming. Farming and local agricultural products have been successfully promoted in and out of the county so that Madison County is known as a county with strong agriculture communities and quality agricultural products. The number and types of products continues to expand and diversify, and more and more local products are available to residents through markets, restaurants, schools and other businesses and organizations. There is strong support from local residents, businesses and public and private institutions for agricultural products.

The average age of farmers continues to drop as young people enter farming in increasing numbers. The local food movement has brought new status to farming as agricultural commodities are widely sought after and farmers are honored for their contribution to the community. Award-winning vocational agricultural training at Madison High feeds into a two-year degree in Sustainable Agriculture at A-B Tech that also offers a four-year NC State agricultural degree via distance learning. Food and farming internships provide labor for local farmers and provides practical training to new farmers. These new farmers are remarkably entrepreneurial as they exploit niches where they can gain a competitive advantage over large farms in the deep south, Midwest and California.

Over the last 20 years the cost of transportation has steadily risen so local agricultural products have more and more of an advantage in the local marketplace. "Fresh" and "local" are continuing to grow in popularity. Much of the irrigated agricultural land in the western U.S. is experiencing severe long-term drought as well as competition with growing populations for water. Agriculture is losing water rights to cities as farmland is taken out of production there, making it increasingly important that we retain our critically important agricultural land base here.

Consumers are increasingly willing to pay a little more for local agricultural products, allowing an improved profit margin for our farmers. Our farmers are also developing more efficient production practices, allowing them to produce more high quality products with fewer inputs and less cost. This improved margin is allowing more and more growers to forego "public work" and make their living full-time on the land. Group efforts to secure benefits packages customized to the needs of farmers have also supported this trend. While paid vacation is rare, at least health insurance is available to farmers at an affordable rate.

There are now many programs that support farmers and promote farming and farm products, such as:

- Education/training on sustainable farming practices, including organic farming.
- Education on various “new” agricultural products and services.
- Marketing and business training programs.
- Farm-related tourism and rural recreation, successfully promoted by a combination of the Madison County Economic Development and Tourism Development Boards in partnership with the Madison County Chamber of Commerce.
- Local food promotion programs through Madison Farms, ASAP and other organizations.
- 4-H programs and Future Farmers of America for youth to learn more about farming.
- Local food processing and distribution facilities – for fruits, vegetables, animal products (meats, eggs, cheese, etc.) and value-added products (jams, sauces, prepared foods, etc.).
- Tax incentives/reductions for farmers.
- A Farmland Protection Plan has been adopted and is being implemented.
- Capital for improvements and operations is available via the purchase of development rights, to preserve farmland for future generations.
- County zoning and land use regulations support and encourage farm and agritourism uses of the land.

The rural communities continue to be strong communities. Traditions, history, and culture are passed on to young people and are a strong part of community life. More children who grow up in Madison County are choosing to live, work and raise their families in the county. In most areas, the rural character of the county and the communities has also been preserved.

Madison County has become a desired destination for farm tours, rural scenery, and celebrations that draw tourism dollars to farmers and rural entrepreneurs. Farming and rural recreation provides a healthy living standard and remains the primary source of income for residents of the county.



Spinning Spider Creamery (left) and Sunset Valley Farms (right) on a farm tour day.

The **Farmland Values Project** collected, analyzed and communicated the many values that people have for farmland in four WNC counties, including Madison County. Over 1100 residents in Buncombe, Haywood, Henderson and Madison counties participated in a survey, focus group or mapping exercise and 307 visitors completed surveys. 173 Madison County residents participated in the survey, conducted in Fall 2007.

Survey Results for Madison County Residents:

- Farmland is very important to residents and their quality of life
 - Top five benefits of farmland to county residents were locally produced food, a link to our agricultural heritage, scenic beauty, wildlife habitat and open space.
- 76% of resident respondents are concerned about the loss of farmland.
- 69% of resident respondents believe their community needs to be doing more to protect farmland in the area.
- Residents and visitors showed willingness to make voluntary donations (annual average of \$185) if the funds went directly to protecting farmland.
- 59% of respondents from Madison County said they would pay more for food if the increase in price went directly to protect farmland.

For more details including interviews, photos, data and more, see
www.unca.edu/farmlandvalues.

7.5 Issues and Opportunities – Current and Emerging

Many issues about the current state of farming and agriculture in Madison County are mentioned in this chapter. These issues along with opportunities inside and outside the county shape the recommendations related to agriculture. Current key issues related to farming and agriculture are:

- Farmers are making a transition from cattle and tobacco to new crops and must learn about how to grow and process the new crops as well as ways to market and distribute them. These new crops are particularly attractive to entrepreneurial growers and those that enjoy engaging new groups of customers.
- Traditional crops like beef or potatoes can be marketed for a higher return if growers work with marketing specialists who provide an entrepreneurial dimension to their evolving enterprises.
- Training is not always offered in ways that farmers find appealing (e.g., time or place may be inconvenient). Announcements about training do not always reach farmers in a timely or efficient manner.
- Farmers would like to find better ways to communicate amongst themselves and often benefit from working together on marketing and distribution.

- Multiple organizations are working on various aspects of support and promotion for agriculture; more coordination and communication amongst these efforts is needed.
- It is getting harder for local people to continue to afford to live (and pay taxes) in Madison County, with the increased land values and sales prices for land and homes. People are also concerned about the increased amount of real estate speculation occurring in the county, which drives up the price of land for farm and forest operations.
- Agriculture is a significant part of Madison County's culture and heritage and residents want it to continue to be significant into the future.

Some of the opportunities that farmers and the County can take advantage of, to help grow and sustain agriculture are:

- Consumers' growing interest in local food and in supporting local farmers;
- Aging consumers are showing more interest in fresher local food;
- Increasing number of farmers markets in the region and coordinated advertising for these markets;
- Changing demographics with increased numbers of more affluent homeowners and retirees with more disposable income;
- Promotion of healthier food choices by public health agencies;
- Creating additional non-traditional opportunities that provide income, like agriculture-based tourism, fishing/hunting guide services, leasing hunting or farming rights, etc.;
- Higher fuel and transportation costs, which will help make local products more affordable than products that travel far distances and also provide opportunities for alternative fuel development including biofuels;
- Mars Hill College, Asheville-Buncombe Technical College and the County School System are large institutions which could purchase a significant amount of food and other products from Madison County suppliers.

7.6 Recommended Strategies to Sustain Agriculture in the County

Growing and sustaining agriculture in the County will take actions, communications and cooperation and collaboration from a number of public and private organizations. The County can take a lead role by convening these groups, facilitating discussions and encouraging collaboration and partnerships. The County can also lead by adopting policies and taking actions which support farmers and farming. Specific recommendations are listed below and grouped under three objectives: (1) Protecting Farmland; (2) Ensuring farm operators are available to take over farms in the future; and (3) Ensuring viable future farm enterprises by supporting existing and future farmers with policies and opportunities for business development.

(1) PROTECTING FARMLAND

7.6.1 Create and adopt a countywide Farmland Protection Plan (FPP).

The County could develop and adopt a farmland protection plan that is strategic and action-oriented. It should incorporate and expand upon the recommendations in this chapter. One benefit of having an adopted FPP that satisfies the state's requirements (see NC G.S. 106-744(e) is that counties with these plans are given preference when the state allocates funds from the state Farmland Preservation Trust Fund.

The County can direct the Agricultural Advisory Board, in partnership with the Planning Board, to oversee the development of a Farmland Protection Plan. A steering committee should be formed to provide input and direction to the plan that includes representatives from a variety of related interests: farming/agriculture; land conservation; economic development; education; and other.

Examples of these types of plans from other WNC counties may be helpful to review. Buncombe County's plan is available on the county website at: http://www.buncombecounty.org/common/soil/BC_FarmPlan.pdf. Haywood County adopted a Farmland Protection Plan in October 2008 – it is available from the county but not online. Henderson County is currently considering adoption of a Farmland Protection Plan.

7.6.2 Consider implementing land use and development policies and/or regulations that support and encourage agriculture.

North Carolina state law exempts “bona fide farms” from county zoning (NC G.S. 153A-340 (2006)). The state statute defines bona fide farms purposes to include:

"... the production and activities relating or incidental to the production of crops, fruits, vegetables, ornamental and flowering plants, dairy, livestock, poultry, and all other forms of agricultural products having a domestic or foreign market."

Several court cases have clarified certain types of farming and farming issues related to this definition. For example, greenhouse production is considered to be farming, but dog kennels are not. Livestock operations are generally exempt from county zoning, but large swine production (facilities designed to handle over 600,000 pounds annually) can be regulated by local zoning ordinances. Use of farm property for non-farm purposes can be subject to zoning. Thus a residence on a farm is generally subject to county zoning; however, a residential structure occupied exclusively by temporary farm workers is likely exempt.

Madison County has a Voluntary Agriculture Districts (VAD) program which helps farmers form areas where commercial agriculture is encouraged. This is a farmer-initiated, voluntary program that provides benefits to farmers and also strives to reduce conflicts between agricultural and non-agricultural land owners and uses. VAD programs help raise awareness about agricultural activity, provide stronger protection to farmers from nuisance complaints/suits, help to influence planning and development near the agricultural districts and provide a few other protections and benefits.

The County should consider implementing the following additional land use planning and policy measures:

- Provide technical assistance to people who are thinking of developing or subdividing their farmland on ways to preserve some of the land for agriculture use as part of the process.
- Identify productive areas of agricultural land and areas that are currently actively engaged in agricultural activities and direct residential and industrial growth away from these areas through zoning regulations. These areas could be identified in a Farmland Protection Plan.
- Encourage protection of farmland located in public water source areas, including reservoirs, streams, and water recharge areas, by identifying these areas and developing incentives and/or targeting land conservation efforts for these areas.
- Consider adopting an Enhanced VAD program as part of the Farmland Preservation Ordinance. Enhanced VAD programs provide additional benefits to participating farmers and encourage longer term commitments to keep land in farming.

(2) ENSURING FARM OPERATORS ARE AVAILABLE TO TAKE OVER FARMS IN THE FUTURE

7.6.3 Provide education, training and technical assistance to farmers and potential future farmers.

- The County School System should integrate more learning opportunities about agriculture and related skills/information into the curriculum. The schools should also promote local food and agriculture to young people through school promotions and educational programs.
- Expand the educational and experiential programs provided by Future Farmers of America (FFA) and 4H.
- Madison County Extension and Madison Farms should expand their educational efforts and provide more support to farmers, including educational programs on new farming practices and products and support programs to help them market, process and distribute their products.
- Encourage potential new farmers by supporting travel experiences to see innovative agricultural businesses.

