

JASPER COUNTY COMPREHENSIVE PLAN

2007 Update



**Update Comprehensive Plan
Adopted by the
Jasper County Council
April 2, 2007**

Original Comprehensive Plan
Adopted November 16, 2007

**Prepared With The Assistance of
The Lowcountry Council of Governments**



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Jasper County Comprehensive Plan

Introduction

This updated Comprehensive Plan has been prepared at a time of dynamic change for Jasper County. From a long history of “stagnant growth” the County has become an area of phenomenally active growth. For instance, the 2000 Census documented 7,928 dwelling units. In October 2006 ground was broken for The Traditions, a development of 9,000 dwelling units. There are over 50,000 residential lots that have been subdivided in the last two years.

To be in the best position to benefit the most from this inevitable development the County has adopted these **Three Universal Development Principles**:

1. **Keep Jasper Rural**
2. **Develop the Municipalities**
3. **Development pays its own way.**

A Comprehensive Plan must set forth not just the development of land and capital improvements. A Comprehensive Plan must also anticipate the provision of public services to the citizenry. With Jasper County’s era of phenomenal growth having just begun, the delivery of public services must be anticipated as never before. As a significant effort to reinforce the **Three Universal Development Principles** the provision of public services will also reflect a rural level of service in areas of Jasper County beyond the municipal boundaries of Hardeeville and Ridgeland.

The 1994 Enabling Legislation for South Carolina requires that:

“The local planning commission shall review the comprehensive plan or elements of it as often as necessary, but not less than once every five years, to determine whether changes in the amount, kind, or direction of development of the area or other reasons make it desirable to make additions or amendments to the plan. The comprehensive plan, including all elements of it, must be updated at least every ten years.”

The *Jasper County Comprehensive Plan* was approved in 1998, although the work had been completed by mid-1997. This is the first review since that time. During the interim many changes have occurred that have made a thorough review essential. The review process which the Planning Commission has undertaken has provided the opportunity to address a different future for the County than was envisioned seven years ago.

To serve those purposes, the two key components of this review have been:

- An assessment of the socio-economic and other changes that have taken place in Jasper County during the past several years;
- An analysis of the policy recommendations (called "Goals and Implementation Strategies") contained in the *Comprehensive Plan* followed by proposals for their modification, replacement or elimination to suit the changed and changing conditions in the County.

The result is a document that combines those two components and can serve as a major amendment to the existing *Comprehensive Plan*. When adopted by Jasper County Council, the planning policy recommendations in this amendment will also serve as the basis for the new zoning ordinance being prepared for the County, since that regulatory document is intended to implement the *Comprehensive Plan*. A new *Plan* will be prepared during the required ten-year update, which should begin in 2007 for completion in 2008.

Overview of Changes in Jasper County

Since the time that the work was completed almost eight years ago, a number of significant changes have occurred in the County and in the four-county Lowcountry Region that provide a considerably changed planning environment than the one that existed in 1997-98. Chief among these are:

- **Rapid Growth.** The US 2000 Census showed that Jasper County was the fastest growing small county in South Carolina between 1990 and 2000. From 2000 to date the population growth has continued at a relatively high 4% annual growth rate. At the same time, the economy has been growing, with new commercial development and jobs and increased wages and income. The next section discusses this in more detail.
- **Expectations of Major Growth in the Future.** In the last two years nearly 60,000 housing lots have been approved for subdivision. Over 2,000,000 sq. ft.

of retail development is anticipated in approved Planned Development Districts/Development Agreements. The prospect of a major new deepwater port to be developed at the southeastern end of Jasper County, and the related businesses development that will follow, portend the era of significant growth in economic development in Jasper County.

- **More Regional Cooperation.** Jasper County has been fully involved in two major region-wide initiatives: the Lowcountry Economic Diversification Strategy and the Regional Multi-Model Transportation Plan. Both are discussed in detail in sections of this document. The County has also been working with Beaufort County and other adjoining Counties on issues that affect both counties.

- **Restructured County Planning.** As a result of the changes that are both underway and anticipated, the structures of both planning jurisdictions and planning commissions in Jasper County have recently been changed. The geographic areas and commission sizes of the municipalities have been increased, and the emphasis of County-wide planning has become more long-term. A key component of this process is a joint planning effort among the County, the Town of Ridgeland and the City of Hardeeville.