(3) ENSURING VIABLE FUTURE FARM ENTERPRISES BY SUPPORTING EXISTING AND FUTURE FARMERS WITH POLICIES AND OPPORTUNITIES FOR BUSINESS DEVELOPMENT

7.6.4 Adopt a County policy to purchase local food and agriculture products if available at competitive prices.

- Encourage the Madison County School System to establish an agreement with Madison Farms to purchase local food if and when it is available.
- Permit and formally request county food purchasers to spend up to ten percent more for local products to reflect the benefit to our tax base of supporting those local enterprises. Encourage purchase of local food products and services for meetings, conferences and institutions (e.g., jail, health/hospital facilities).
- Provide incentives for school cafeteria managers to buy and prepare fresh, local food that helps lower obesity and related chronic conditions.

7.6.5 Seek outside funding to support the purchase of local food and food products.

- Work with various private and government organizations to provide sources of capital for agricultural entrepreneurs.

- Actively pursue funding to support the purchase of local food by county government organizations.

7.6.6 Consider infrastructure needed to support agriculture and agricultural products (e.g., facilities, transportation, communications, etc.) when planning for, prioritizing and funding infrastructure projects.

Transportation planning needs to consider and incorporate agriculture's needs in transportation system and project planning and designs. The transportation system should enable smooth transport of equipment and supplies to farms and farm products to distribution centers and other markets.

More extensive and effective communications infrastructure that includes access to phone and high-speed Internet services is needed to support growth and sustainability of agriculture and agricultural products and services.

Work with the towns to ensure the availability of water for farming operations and rural entrepreneurs.

Encourage local power service companies to give priority to farm electrification needs. Support the use of alternative power sources as a way to increase power availability and reduce the cost of power.

7.6.7 Facilitate the coordination and collaboration of economic development, business, tourism and agricultural organizations for the purposes of planning, marketing and “packaging” a variety of products/offerings, which will bring more revenue to businesses, farmers and the County.

The County should also initiate bringing the Towns of Hot Springs, Marshall and Mars Hill together with the County to discuss and work together on these economic development and tourism initiatives. The County should provide staff, technical assistance and other resources to implement the actions below.

- Direct the Economic Development Board and Tourism Development Authority to coordinate planning and promotion activities with Madison County Farms, Madison County Extension and other interested organizations.
- A Strategic Plan should be developed which brings the organizations and ideas together and contains specific plans on how to implement the planning, communication and promotion activities. A number of ideas have been suggested that relate to the need for coordinated promotion and marketing of agricultural products and related services, including:
 - Utilize the Internet for promotion; provide an Internet presence for farms and farmers

- Develop better communication channels to spread information on agricultural opportunities and information to farmers and to improve farmer-to-farmer communications
- Promote existing/current efforts (e.g., Madison Farms, Extension, ASAP programs)
- Focus more promotion within Madison County; emphasize buying local products and supporting local farmers and residents.
- Develop a Madison County brand.
- Develop some sort of clearinghouse to connect suppliers/producers with buyers (take a systems approach to addressing this)
- Develop and post a County Calendar of related events – online and printed in the newspaper.
- Support events such as product fairs that showcase and celebrate Madison County's farming heritage and farm and forest products.
- Consider supporting a Madison County store – that sells and promotes Madison County products and services. The County could help get this started and possibly provide a place for the store. It should be near I-26 and be easily accessed from the interstate. TJ's in Mars Hill is an example of a store that sells primarily local products.



Madison County Comprehensive Plan - May 2012

Selected resources:

American Farmland Trust, national organization and North Carolina office (<http://www.farmland.org/programs/states/nc/default.asp>) and a useful report: *Planning for an Agricultural Future: A Guide for North Carolina Farmers and Local Governments* (2007), http://www.farmlandinfo.org/farmland_preservation_literature/index.cfm?function=article_view&articleID=31721.

Carolina Farm Stewardship Association (<http://www.carolinafarmstewards.org/>). Promotes local and organic agriculture in the Carolinas by inspiring, educating and organizing farmers and consumers.

Center for Environmental Farming Systems (www.cefs.ncsu.edu). The Center for Environmental Farming Systems (CEFS) was established in 1994 by N.C. State University, N.C. A&T State University, and the N.C. Department of Agriculture and Consumer Services to serve as a center dedicated to sustainable agriculture research, extension, and education.

Farm Prosperity Project (www.cals.ncsu.edu/specialty_crops//farmprosperity/). The Farm Prosperity Project is made up of seven regional, state and national organizations, led by North Carolina State University, that have teamed together to launch a grant-funded study intended to preserve western North Carolina farmland and farm heritage. The Farm Prosperity Project will identify crops and farmland preservation methods that help sustain farmland in our region. The overarching goal of the project is to save farms and farmland in western North Carolina by directly aiding farmers in increasing their economic prosperity.

Foothills Connect Business and Technology Center and Farmers Fresh Market together utilize high-speed Internet service to connect restaurants, consumers and suppliers to farmers in Rutherford County. Foothills Connect is one of seven business and technology centers in economically distressed areas of the state funded by the e-NC authority and it provides free, high-speed Internet service to the public and a variety of free and fee-based services to local nonprofits and businesses. It received funding from the NC Rural Center through its Economic Innovations grant program to expand the Farmers Fresh project. See www.foothillsconnect.com and www.farmersfreshmarket.org for more information.

North Carolina Farm Transition Network (<http://www.ncftn.org>). The NCFTN was recently organized through cooperative efforts of a diverse group of state government and non-profit organizations concerned about the continuing loss of family farms in NC. Its mission is to *“ensure that working farms remain in agricultural production by assisting retiring and aspiring farmers in the effective transition of farm businesses.”*

Sustaining Agriculture in Urbanizing Counties (University of Nebraska – Lincoln, 2009. <http://www.farmland.org/resources/reports/Sustaining-Agriculture-in-Urbanizing->

[Counties/default.asp](#)) includes case studies in 15 counties across the U.S and suggests policy approaches to sustaining agriculture in the urban fringe. The report's final chapter closes with seven policy recommendations for promoting viable farming in metro areas:

1. Local governments should aim to prevent conflicts between farmers and nonfarmer neighbors and to resolve those that arise in ways sympathetic to farmers' interests.
2. Local governments should apply zoning policies (e.g., large minimum-lot requirements, cluster zoning, urban growth boundaries) that help to preserve an adequate land base for agriculture.
3. State governments should enable, and local authorities operate, effective programs for purchasing development rights to farmland, thereby either adding to the land base that agricultural protection zoning supports or achieving what zoning fails to realize.
4. Public and private agencies should encourage farm families to plan for the transfer of ownership and management to their children or other relatives. We found that with family successors lined up, the future of individual farms could look much brighter (e.g., current owners more likely to invest in their land and operators less likely to quit farming in the county prematurely).
5. The same agencies should encourage the launching and sustaining of farm enterprises likely to be profitable on the urban edge. Given the pervasive land constraint, consideration should be given to relatively smaller acreage operations, such as those raising high-value products including specialty crops and livestock. Direct marketing can also add revenue, and assistance programs for it were the second most popular type of help requested by our surveyed farmers—second after the purpose of “diversifying or adding new products.”
6. In geographic areas lacking sufficient farmers to sustain agri-service businesses, policy makers may need to encourage adaptations by both farm operators and suppliers, such as Internet purchasing and “drop-off boxes” for equipment repair.
7. Policy makers should consider ways to provide for adequate numbers of farm workers. One tool urged by interviewed farm operators was to reform the federal government's guest worker program for migrant labor.

Chapter 8. Transportation

8.1 Overview of Existing Transportation System and Plans

8.1.1 Current Transportation System



The transportation system in Madison County consists of a few primary or main roads and many smaller paved and unpaved roads through the river valleys and coves and over a few of the mountains. The largest roadway is the newly-completed Interstate 26 (completed in 2003) that runs between Buncombe County and Unicoi County, Tennessee, and next to Mars Hill. It was a monumental construction project which changed the shape of the terrain in this part of the county. It now carries, on average, over 9,300 vehicles a day. The next most traveled roadway in the county is US 25-70 between the Buncombe County line and Marshall, carrying an average of 8,300 vehicles a day. The other main roads in the county are NC 213, which connects Mars Hill and Marshall, NC 209 which runs from Haywood County to Hot Springs, NC 208 in the northwest part of the county and US 19 which connects Mars Hill and I-26 to Burnsville, Yancey County and beyond.

Roadways are the primary means of transportation in the county. There is also an active freight train line, operated by Norfolk Southern, that runs along the French Broad River through the county. A county authority runs a limited public transportation service which is described below in section 8.1.4. The towns have pedestrian facilities (sidewalks, crosswalks) in their downtown areas and the Town of Mars Hill developed a Pedestrian Plan in 2007. Mars Hill has a paved trail along Gabrielle Creek that connects Mars Hill College and downtown to the elementary school, but no other greenways/trails for transportation purposes exist currently in the county. There is a large network of hiking trails, including the Appalachian Trail, in the Pisgah National Forest, but these are primarily used for recreation rather than transportation.

8.1.2 Transportation Plans and Planning

Madison County is part of a regional transportation planning organization, the Land-of-Sky Rural Planning Organization (RPO). The RPO brings together representatives from Madison, Haywood, Buncombe and Transylvania counties and NCDOT to determine plans and priorities

for transportation projects in this region. NCDOT takes the recommendations from regional planning organizations and develops a statewide plan and capital spending program – called the Transportation Improvement Program, or TIP – to implement high priority projects from across the state. Every two years, the regional planning organizations update their priorities and NCDOT updates statewide plans.

The RPO recently revised its Priority Needs List of high priority projects and a couple projects in Madison received high priority on this list:

- Priority #2 – I-26/Hwy 213 interchange: Connect Frontage Road to Hwy 213 or I-26 exit
- Priority #3 – Bruce Road: Upgrade and widen near Main Street in Mars Hill
- Priority #7 – NC 208: Upgrade roadway from US 25-70 to Tennessee state line
- Priority #8 – NC 209: Upgrade and realign between NC 63 and US 25-70

Some of these will likely be implemented over the next 5-10 years, as they are programmed into the TIP.

NC Department of Transportation (NCDOT) is currently working with Madison County and staff at the Land-of-Sky RPO to develop a **Comprehensive Transportation Plan** for Madison County. It is expected to be complete by the end of 2010 and will consider and include recommendations from this Comprehensive Plan as transportation recommendations are developed.

NCDOT's planning has evolved from simple bridge and highway thoroughfare plans to Comprehensive Transportation Plans (CTPs). Thoroughfare plans identified the existing and proposed highway network needed to handle existing and future traffic. The CTP is a multi-modal plan that identifies the entire existing and future transportation system which includes highways, public transportation, rail, bicycle and pedestrian facilities needed to serve the anticipated travel demand. The CTP strengthens the connections between an area's transportation plan, adopted local land use/development plan and the community's vision.

Additionally, each rural or community transportation system is required to have a Community Transportation Services Plan, commonly referred to as a "5-year plan," which "reviews the current performance and organizational direction of the transit system and recommends alternative strategies of operating or managing that increase mobility options for passengers and improve the efficiency and effectiveness of the organization and transportation services," according to the NCDOT web site.

8.1.3 Comprehensive Transportation Plan – Initial Insights

As stated in the previous section, a Comprehensive Transportation Plan (CTP) for Madison County is currently under development. A draft vision statement for transportation in the county has been developed: "Provide a safe, reliable, efficient, and sustainable multi-modal transportation network that enhances quality of life and economic vitality while preserving the natural environment and community character and supporting the county's vision for future

land use and development.” To go along with the vision, a set of preliminary objectives has been developed for the CTP. They are:

- Complete a study of transportation facilities and develop a plan with recommendations that address safety and mobility and consider economic impacts.
- Improve the safety, connectivity, and mobility of the transportation system, for people and freight, for all modes of transportation in and through the region.
- Make informed transportation decisions that are sensitive to the environment and community character
- Coordinate with the land use and other plans of Madison County and its municipalities.
- Coordinate with Madison County Emergency Management and relevant organizations to ensure that emergency plans are considered in plan development.
- Transportation system goals and objectives that were ranked highest were:
- Preserve community character: preserve downtown business districts and keep rural areas rural; and
- Protect the natural environment.

8.1.4 Public Transportation Services

Madison County Transportation Authority (MCTA) is the coordinated public transportation service for Madison County and it provides transportation services from the populated areas to the remote areas of the County. A round trip to and from remote areas can add up to one hundred miles or more. MCTA provides trips outside the county to Haywood, Yancey and Buncombe counties and the towns of Newport and Greenville, Tennessee.

Madison County Transportation Authority has a Transportation Advisory Board that consists of representatives of elected county officials, local agencies and community and business representatives. It meets monthly at the new Madison County Transportation Facility at 387 Long Branch Road in Marshall. This facility was completed and occupied in August, 2007.

Madison County Transportation Authority is a demand-response transportation service. MTCA requires a 24-hour advance reservation for local trips and a two-day (or more) advance notice for out-of-county trips. It provides services for general and medical trips and provides transportation to all the nutrition centers within Madison County. Madison County has a large number of passengers over the age of sixty, people with disabilities, and with financial and mobility constraints; thus their ability to utilize a transportation service is vital to their well-being.

Madison County currently has a fleet of 11 vehicles. Services are provided from 6:00 a.m. until 6:00 p.m. Monday through Friday. The fleet consists of:

- Three 8-passenger lift vans with two wheelchair stations; and
- Eight 14-passenger standard vans.

Prioritized Public Transit Needs

A public and stakeholder workshop was held in the County in 2008 as part of the *Coordinated Public Transportation and Human Services Transportation Plan* (adopted March 20, 2009 by the Land-of-Sky Rural Transportation Planning Organization). Needs were identified by participants and then prioritized. The following list contains the prioritized needs from this workshop, which appear in the referenced transportation plan.

Public Transportation Needs (listed in priority order):

1. Expansion vans
2. Route to tie together Hot Springs, Marshall and Mars Hill
3. More lift-equipped vans
4. Routes for daily cancer treatment
5. GPS and communication capabilities
6. Planning grant to identify work commuting patterns
7. Lifts for larger chairs (equipment updates)
8. Van from Mars Hill Park & Ride to meet Asheville Transit
9. Connector from Spring Creek to Hot Springs
10. Attendants for visually impaired
11. Route to Mountain Recovery (addiction treatment located in Asheville)

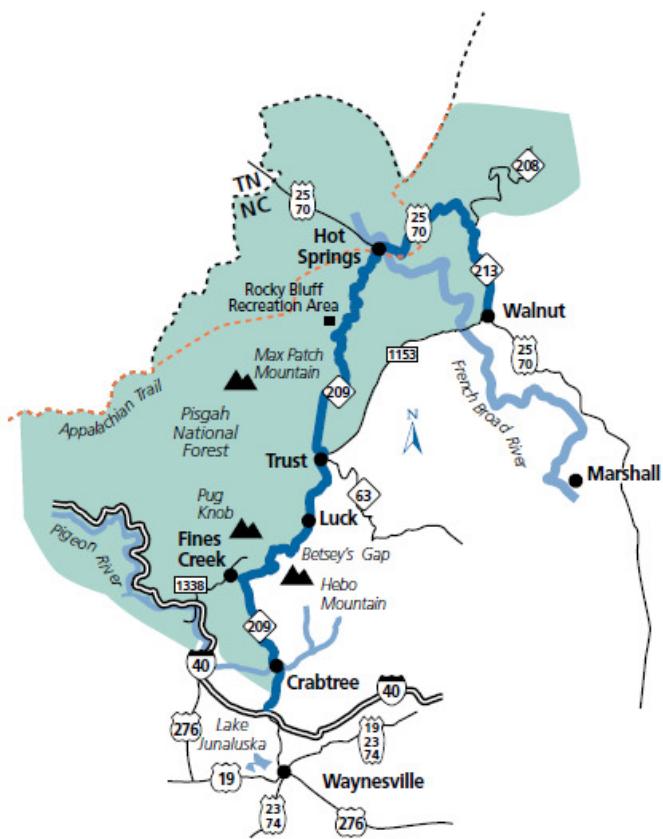
8.2 Scenic Byways

The NC Department of Transportation has designated 51 scenic byways to give visitors and residents a chance to experience North Carolina's history, geography and culture, while also raising awareness for the protection and preservation of these treasures. Byways are carefully selected to portray the diverse beauty and culture of the state and to provide travelers with safe and interesting alternate travel routes. The routes are clearly marked with N.C. Scenic Byways signs. More information and maps are available at NC DOT's website:
http://www.ncdot.org/doh/operations/dp_chief_eng/roadside/scenic/.

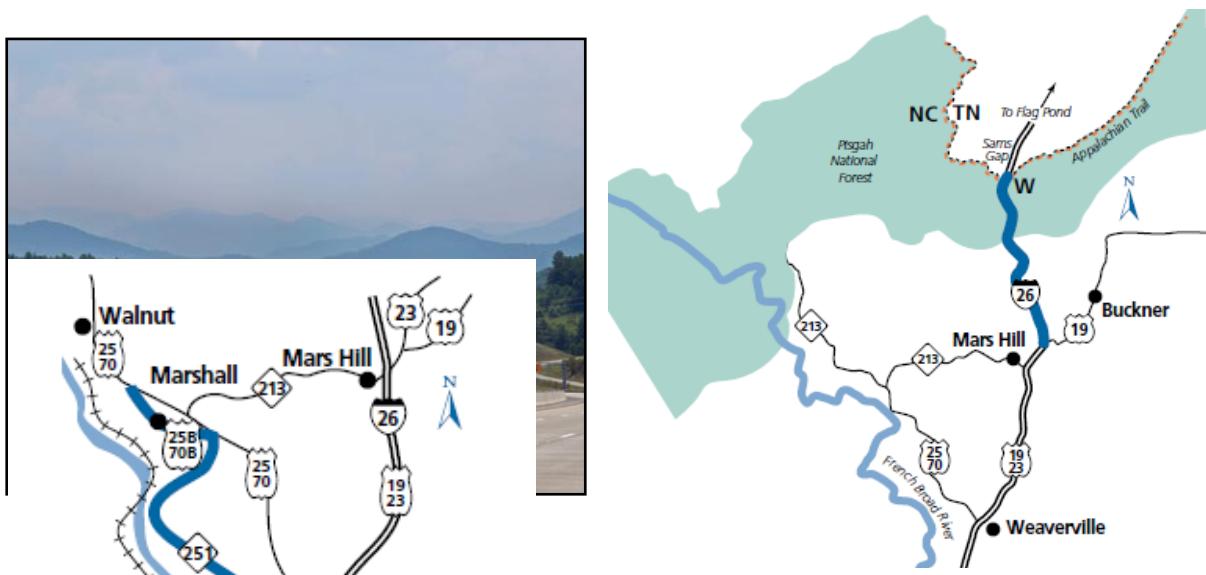
Typically local leaders identify a section of roadway they would like to have designated and work with NCDOT to attain designation. Designation helps preserve the scenic character of the roadway. For example, the North Carolina General Assembly passed a bill in 1993 that bans billboards ("outdoor advertising signs" as defined in G.S. 136-129) from along scenic byways or scenic highways.

Madison County contains three NC Scenic Byways: "Appalachian Medley," along NC 209 and US 25-70 in the western part of the county; I-26 from Mars Hill north to Tennessee; and "French Broad Overview," which primarily follows NC 251 between Alexander and Marshall. The maps below show these byways.

Appalachian Medley:



I-26 Scenic Highway:



French Broad Overview:

May 10, 2010

Page 64



8.3 Transportation Recommendations

Because the County is in the middle of a transportation planning process that will contain a number of specific recommendations, this plan contains only a couple general recommendations. These recommendations are based on input received during the planning process for the Comprehensive Plan, as well as the preliminary survey results from the recently conducted survey for the Comprehensive Transportation Plan (CTP) process.

8.3.1 Work with NCDOT, the RPO and the Madison County Transportation Authority (MCTA) to improve public transportation services.

In the community meetings and throughout the planning process, residents voiced the need for additional public transportation services. The ones mentioned most frequently were for regular public transit service between the three towns and regular service between Asheville and Madison County, in the Marshall or Mars Hill area. The County should advocate for these additional services and work with the entities listed above to improve transit service in the county.