A Vision for Jasper County

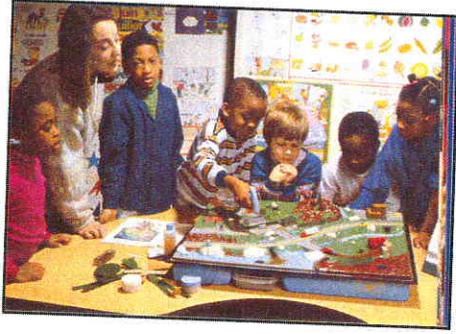
Jasper County encompasses a wealth of natural resources that allows its residents to enjoy a quality of life that should be protected and enhanced. The County is strategically located near two regional growth areas and is expected to experience its own considerable growth over the next few years. To assure that the anticipated growth occurs in a manner which is as favorable for the current residents as it is to the future prosperity of the County, the following should be achieved:

- ☞ *Land use and development* patterns should be established incrementally based on demand, careful infrastructure planning, and reasonable regulations that balance the County's long range vision with the rights of landowners. New growth should pay for itself without creating undue financial burdens on the County's existing population. Jasper County, especially the area west of I-95, is to be kept rural while significant development is planned to take place within the municipalities of Hardeeville and Ridgeland.

- ☞ *Natural and historic resources* should be protected. Conserving natural resources will allow residents to continue to enjoy outdoor leisure activities that

they have so long enjoyed, while also realizing some new economic benefits associated with an increased nature-based tourism industry. The County's scenic landscape should also be protected, particularly along the rivers and wetlands, to attract visitors and high-quality development. By protecting and conserving the County's large, forested holdings, Jasper County will contribute to its ecological and economic health. Historic sites and structures should be preserved and maintained (both physical integrity and character of place), with inappropriate infill development not allowed to destroy the integrity of historically significant communities.

- ☞ **Jasper County's economy** must steadily expand to include a wide range of business and employment opportunities for County residents and an increased tax base to help accommodate the County's growth. The proposed **Deepwater Port** is by far the most significant economic development project. New businesses should be in those industrial and business service sectors which would best compliment regional needs and would offer job opportunities with higher pay for County residents, lessening the need for residents to travel outside the County for employment. The safeguards placed on natural and historic resources should not discourage industry, but attract the highest quality industries to Jasper County and allow the County's beauty and natural character to flourish. Forestry should remain an important part of Jasper County's economy, with new development located in areas where it does not pose a substantial threat to forestry activities.
- ☞ Jasper County should strive to achieve a successful mix of *housing* types to meet the needs of an increasingly diverse population including an adequate supply of affordable housing that is physically safe for occupants and attractive to neighbors. Affordable housing can be achieved through community support, an emphasis on infrastructure support, and encouragement of development patterns that provide quality affordable housing while minimizing excessive public service demands.
- ☞ **Public services** The clear rural/municipal dichotomy of service levels is to be maintained. Jasper County shall continue to be the provider of the rural level of service throughout the County. Within the growing municipal areas, the Joint Planning Areas centered around Hardeeville and Ridgeland, a higher level of service is necessitated. In order to maintain equity to all of Jasper County's residents, those residents within the higher service level metropolitan areas are to pay for this higher level of service. Typically this payment is through taxes and service fees paid to the municipality. Cooperation with the municipalities in strategically planned infrastructure and service delivery planning is essential.



Chapter 1: Jasper County Observations

Jasper County lies within the “Lowcountry” Region of South Carolina, with its western boundary formed by the Savannah River and the eastern border primarily composed of the Coosawhatchie, Broad, New, and Pocatigo Rivers (Map 1). The County covers approximately 650 square miles, of which over 22 percent are wetlands. The land surface is generally level, broken by numerous streams and swamp areas, with extensive saltwater marshlands covering the lower portion of the County.