8.3.2 Work with NCDOT and the RPO to designate additional park-and-ride lots

The recent transportation survey showed that a majority of respondents would like to see more park-and-ride lots around the county. Currently there is only one official lot and it is along I-26 in Mars Hill. Park-and-ride lots enhance carpooling and in the future, could be used in conjunction with transit routes. They can be established in any parking lot that has excess or

unused space and they work best if they are in a convenient location, along or near a main road. There are a number of retail parking lots along US 25-70 that could contain a section for park-and-ride parking. Church parking lots can also be good locations for park-and-ride lots because they are often mostly empty during weekdays. Park-and-ride lots can be managed with simple but formal agreements between NCDOT or another entity – a town, county or transportation authority – and the property owners.

Chapter 9. Housing

9.1 Summary of Existing Housing Stock

Values and Affordability

Studies have demonstrated that the Asheville Metropolitan Statistical Area (includes Buncombe, Haywood, Henderson and Madison Counties) has the most expensive housing of any MSA in the state, both in absolute terms and relative to median incomes (National Association of Home Builders Housing Opportunity Index, 2002 & 2004; Coldwell Banker Housing price survey 2002.). House prices have continued to increase more rapidly in the Asheville area than elsewhere in the state.

According to a *Housing Market and Needs Assessment* prepared in 2005 for the Asheville Regional Housing Consortium (Bay Area Associates), rents in the Asheville MSA are high relative to incomes, although not the highest in the state. While many single persons and single parents work two or more jobs to be able to afford housing, most low-income households end up paying more than they can afford for housing.

“Cost burden” is determined by calculating the percentage of household income spent for mortgage costs, insurance, taxes and utilities (owners) or gross rent and utilities (renters). According to the U.S. Department of Housing and Urban Development (HUD), households spending more than 30% of their income for these costs are considered to be “cost-burdened.” Households spending more than 50% are considered to be “severely cost-burdened.”

According to the most recent information available from the North Carolina Housing Finance Agency, there were approximately 1,090 cost-burdened homeowners, and 453 cost-burdened renters in Madison County in 2005. This represents about 18% of homeowners and 24% of renters respectively.

Recent trends in increased overnight tourism and an influx of part-time residents have made housing affordability more of an issue in Madison County and the western North Carolina region as a whole. The North Carolina Multiple Listing Service (MLS) reports that the average home sales price for 2000 was \$173,753 for Asheville-Buncombe County. By June, 2009 the average sales price in the Asheville-Buncombe County area had increased to \$253,852. In Haywood County, the average home sales price in June, 2009 was \$179,457. Recent average home sales price data for Madison County was not available from MLS. The average sales price in Madison County is likely between Haywood’s and Buncombe’s values.

The U.S. Census Bureau collects assessed property values from counties and computes median and average housing values based on these data. In 2000, the median value of owner occupied housing units in Madison County was \$94,600, which was about 87% of North Carolina’s median value of \$108,300 and 79% of the median value across the United States (\$119,600).

Values in Mars Hill are higher than the county values for this entire time period, and more closely match the median values for the state.

Median Assessed Values of Owner-Occupied Housing Units			
	1980	1990	2000
Hot Springs	\$20,800	\$30,400	\$65,600
Mars Hill	41,700	65,300	112,300
Marshall	20,600	42,900	86,000
Madison County	27,300	47,800	94,600
State of NC	36,000	65,800	108,300
United States	47,200	79,100	119,600

Source: U.S. Census Summary File 3 (1980, 1990, 2000)

The Census Bureau (American Community Survey) for the period 2005-2007 estimates the median value of owner-occupied homes in Madison County at \$145,700. For this same period for the state of North Carolina, the median value for these types of homes was \$136,800 and for the United States it was \$181,800.

Housing Characteristics

A lot of housing was built between 1990 and 2000 – 2,055 units – representing an increase of almost 27% in housing stock in this ten-year period. According to the Census Bureau there were 9,722 housing units in the year 2000. Of these, 1,722, or nearly 18%, were vacant and 681 (7%) were seasonally-occupied (see table below). There was a slight increase in the number and percentage of seasonal and vacant housing units from 1990 to 2000. By July 1, 2008, there were an estimated 10,858 housing units in Madison County – an increase of almost 12% over eight years, and a slower rate of growth that was seen in the previous decade.

Madison County Housing Characteristics				
	1990		2000	
	No. Units	Percent	No. Units	Percent
Owner-occupied	5050	77.8%	6,130	76.6%
Renter-occupied	1438	22.2%	1,870	23.4%
Total occupied	6488	100%	8,000	100%
Vacant	1,179	15.4%	1,722	17.7%
Seasonal	441	5.8%	681	7.0%
Total Housing Units	7,667		9,722	

Source: U.S. Census, Summary File 3

Types, Ages and Conditions of Structures

Two-thirds of the housing units in 2000 were single family homes. Manufactured homes accounted for nearly 28% of county housing units. Less than 5% were multifamily structures.

One reason for the relative dearth of multifamily units is the limited availability of public water and sewer service outside the three municipalities of Marshall, Mars Hill and Hot Springs.

Types of Housing Units in 2000		
Units in Structure	Number of Units	Percent
1, Detached	6412	66.0%
1, Attached	104	1.1%
2 (Duplex)	131	1.3%
3 or 4	168	1.7%
5 to 9	50	0.5%
10 to 19	66	0.7%
20 to 49	48	0.5%
50 or more	13	0.1%
Mobile Home	2699	27.8%
Boat, RV, or Van	31	0.3%
Total Housing Units	9722	

Source: U.S. Census 2000 Summary File 3

A little over half of the homes in Madison County (5,594 homes) were built prior to 1980 and 37% (3,984 homes) were built before 1970. Homes built before 1972 are more likely to have lead present, and consequently present a higher risk of causing elevated blood lead levels to their occupants, children in particular. These older homes often have higher levels of deterioration and are more likely to have asbestos present.

Additionally, 1,415 houses, or 14.6%, were built before 1940. These housing units may reveal severely inadequate electrical, plumbing and/or structural deficiencies. They may also contain aging single-pane windows and inadequate insulation, leading to inefficient heating and cooling. This overall lack of energy efficiencies can lead to higher heating and cooling costs, further straining limited budgets for low to moderate income families.

In the year 2000, the Census reported that 120 housing units (0.1%) lacked complete plumbing facilities and 94 units lacked complete kitchen facilities. Most homes in Madison County are heated by individual, rather than public utility, systems: 61% of the homes in Madison County are heated by fuel oil or kerosene; 9.5% rely on bottled, tank, or LP gas; 10.2% of county homes are heated with wood; and approximately 1% are heated by utility gas, coal or coke, solar or “other” fuel. About 20% of the homes have electric heat. Two homes have no heating source at all.

Average Household Size (persons per household)

Household Size

Average household size decreased in Madison County in the years from 1980-2000, from 2.72 to 2.34 occupants per household. This reflects similar trends at the state and national levels, although Madison's average household size is slightly smaller than the average size across North Carolina and the U.S.

	1980	1990	2000
Hot Springs	2.64	2.40	2.13
Mars Hill	2.39	2.19	2.10
Marshall	2.43	2.34	2.12
Madison County	2.72	2.48	2.34
North Carolina	2.78	2.54	2.49
United States	2.75	2.63	2.59

Source: U.S. Census Summary File 1 (1980, 1990, 2000)

9.2 Projected Future Housing Needs

According to the projections from the State Data Center, Madison County's population is expected to grow at a fairly steady rate, with estimates of about 23,630 in the year 2020 and 25,000 by 2030. Using the average household size in the year 2000, an estimated 10,098 housing units will be needed in 2020 and 10,684 will be needed in 2030 to house the residents of the county. Since the trend in household size is for smaller households over time, the number of housing units needed may be a little more than these estimates.

It is important to have a variety of housing choices located in a variety of places that match the needs of county residents. Some of these needs include:

- Providing more homes near places of employment;
- Housing for single people, young couples, workers, families, elderly individuals and couples;
- More affordable housing choices for county residents;
- Housing that fits in with the rural character of the county;

Different types of housing suit different stages in life. Providing a variety of housing choices allows people to age "in place" and maintain social and community connections through their stages of life.

Affordable Housing

A lack of affordable housing has been identified as a critical issue in Madison, as well as in other counties in the region. In-migration and the growing popularity of the area as a location for second homes and retirement have increased housing and land values in recent decades. Coupled with the relatively lower incomes of Madison County residents to others in the region, increasing housing costs put a disproportionate stress on local residents' budgets.

Available Affordable Housing

Madison County and the three incorporated towns within the County have some nice public housing stock, but the number of units cannot address the housing needs of all the low income residents of the County. The current inventory of public housing units is as follows:

- The **Madison County Housing Authority** has 40 units of housing for low income residents. The Housing Authority also administers the Section 8 housing voucher program for the County. There are 191 Section 8 vouchers allotted to Madison County.
- The **Hot Springs Housing Authority** has 16-one bedroom apartments; 20 two-bedroom apartments and 14 three-bedroom apartments.
- **Marshall's Housing Authority** has 20 one-bedroom; 15 two-bedroom; 6 three-bedroom; and 4 four-bedroom apartments.
- **Mars Hill Housing Authority** has 20 one-bedroom; 42 two-bedroom; 24 three-bedroom and one four-bedroom apartments in Mars Hill.
- Mashburn Gap Apartments in Marshall provides 32 one-bedroom and 2 two-bedroom units of subsidized apartment housing for seniors who may or may not be disabled. These are part of a USDA Rural Development grant-funded program.

Madison County also has an active chapter of **Habitat for Humanity** that has built 19 homes since 1989.

The **Community Housing Coalition of Madison County** is a federally-designated Community Housing Development Organization (CHDO; designated in 2008), and is able to develop and assist with affordable housing development efforts. It recently received a Community Development Block Grant (CDBG) to build capacity in the Coalition for providing affordable housing. It has also received HOME fund grants for the past three years, which has enabled it to coordinate and fund emergency repairs for low-income residents. The organization has also been working with Land-of-Sky Regional Council on a CDBG scattered-site grant that is helping four homeowners make renovations to their homes.

HOME is the largest Federal block grant to state and local governments designed exclusively to create affordable housing for low-income households. The eligibility of households for HOME assistance varies with the nature of the funded activity. For rental housing and rental assistance, at least 90 percent of benefiting families must have incomes that are no more than 60 percent of the HUD-adjusted area median income. Any household receiving HUD assistance must have an income that does not exceed 80 percent of the area median income.

Eligible activities under the HOME program include single-family housing construction, multi-family housing construction, owner-occupied rehabilitation, special needs housing and pre-development loans. Madison HOME funds are used for owner-occupied rehabilitation projects. HOME-assisted rental housing must comply with certain rent limitations which are published each year by HUD. The program also establishes maximum per unit subsidy limits (for multi-family projects) and maximum purchase-price limits (for single-family units).

Federal Low-Income Housing Tax Credits now finance virtually all the new affordable rental housing being built in the United States.² Housing Credit rental properties are privately owned and privately managed. In exchange for the financing provided through the tax credit, owners agree to keep rents affordable for a period of 15 to 30 years for families and individuals with incomes at or below 60% of the local median income. The North Carolina Housing Finance Agency monitors the properties during the compliance period to ensure that rents and residents' incomes do not exceed federal limits and that the properties are well maintained. Owners are eligible to take a tax credit equal to 9 percent of the "Qualified Cost" of building or rehabilitating the property (excluding land). The tax credit is available each year for 10 years, as long as the property continues to operate in compliance with program regulations.

Barriers to Affordable Housing

Local regulatory policies can have a profound impact on the development, or lack thereof, of affordable housing. Local regulations may disallow or make it cost-prohibitive to construct affordably priced housing. Examples include subdivision regulations that mandate large lots and set backs, zoning designations that limit or ban multifamily housing and/or mobile homes, building codes that require expensive materials and high development fees associated with infrastructure improvements.

Current zoning regulations in Madison County specify minimum lot sizes of 80,000 s.f. for Residential-Open Space (ROS), 40,000 s.f. for Residential-Agricultural (RA) and Residential (R-1) and 20,000 for Residential-Resort (R-2). These large lot sizes are barriers to affordable housing due to higher costs for land and infrastructure. Most property, outside the main transportation corridors and towns, is zoned RA. The County recently approved changes to the Planned Unit Development (PUD) regulations to allow for greater flexibility in site design, types of housing units and including some non-residential uses. The developer may also request greater density than two dwelling units per acre (up to four units per acre), if it is for a conservation-based subdivision design.

Policies that serve to exclude affordable housing development may evolve from the desire of local officials to maximize property tax revenues in their jurisdiction. In other instances they may reflect residents' fears of lower property values and higher crime rates sometimes associated with the proximity of affordable housing developments. This local opposition is sometimes referred to as "NIMBY," an acronym for "Not In My Back Yard."

Other barriers to affordable housing within Madison County include the high cost of land available for development and mountainous terrain that makes water and sewer infrastructure extensions more difficult and expensive. Public water and sewer service is limited to areas

² *Mountain Landscapes Initiative* – see www.mountainlandscapesnc.org (Southwestern Planning and Economic Development Commission, the Community Foundation of Western North Carolina and The Lawrence Group Architects of North Carolina, Inc. , 2008).

including and immediately surrounding the towns, along with a few areas served by small community systems.

9.3 Strategies to Improve Housing Options and Affordability

(1) Develop a Range of Housing Choices

9.3.1 Revise the Zoning Ordinances to allow greater density in places near towns, employment centers and infrastructure and consider providing incentives for the development of affordable housing.

Local policies and regulations can promote the development of affordable housing. Examples include zoning changes to allow or encourage higher density development, multi-family dwellings, and a mix of housing types within subdivisions. Some local governments, including Buncombe County, also offer permit fee reductions or rebates and down payment assistance.

The Future Land Use Map identifies areas where infrastructure exists or is planned by showing areas around each town, and also shows where employment and community centers are recommended. Higher density and a greater range of housing choices should be encouraged in these areas.

In healthy housing markets with solid property values, local governments may see some success by using “inclusionary zoning” rules or incentives to encourage more affordable housing. Developers commit to build a certain number of lower-priced homes and are compensated by being allowed to build more units in a project than zoning would otherwise have allowed. This approach has recently grown in popularity since state governments have less money for housing options in the face of huge budget shortfalls.

9.3.2 Partner with developers who can utilize housing tax credits to create affordable housing.

Local governments can partner with non-profit and for-profit developers who can utilize housing tax credits to create affordable development. An example of this partnership would be partnering with the Community Housing Coalition or with another development entity to obtain HOME and CDBG funds to extend infrastructure to affordable developments and/or enable higher densities.

9.3.3 Partner with Mars Hill, Marshall and Hot Springs to develop water and sewer infrastructure.

Madison County should partner with the towns to plan for water and sewer infrastructure in areas where higher density and more affordable housing is desired. Possible areas to consider are along US25-70 near Marshall, around the intersection of 25-70 and NC213, along NC213 between Marshall and Mars Hill and near Mars Hill, and along US19 on the east side of Mars Hill.

9.3.4 Support the Community Housing Coalition of Madison County

The Community Housing Coalition is eligible to receive grant funds from HUD and other sources to develop housing and to assist with related efforts. The Coalition is identifying projects and priorities through its housing plan and will need support to implement projects. It will need county support to competitively seek HOME, CDBG and other grant funds to fund housing projects.

(2) Housing Retention and Asset Building

9.3.5 Raise awareness about savings, loan and education programs for lower income individuals.

Individual Development Accounts (IDAs) are matched savings accounts designed to enable lower income individuals to enter the economic mainstream. Typically these programs are a partnership between a local non-profit and a financial institution. The non-profit recruits participants and provides financial counseling. The participant then begins saving in an IDA at the designated financial institution and each dollar is matched by the non-profit or another community organization or local government. These funds may be used for first time homeownership. The North Carolina Housing Finance Agency (NCHFA) has realized that even when individuals participate in the IDA program for a number of years, they still may not be able to afford a home. The NCHFA has established an IDA loan pool that can provide up to \$25,000 in gap financing to allow ownership. They may also provide \$1,000 grants as a match to IDA savings.

Homeownership and Education Counseling in the region is provided by OnTrack Financial Education and Counseling (www.cccsofwnc.org). Formerly known as Consumer Credit Counseling of WNC, the private, non-profit organization has provided education, counseling and debt management programs since 1975.

9.3.6 Encourage/support the formation of community land trusts.

The County and Community Housing Coalition should consider the viability/feasibility of community land trusts as a way to provide affordable housing in the county. If deemed viable, the County should modify its zoning and subdivision regulations to allow land to be used in a way that is consistent with the way a Community Land Trust works (see description below).

Community Land Trusts are an increasingly popular tool for creating affordable housing opportunities. They offer a way to lessen the cost of housing and incorporate an ethic of land stewardship for the long term. A Community Land Trust (CLT) owns land and leases it at a nominal fee to individuals who own the buildings on the land. This significantly lowers the cost of ownership by virtually eliminating the price of the land. Community Land Trusts provide access to land and housing to people who otherwise are denied access because they cannot

afford them and they preserve the affordability of housing for the long term. CLTs exist in both urban and rural areas; some rural ones hold land to preserve farming and forestry operations and to provide affordable housing. There are currently approximately 200 CLTs in the U.S. and at least six in North Carolina:

- Burnsville Land Community, Inc.;
- Community Home Trust in Orange County (<http://communityhometrust.org/>);
- Durham Community Land Trustees, Inc. (<http://www.dclt.org/>);
- Davidson Housing Coalition (<http://www.davidsonhousing.org/>);
- Cape Fear Housing Land Trust;
- Countywide Community Development Corporation in Brunswick County.

From the E.F. Schumacher Society (www.schumachersociety.org/cmlt.html):

"A **Community Land Trust** (CLT) is a form of common land ownership with a charter based on the principles of sustainable and ecologically-sound stewardship and use. The land in a CLT is held in trust by a democratically-governed non-profit corporation. Through an inheritable and renewable long-term lease, the trust removes land from the speculative market and facilitates multiple uses such as affordable housing, village improvement, commercial space, agriculture, recreation, and open space preservation. Individual leaseholders own the buildings and other improvements on the land created by their labor and investment, but do not own the land itself. Resale agreements on the buildings ensure that the land value of a site is not included in future sales, but rather held in perpetuity on behalf of the regional community."

The first community land trust was formed in 1967 in Albany, Georgia by Robert Swann and Slater King, seeking a way to achieve secure access to land for African American farmers. The movement has grown to include over 200 community land trusts throughout the US and is widely understood as the best model for developing permanently affordable homeownership opportunities in regions of escalating land prices. A new National Community Land Trust Association has formed to respond to the growing needs of its member organizations."

Other Links:

9.3.7 Continue to be actively involved in the Asheville Regional Housing Consortium and encourage Mars Hill, Marshall and Hot Springs to get involved.

Madison County is part of the Asheville Regional Housing Consortium, which was formed in 1992. The consortium's jurisdiction is the counties of Buncombe, Henderson, Madison and Transylvania, the same four counties covered by the Land-of-Sky Regional Council. The counties and towns involved were accustomed to working together on issues such as land use, clean water and transportation. A total of fourteen of the nineteen units of general local

government within the area are members and nine are actively involved in affordable housing production.

Selected Resources:

Asheville Regional Housing Consortium Housing Market and Needs Assessment (Bay Area Economics, Inc., 2005). See

<http://www.buncombecounty.org/common/planning/HMandNA.pdf>

The **North Carolina Housing Coalition** is a private, non-profit advocacy and resource organization working for decent, affordable housing that promotes self-determination and stable communities for low- and moderate-income North Carolinians. The Coalition works to increase investment in quality affordable homes so that working families and individuals, persons with disabilities, people in crisis, and fixed-income seniors may live with opportunity and dignity. See www.nchousing.org.

The **National Low Income Housing Coalition** is dedicated solely to achieving socially just public policy that assures people with the lowest incomes in the United States have affordable and decent homes. See www.nlihc.org for more information.

Enterprise Community Partners, Inc. has developed a comprehensive guide – *Housing Development Step-By-Step* (http://www.enterprisecommunity.org/resources/tutorials/housing_development/). This tutorial is designed to equip nonprofit organizations with the appropriate information and tools to improve, or expand, their affordable housing production systems. It can also assist nonprofit developers in evaluating alternative housing production methods and "scaling up" their pipeline. Enterprise's broad experience developing affordable housing and providing technical assistance to more than 500 community development corporations (CDCs) and municipal agencies across the country is reflected in this tool.