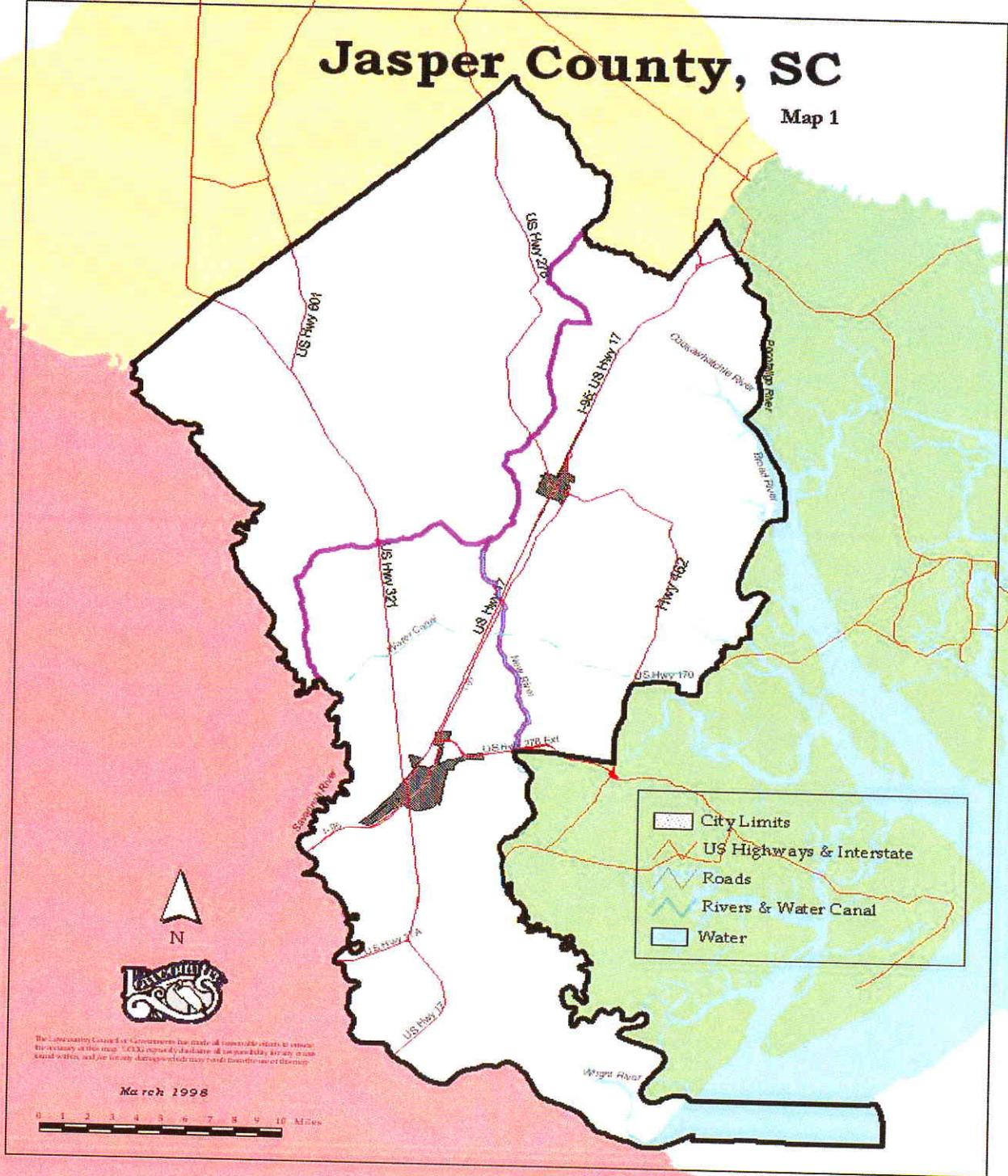
Jasper County is critically located between two rapidly growing communities: Savannah, Georgia, and Southern Beaufort County including Hilton Head-Bluffton. Interstate 95 and US Highway 17 link Jasper County to Savannah and provide the primary transportation routes to heavily visited recreation destinations in southern Beaufort County and, in terms of future economic development; these are key freight transportation connectors for the planned deepwater port in Jasper County and between the two existing deepwater ports in Savannah and Charleston.

The County is still generally rural in character, with most of the land in agricultural and forest uses. There are two existing municipalities as well as an increasingly “suburbanized” area along the Beaufort County border. Ridgeland, the County seat, is located in the central part of Jasper County, approximately 30 miles west of Beaufort and 35 miles northeast of Savannah, Georgia. Hardeeville, located in the southern part of the County, approximately 20 miles north of Savannah, is projected to be the most rapidly growing portion of the County over the next 20 years. Underscoring this point is phenomenal ten-fold growth the area of Hardeeville over the last two years – from 5 sq. miles to 50 square miles and growing.

Jasper County enjoys mild winters and warm summers. The growing season over the past 30 years has averaged 223 days. The average winter daytime temperature is 63 degrees and 89 degrees in summer, with a mean temperature of 77 degrees. Average precipitation is 48 inches per year.