Chapter 10. Infrastructure and Utilities

10.1 Existing and Planned Water and Wastewater Infrastructure

The County does not provide water or wastewater infrastructure or related services at this time and has no plans to provide these services in the foreseeable future. Each town provides public water and wastewater service to properties within their jurisdictions, sometimes also serving areas just outside their town limits. There are also a couple small community water systems that serve a small number of households.

Hot Springs

Water: The water system consists of two wells, a storage tank and service lines that range in size from two to eight inches in diameter. The primary well provides 250 gallons per minute, while the secondary well provides 100 gallons per minute. Current daily water usage is 90,000 gallons per day. The daily usage is high for a community the size of Hot Springs, and reflects the Town's economic base in tourism.

Analysis from Hot Spring's recent Comprehensive Plan (2008) indicates that any failure of the main well would strain the backup well beyond capacity. Additionally, portions of the Town's water service lines are two and four inch lines. These lines do not meet the State's minimum standard of six inches. Analysis also reveals lead welds in the waterlines throughout the system. These could pose a lead hazard risk and should be replaced when they are exposed during repairs of the system.

Wastewater: The Town's wastewater facility has a treatment capacity of 80,000 gallons per day. There is also a sand filtration treatment system serving the River Drive public housing development.

Projected growth in the area, and the increasing popularity of Hot Springs as a tourism destination, may strain the capacity of the Town's water and wastewater facilities. Improving and increasing water and wastewater infrastructure has been identified as a priority by Hot Springs residents.

Mars Hill

Water: In 2007, the Town of Mars Hill provided water to approximately 3,102 customers. The customer base reflected 743 residential, 78 commercial, 2 industrial and 36 institutional metered connections.

Mars Hill owns and operates a 0.8 million gallons per day water treatment plant that was built in 1996 and is located at the headwaters of Laurel Creek. There are two raw water reservoirs that provide storage for Mars Hill within the Laurel Creek reservoir. The Poplar Cove reservoir

has a capacity of about 12 million gallons, while the Carter Cove reservoir has a capacity of about 1.7 million gallons. The Carter Cove reservoir is used to supplement the Poplar Cove reservoir. Treated water is then piped to a 400,000 gallon concrete clear well and transported to the town's distribution system via gravity transmission line. A large portion of the transmission line was built in the 1920's and is made of cast iron. The Town replaced three miles of the main distribution line in 2003 and will begin replacing another two miles in 2010. Once the 2010 project is complete, this will constitute over half of the main distribution line replaced from the reservoirs to Town, and the most leak-prone areas.

Mars Hill owns four above-ground water storage tanks. These tanks store 1,160,000 gallons of water for the water customers. The water distribution system consists of approximately 37 miles of lines ranging from 12-inch cast iron to one-inch PVC. Overall the water system is in good condition.

Wastewater: There were approximately 600 connections to the Town of Mars Hill's wastewater system in 2007, with an average daily flow of around 0.165 million gallons per day. Most of the connections are within the town limits. The Town maintains seven wastewater pump stations. The wastewater collections system has over fifteen miles of mostly eight-inch PVC gravity sewer lines. A large part of the system was installed in the 1980's and remains in good condition.

The Town of Mars Hill's wastewater treatment plant that was built in the mid-1980's, and is permitted to discharge up to 425,000 gallons per day of treated effluent into Gabriel Creek.

Marshall

Water: In 2007, the North Carolina Department of Environment and Natural Resources (NCDENR) placed a moratorium on any water extensions by the Town of Marshall for two reasons: (1) inadequate water supply capacity; and (2) failing distribution system with inadequately sized lines that were longer than 1000 feet in length.

Marshall currently receives its water from three wells located in the Walnut Creek area. There are also two off-line wells located in Fortner Hollow. The active wells have a yield of about 210 gallons per minute. The Fortner Hollow wells yield around 500 gallons per minute, but are offline due to high mineral content. A new treatment facility, with an estimated capital cost of about \$500,000, would be required in order to use these wells. Marshall's water consumption averages about 125,000 gallons per day, with peak consumption around 160,000 gallons per day. Marshall is currently constructing two new wells in the vicinity of the Walnut Creek wells. The yield of these two wells is expected to be about 105 gallons per minute each.

Marshall has two water tanks with a combined capacity of 1.5 million gallons. The largest of the two tanks (one million gallons), built in the 1930's by the Civilian Conservation Corps, is antiquated and in need of replacement.

There are over 29 miles of water lines in Marshall, ranging from less than two inches to twelve inches in size. Portions of the distribution system were built with cast iron pipe in the 1930's and 1940's and are in need of replacement.

Wastewater: The Town of Marshall's wastewater collection system consists of about 13.5 miles of gravity sewer and force main. The type of lines include vitrified clay, cast and ductile iron and PVC, and they vary in size from four to ten inches in diameter. There is a small inflow and infiltration problem associated with the system.

Wastewater is treated at a facility located on Blennerhassett Island in the French Broad River and has a 400,000 gallons per day discharge permit. The town generates approximately 110,000 gallons per day of wastewater, with a peak of 225,000 gallons per day. The high peaking numbers reflect infiltration and inflow into the system. The wastewater treatment plant was built in the 1980's and has had little in the way of upgrades since then. Disinfection is provided by a UV treatment system; however the system has been periodically out of service over recent years.

10.2 Future Water and Wastewater Needs

Mars Hill – Water

A recent analysis for the Town of Mars Hill prepared by McGill Associates, P.A., projected a 1% annual growth rate through 2029. Based on this projection the water treatment plant should be able to handle the average daily demand (0.349 million gallons per day) and peak daily demand (0.523 million gallons per day) through 2029. Peak demand is based on 50% greater water consumption than average daily demand.

However, the Laurel Creek watershed has been determined to have an inadequate yield of safe water during times of drought. The North Carolina Department of Environment and Natural Resources (NCDENR) mandates that public water systems look for additional water supplies when demand reaches 80% of capacity. This is projected to occur in 2025. Accordingly, the Town of Mars Hill is working on an interconnection with the Town of Weaverville's Ivy River water treatment plant in order to purchase additional water during drought conditions. The proposed interconnection will allow Mars Hill to purchase as much as 200,000 gallons of water per day from Weaverville.

In addition to the water supply needs, there are several other needs within the water distribution system that need to be addressed. Projects identified in the study by McGill Associates study include:

- 1) Water Transmission Line Replacement. This is a two-phase project that will help ameliorate the water loss throughout the water distribution system.
- 2) Banjo Branch Road and Main Street Water Line Replacement.
- 3) Frontage Road Water Line Extension.

- 4) Mountain View Road Water Line Replacement. (Two separate projects.)
- 5) Roy Edwards Road Water Line Extension.
- 6) Parkway View Road Water Line Replacement.
- 7) Bruce Road Water Line Extension.
- 8) Calvin Edney Road Water Line Extension.
- 9) Woods Ammons Road Water Line Extension.
- 10) Park Drive Water Line Extension.

Mars Hill – Wastewater

The Town of Mars Hill's wastewater treatment plant has the capacity to meet current and projected future needs. However there are several improvements within the wastewater system needed to meet current and projected demands. These projects include:

- 1) College Street/Highway 213 Sewer Line Replacement.
- 2) Woodhaven 1A and 1B Pump Station Upgrades. (To include new electrical controls, emergency generators, hatches, pump rails and discharge piping. This is considered to be an urgent project and needs completing within the next two years.)
- 3) Interstate 26 and State Highway Pump Station Installation. (This will serve the immediate area and transfer flow to the existing Carl Eller Road Pump Station.)
- 4) SR 1605 Sanitary Sewer Service Extension. (To include installation of a Pump Station and extension of sewer lines.)
- 5) Calvin Edney Road and Frontage Road Sanitary Sewer Service Extension.
- 6) State Highway 213 (West of Mars Hill) Sanitary Sewer Service Extension. (To include installation of a Pump Station and extension of sewer lines.)

Marshall – Water

As mentioned in the previous section, the Town of Marshall has been under a moratorium from NCDENR since 2007. The highest priority water projects have been targeted to get the moratorium lifted with work slated to begin in 2009. These projects include the construction of two new wells in order to meet current demand and taking the primary one million gallon reservoir off-line and replacing it with a 0.5 million gallon reservoir. These changes will help reduce water loss within the system. Undersized and deteriorated water lines in the Rector Corner and Bailey Branch areas will be replaced with those of appropriate sizes.

Other projects identified as priorities over the next twenty years include:

- 1) Hill Street/Skyway Drive Waterline Replacement.
- 2) Rollins Road Water line Replacement.
- 3) West US25 Water Line Replacement.
- 4) Roberts Hill Road Water Line Replacement.
- 5) Redmon Road Water Line Replacement.
- 6) Walnut Creek Road Water Line Replacement.

- 7) Water Meter Replacement and Automatic Meter Read System.
- 8) Hayes Run Road Water Line.
- 9) Rector Corner Water Tank.
- 10) Well Construction at Recreation Park.
- 11) New Town Well (site as yet undetermined).
- 12) Fortner Hollow Well Rehabilitation.
- 13) Recoat/Paint Industrial Park Tank.

Marshall - Wastewater

A recent analysis for the Town of Marshall, prepared by Michael R. Goforth, PE, projected an annual growth rate of 2% over the next twenty years. Based on this projection, Marshall has adequate wastewater treatment capacity. However, there are several improvements at both the plant and within the wastewater collection system that will require attention. Priorities over the next twenty years include:

- 1) Replace Island Road Pump Station.
- 2) Walnut Creek Road Sewer Line Replacement.
- 3) Hill Street Sewer Line Replacement.
- 4) Influent Screens at Wastewater Treatment Plant.
- 5) Replace Aerator In Digester at Wastewater Treatment Plant.
- 6) Stand-By Power Generation at Wastewater Treatment Plant and Pump Stations.

10.3 Feasibility of coordinated/consolidated regional water and waste water systems

Staff and elected leaders from the County and the towns have been meeting periodically for the past couple years to discuss common issues and needs related to water and waste water infrastructure, and to explore possible coordination of systems and services. Due to the locations of the towns and the geography of the county, it is not feasible for Hot Springs to connect to or coordinate services with Marshall or Mars Hill. But there is interest from Marshall, Mars Hill and Madison County to work together to develop infrastructure along 213, which connects the two towns. There are still topographic challenges along this route but the towns and county would like to continue to explore options and associated costs, so they can plan for future services along this corridor and for the funding necessary to accomplish this.

10.4 Communications Infrastructure

Residents and business owners throughout the County expressed needs for high-speed internet service and cell phone service. Both of these services are only available in parts of the County – see the Communications Infrastructure Map (Map 15) for tower and line locations and

coverage areas. The primary challenges to providing wired and wireless service in Madison County are the mountainous terrain and rural settlement patterns, making it expensive to run lines and difficult to reach customers with wireless signals.

Current service providers in the County include:

- Charter – Charter provides high-speed phone, internet and cable TV service through a wired service in limited parts of the County;
- Verizon – Verizon provides wireless phone and internet service through five communication tower antennas and 3.5 miles of land lines running from each tower. Verizon is the primary telephone service provider for Madison County.
- French Broad Electric Membership Corporation (EMC) – Through a partnership with the Education & Research Consortium of the Western Carolinas Inc. (ERC), French Broad EMC offers broadband Internet to businesses, school systems and other large organizations located within its western North Carolina service area and near its fiber optic backbone (see map below). Currently, the service is *only* provided for organizations/businesses requiring a minimum of 3Mbit of bandwidth. The service is *not* available for individual home users. Connectivity is provided via the fiber optic backbone which spans through the main towns located in Madison, Mitchell and Yancey Counties.



- US Cellular Wireless – US Cellular provides cell phone and high-speed internet service to some areas of the county.
- M.A.I.N. (Mountain Area Information Network) – M.A.I.N. provides dial-up internet service to Madison customers.
- Bell South – Bell South provides land-line phone service and DSL internet service to a limited area in the Sandy Mush community.
- Country Cable – Country Cable serves the Wolf Laurel area and limited parts of Highway 19E with cable and high speed internet services.
- Aloft – Aloft provides wireless phone and internet service to a limited number of customers and is currently trying to expand into the Mars Hill area.

10.5 Electricity Infrastructure

French Broad Electric Membership Corporation was formed in 1939, after Madison County Commissioners voted to form a committee regarding a rural electric company. A Board of Directors was appointed to set up the organization and this original Board met in March, 1940, and adopted by-laws and a charter for incorporation under the laws of the State of North Carolina.

French Broad EMC has grown into a modern-day cooperative, with 21 substations serving approximately 35,000 members in Madison County, Buncombe County, Yancey County and Mitchell County in North Carolina, as well as members in Unicoi County and Cocke County in Tennessee.

10.6 Natural Gas Infrastructure

Public Service Gas of North Carolina (PSNC) serves the Mars Hill area with natural gas service. This is the only area of Madison County that is served by them at this time.

As of 2009 there are no new planned extensions to any additional areas of Madison County. They are currently working on small extensions off of their main service lines.

10.7 Infrastructure Recommendations

10.7.1 Work with Mars Hill and Marshall to develop coordinated plans for development and infrastructure along the NC 213 corridor.

The County should continue to convene meetings with town and county officials to discuss and plan for future development along the 213 corridor. The entities should consider creating an inter-local agreement that outlines the goals for development and the responsibilities of each entity. All three entities should seek funding sources to carry out the necessary feasibility plans and eventually project plans and construction.

10.7.2 Work with each of the towns to adopt a common vision for development surrounding the towns and to provide water and waste water infrastructure, as needed, in these areas.

Each town has their own comprehensive or land use plan and now the County has this comprehensive plan. Some reconciliation of the plans and associated zoning is recommended near the towns' borders to maintain some continuity and create some consistency between them. Working with the towns to develop a common vision for these "border" areas will help the towns and county plan for services in these areas as well as appropriate zoning for these

areas. Since the most feasible land for industrial development is close to the towns, work with the towns to identify sites for future industries and to zone them appropriately.

10.7.3 Work with internet and telephone service providers and land owners as appropriate, to expand high-speed internet and phone coverage throughout the County.

The County needs to pro-actively engage in conversations with internet and phone providers to facilitate the expansion of high-speed internet and cell phone services in the county and for suppliers to provide these services at reasonable prices to residents and businesses. Businesses and organizations need these services to effectively compete and thrive and to serve their customers. Residents need these services to connect to goods, services, education, jobs and to areas outside Madison County.

Chapter 11. Growth Management and Future Land Use

11.1 Alternatives for managing growth

Local governments have a variety of tools they can use to direct development and to influence its scope, form and impact. They can:

- adopt regulations to govern how and where development may occur (through a zoning ordinance and map, subdivision ordinance, form-based regulations);
- create incentives and other policies to influence the type of development that will occur; and
- plan for and provide infrastructure (water, sewer, schools and government services) and work with infrastructure providers (towns, utility companies, NC DOT) to develop/improve infrastructure in areas where development is desired.

The zoning map and corresponding zoning ordinance define the types and intensities of land uses that are allowed in each area of the map. Government policies can provide incentives for a variety of development characteristics. Incentives can include reduced fees, streamlined development process, increased density/intensity, decreased parking requirements, etc. Development characteristics that may qualify for an incentive could include the provision of “affordable” housing, preserving large areas of open space, building a greenway/walkway, providing jobs, preserving a cultural/historic site, and more.

Transportation and water and sewer (or wastewater) infrastructure are key components for development of high intensity. Individual homes, small farms and small businesses can be located in most places because they typically don’t need public or private water and sewer service and although they do need to have access from a road, it could be a secondary road. However, larger businesses and organizations (churches, schools, government centers, etc.), businesses that depend on customer traffic.

In North Carolina, the state Department of Transportation (DOT) has a strong influence on planning and making changes to the transportation system. Working through the Land-of-Sky Rural Transportation Planning Organization (RPO) and with the towns and DOT, the County can influence future transportation plans. DOT also must honor the County’s Comprehensive Plan, and its Future Land Use map as it makes transportation plans and implements projects. It is fortunate that DOT and the RPO are currently working with the County to develop a County transportation plan; this Comprehensive Plan will inform and influence the transportation plan.

There are a myriad of non-transportation infrastructure providers in the County and these are described in more detail in Chapter 10:

- Mars Hill, Marshall and Hot Springs provide water and wastewater service to their town and some surrounding areas;

- French Broad Electric and Progress Energy provide electricity and limited broadband service in the County;
- Verizon, Charter, BellSouth, US Cellular, Aloft, M.A.I.N. and Hughes Net provide internet and/or phone service, each in different parts of the county;

The County will need to communicate its vision and desires to these providers and work with them to improve or change the services that are being provided.

11.2 Preserving Rural Character and Natural and Cultural Resources

Preserving the rural character of the county involves maintaining the traditional ties to the land and to rural communities that define the character of Madison County. It also involves having new development designed in ways that are sensitive and complimentary to the context and character of the area. Achieving these objectives is based on a few basic principles:

1. New development in rural areas not directly tied to traditional land-based economic activities should consider the surrounding character and community.
2. The viability of the agriculture and rural economy must be maintained and enhanced as much as possible, while recognizing that agriculture is changing and will look differently and consist of a different set of products in the future than it has in the past. It has also become increasingly difficult for families to rely on farming as their only source of income, so this needs to be considered while addressing economic viability.
3. Providers of public or private infrastructure and services should coordinate policies and capital investment decisions in rural areas.
4. Development designs should factor in the surrounding area and natural resources available.



Maintaining rural character and rural communities is complex because it involves actions by the public and private sector and is affected by the regional and more global economy. The public sector can provide technical expertise and facilities to rural entrepreneurs, regulate how and

where land development occurs, invest in public infrastructure. The private sector provides businesses and jobs and is the primary steward of the land and landscape. Having a shared vision that values the rural aspects of the county will help Madison County maintain its rural character and heritage.

11.3 Recommendations for Future Land Use

The **Future Land Use Map** (Map 16) depicts some of what was described in the previous sections – concentrating the majority of commercial and industrial development in already developed areas, along main roadways and thoroughfares. We should concentrate a mix of smaller business and residential focal centers for communities as well as highly traveled roadways. These concepts are described here, then framed as more specific recommendations in the next section.

First, along portions of the main roads (I-26, 25-70, 213 and 19), a variety of medium to high intensity uses can be accommodated and should be encouraged. The “mixed-use corridors” designated on the map are those areas where it is appropriate and desired to have retail and service businesses, offices, industrial, apartments/condominiums, educational facilities and similar types of uses.

A few “neighborhood/community centers” have been identified on the map – in the Spring Creek community, near Wolf Laurel, along Leicester Highway (NC 63) in southwest Madison and in the Laurel community center area. These are areas that already contain gathering places and/or neighborhood businesses and that are logical areas to grow into community centers, with a wider range of businesses and gathering places.

Around each town is an area (approximately two miles from the existing town limits) that represents where more high density development could occur, due to the proximity to a town and to main roads and water/sewer infrastructure. The County has zoning jurisdiction over the areas outside of town limits, except for around Mars Hill where the Town controls zoning and land use in its Extraterritorial Zoning Jurisdiction (ETJ).



Another proposed future land use is an area where businesses and industries could locate more closely together. These “business and industry” clusters identified on the map are areas that are near both Marshall and Mars Hill, accessible by main roads and have or are near utilities. These areas already have a couple different types of businesses and seem to be good locations to cluster additional businesses. The one near Marshall contains the Mashburn Medical Center, NC Cooperative Extension, County Fairgrounds and some retail businesses along the roads.

There is one west of Mars Hill contains Micro Switch which is under the town's jurisdiction but also along highway 19E at the intersection of I-26 is another good location.

The County and towns will need to work together to plan for infrastructure and development in the areas just outside the towns. The towns provide water and waste water services in and around their town boundaries and have control over expansions and rates.

11.4 Possible Considerations for Maintaining and Managing Growth and Development

New or Revised Regulations

11.4.1 Allow a variety of medium to high intensity uses along portions of the main roads, as shown on the Future Land Use Map.

Modify zoning regulations, by defining a new zoning district or overlay district, to allow a variety of medium to high intensity uses along portions of the main roads – US 25-70, US 19, & NC 213. The “mixed-use corridors” designated on the map are those areas where it is appropriate and desired to have retail and service businesses, manufacturing/industrial businesses, offices, apartments, condominiums, educational facilities and similar types of uses. Also establish the “neighborhood district” designated on the map – NC 63, 209 and 208 among others- in these area’s which would allow for a cluster of smaller business to mix with residential uses. This would allow communities to maintain that focal point of gathering.

11.4.2 Allow higher-density development adjacent to and around the towns.

Using the areas shown around each town on the Future Land Use Map as a general guide, modify zoning regulations to allow more dense development in these areas. These are areas where more dense development could occur, due to the proximity to a town and to main roads and water/sewer infrastructure. The County could use their R-1 zoning district for this area (it is currently not being applied to any areas on the Zoning Map). The zoning could be modified to allow smaller lot sizes, duplex and multifamily units and mixed uses where current and planned infrastructure can support this level of intensity. The County should also consider encouraging cluster-style housing developments in these areas, as a way to provide more affordable housing near the towns. This could be achieved by adding density bonuses to builders to try to attract them to this area instead of the more rural parts of the county.

11.4.3 Adopt a zoning district that allows a mix of businesses and industries and apply it to the areas identified as “business and industry clusters.”

The “business and industry clusters” are areas that are near both Marshall and Mars Hill, accessible by main roads and have or are near utilities. These areas already have a couple

different types of businesses and appear to be good locations to cluster additional businesses or industry.

11.4.4 Establish a design review process and maximum square footage requirements for buildings in the Retail-Business and Mixed-Use Corridor zones.

To ensure that designs are compatible with community character and contain safe access, the County could establish design guidelines and a design review process so these issues are discussed and understood up front. It can be set up as “mandatory review, voluntary compliance” process as a way to provide information to developers and some influence over the design.

Especially with national franchises and chain stores, experience shows that communities that accept standard corporate design get that design. In communities that insist on more context-sensitive designs that fit with their community character, get custom designs from the national chains and franchises.

Along with this, the County should consider incorporating a maximum square footage requirement in the Retail-Business and Mixed-Use Corridor zoning districts, or a threshold that triggers the Conditional Use process. For example, large stores like Wal-Mart are typically 120,000 to 140,000 square feet and a typical Lowe's is about 150,000 square feet. The Conditional Use process could be used for buildings that were proposed to be larger than 50,000 square feet, which is a little larger than a football field. This would ensure more oversight and discussion for very large buildings.

Policies and Incentives

11.5.1 Provide incentives to encourage more affordable housing.

The County should consider providing incentives, like increased density, for developers willing to include a percentage of affordable housing units in a residential development. Many places offer a “density bonus” if 10 to 20 percent of the housing units in a subdivision or multifamily development.

Education

11.6 Develop and distribute educational materials to help citizens understand county zoning and subdivision regulations and the review and approval processes.

The general public often does not understand regulations or how they can have effective input on decisions. The County could develop some brochures or information sheets explaining the legal responsibilities and requirements of the Planning Board, Board of Adjustment and County Commissioners; the development review and approval processes; and when and how to provide meaningful input. This information could be made available on the County's website, at County offices and as features in the News Record and Sentinel.

Chapter 12. Intergovernmental Coordination

12.1 Opportunities for Coordination on Infrastructure, Schools and Other Government Services

Intergovernmental coordination is at the core of many aspects of the County's Comprehensive Plan. As the County plans for a successful future, with the hopes of continuing to be a place where people will want to live and plan to stay, intergovernmental coordination and collaboration play an important role. The various initiatives underway at this time that are exploring collaborations and related roles and responsibilities need to be continued and completed as appropriate. The County, towns, school system and colleges are working together to address economic development, workforce, transportation and other needs. This work should be both commended and expanded in the future.

Land Use/Growth Management Planning

Hot Springs and Marshall have recently completed land use plans or comprehensive plans – Hot Springs in 2008 and Marshall in 2009. Mars Hill has recently gone through a community visioning process and is working on plans to realize the vision. These plans and related documents have been reviewed as part of this comprehensive planning process. While there are similarities, especially in the goals for maintaining rural character and for strengthening the downtowns and the towns' economic and residential bases, there are potential areas of conflict or difference in some aspects that will need to be addressed.

One of the issues that will need to be discussed with each town is about how new development will be accommodated around the town's current limits of jurisdiction. This plan recommends accommodating most future growth adjacent to the towns and on portions of the main corridors. It also recommends developing at higher densities than current zoning allows in some areas. Related to this issue are issues of planning and providing for transportation improvements and other infrastructure improvements, including water, sewer and communications infrastructure.

Transportation Plans and Projects

The County has recently begun a countywide transportation planning process, working with the Land-of-Sky Rural Planning Organization (RPO) and NC Department of Transportation (NC DOT). The towns and other stakeholders are involved on the steering committee for the transportation plan. The future land use map and plans as well as other related recommendations from this Comprehensive Plan will need to be incorporated into the

transportation plan and its recommendations. The County and the towns will need to stay involved in the planning process to ensure that this occurs.

Water and Wastewater Plans and Facilities

Each town provides water and wastewater service for residents and businesses in and near its town limits. Currently the County does not have a role in the provision of this infrastructure. The County Manager has initiated intergovernmental dialogue on this issue through regular town and county manager meetings that often include some elected officials and other staff. There appears to be interest between the county and towns to coordinate services as it makes sense financially and logically. The area along NC 213 that runs between Mars Hill and Marshall offers an opportunity for these towns and potentially the County to coordinate and share costs and benefits of these improvements.

Due to Hot Springs' location, far from the other two towns and separated by mountains and National Forest lands, there are minimal opportunities for coordination of water or wastewater services. As the town grows, it will need to expand its current services and this expansion is a high priority in the town's recently completed comprehensive plan.

Schools and Education

The **Madison County School System** has approximately 2,600 students enrolled in four elementary schools, one middle school and one high school. The middle and high schools are in the central part of the county – in Walnut and Marshall. The elementary schools are spread around the county – in Hot Springs, Brushy Creek (Walnut), Laurel, and Mars Hill. Some students have to travel far distances for middle and high school, due to the consolidated location. Due to the mountainous terrain and settlement patterns across the county, some students also have long distances to and from the elementary schools.

The county school system and **Asheville-Buncombe Technical Community College** (A-B Tech) have been partnering in recent years to offer college-level courses to high school students and to coordinate course offerings. These efforts (described more in Chapter 6) should continue and should be coordinated with the county's economic development efforts and local employment needs.

Mars Hill College gets their students involved in the greater community through service learning opportunities, in its Lifeworks Learning Partnership program. In August, the college hosted a meeting of about 35 community leaders, representing the faculty and staff of Mars Hill College as well as service organizations from Madison and Buncombe counties. The purpose of the event was to brainstorm about better collaboration between the college and numerous community groups which provide a range of services to individuals in the community.

Mars Hill College is also planning to begin a program that will attempt to connect visitors to the college and to the agricultural, cultural and historical resources and amenities/businesses in the

county. This new program is envisioned to offer a week's stay at the campus and include educational sessions and field trips, with opportunities for self-exploration. This program will give visitors more awareness of the variety of things the county has to offer and hopefully encourage them to stay longer and visit again.

Other Governmental Services

The County provides building inspection and floodplain administration services for the entire county. It also provides watershed administration services for the county and the Town of Mars Hill. Each town does their own zoning administration and enforcement.

Various public services are provided by the County for the entire county population and area: parks and recreation; social services; public transportation; senior services; and emergency management. There may be opportunities for efficiencies and collaboration in these and other services, some of which are outside the scope of this plan.

12.2 Recommendations

12.2.1 Coordinate with the towns on plans to accommodate future growth and plans for annexation and extra-territorial jurisdiction (ETJ).

Coordinate with the towns to share a similar vision in the development of annexation plans that define future annexation boundaries, future land uses, providers of and enhancements to public facilities/services, and other infra-structure. The plans should be consistent with this Comprehensive Plan and assess financial feasibility and availability/capacity of service providers to serve the areas proposed for annexation.

12.2.2 Work with the School Board to identify sites for new schools and on plans to consolidate schools.

Assist the School Board in identifying sites for new schools and in school consolidation plans to ensure that the decisions made are consistent with the County's Comprehensive Plan and the concerns raised by residents regarding the long distances many students must travel to and from schools. Proposed school locations should be reviewed for opportunities to integrate/collocate schools and other public facilities including, but not limited to, libraries, parks, community centers and public safety or fire station facilities.

12.2.3 Regularly share information with the School Board and the colleges to identify issues of mutual concern and to review capital and expansion plans.

Annually share information and assess future needs with the School Board and to identify areas of mutual concern and financial savings concerning the construction of public facilities.

Annually share information and assess future needs with Mars Hill College and Asheville-Buncombe Technical College to identify areas of mutual concern and benefit, and to ensure their plans are consistent with the goals and objectives in this Comprehensive Plan.

Review the School Board's Strategic Plan and related work programs and provide input on updates to this plan to ensure that it is consistent with the County's Comprehensive Plan.

12.2.4 Continue to be active in the Land-of-Sky RPO and work with the towns to develop countywide transportation priorities.

Continue to be active in the Land-of-Sky Rural Planning Organization (RPO) and advocate for the County's transportation infrastructure needs.

The County and towns should communicate regularly about transportation issues and concerns and try to agree on countywide priorities. The County and the towns can then collectively advocate for these priorities, which will be more effective in making them regional priorities and attracting funding.

12.2.5 Continue to be active on the Land-of-Sky Regional Council board.

Continue to be active on the Land-of-Sky Regional Council board, especially those efforts that will result in greater coordination, efficiency, and effectiveness of local governments.

12.2.6 Consider conducting a feasibility study to look at consolidation and coordination possibilities for water and sewer facilities and services.

With the interest in the future development along NC 213, the County and the towns of Mars Hill and Marshall should consider conducting a feasibility study to look at costs and benefits of various scenarios of providing water, sewer and other utilities along this corridor. Other future growth areas near the towns could also be included. Potential study elements could include:

- Evaluation of Existing Resources (Infrastructure and Facilities)
- Operating Costs
- Growth Projections
- Present and Future Needs
- Opportunities for Synergy within Systems
- Capital Improvements Program
- Financial Analysis and Rate Information
- Legal Analysis
- Consolidation Feasibility Analysis
- Other Issues Affecting Consolidation (e.g., loss of control, risk and liabilities, implementation issues, etc.)