Jasper County, SC

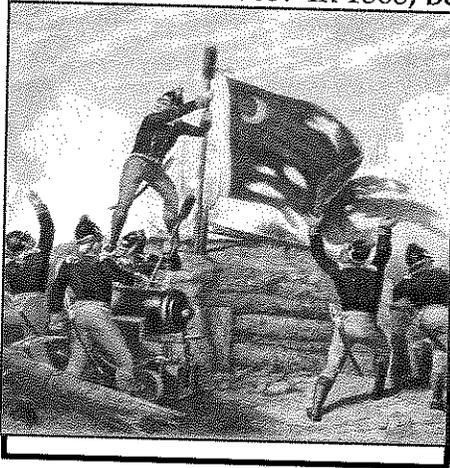
Map 1



1.1 EARLY HISTORY

Shortly after the English settled Carolina, during the times of the Lords Proprietors, the area which now encompasses Jasper County was designated as part of Granville County. This area included the "Indian Lands" stretching from the Combahee River to the Savannah River. Legend has it that the first courthouse and jail in Granville County consisted of a log building near a causeway across Black Swamp, a tributary of the Savannah River along the banks of which lived the Pallachuccola tribe. Remnants of an old fort named for the tribe can still be seen in the swamp today.

In the late 1700's, the area was known as the "back country" of the Beaufort District, which was organized under the Court Act of 1769. The seat of government was placed on the coast in Beaufort, but access was a major problem due to the numerous tidal streams and marshes between the "back country" and the coast. In 1788, Coosawhatchie, nine miles north of present Ridgeland, became the government seat. In 1840, the courthouse was moved to higher ground in Gillisonville, where it remained until it burned in 1865. In 1868, Beaufort once more became the government seat.



In 1878, Hampton County was created, cutting sections from the old Court Act districts of Beaufort and Barnwell. The area formerly comprising most of Granville County became the separate counties of Hampton and Beaufort, from which Jasper County was created in 1912. Named for a Revolutionary War hero, Sgt. William Jasper, Jasper County is one of South Carolina's youngest counties.

1.2 POPULATION

POPULATION GROWTH

Between 1990 and 2004, Jasper County's rate of growth was second only to that of Beaufort County (the fastest growing in the state) with an average annual rate of nearly four percent, which is quite high. Population projections developed by Clemson University forecast a significantly greater rate of growth over the next twenty years.

Table 1.1: Population and Population Estimates: Region

	Census 1990 Population	Census 2000 Population	July 1, 2001 Population	July 1, 2002 Population	July 1, 2003 Population	July 1, 2004 Population	% Change 1990-2004
Beaufort County	86,425	120,937	124,884	127,977	132,889	135,725	57.04%
Colleton County	34,377	38,264	38,580	38,804	39,173	39,595	15.18%
Hampton County	18,191	21,386	21,384	21,316	21,391	21,301	17.10%
Jasper County	15,487	20,678	20,831	20,969	20,998	21,193	36.84%
Lowcountry Total	154,480	201,265	205,679	209,066	214,451	217,814	41.00%

Source: State Data Center

[Note: Ridgeland's growth between 1990 and 2000 included the addition of a 1,203 inmate population at the SC Ridgeland Correctional Institution. Without the inmates Ridgeland's population would be 1,409, for an increase of 31.56% between 1990 and 2004; the total County population would be 19,990, for an increase of 29.08% between 1990 and 2004.]

Table 1.2: Population and Population Estimates: Jasper County and Municipalities

	Census 1990 Population	Census 2000 Population	July 1, 2001 Population	July 1, 2002 Population	July 1, 2003 Population	July 1, 2004 Population	% Change 1990-2004
Jasper County	15,487	20,678	20,831	20,969	20,998	21,193	36.84%
Hardeeville City	1,583	1,793	1,819	1,818	1,814	1,838	16.11%
Ridgeland Town	1,071	2,610	2,609	2,605	2,600	2,612	143.88%
Balance of Jasper County	12,833	16,367	16,416	16,552	16,584	16,743	30.47%

Source: U. S. Census Data

POPULATION FORECASTS TO 2025

Within Jasper County growth rates varied, as shown in Table 1.3 and 1.4 below. Jasper County has recently experienced growth and anticipates considerably more. Only time will tell which of the extremely diverse population projections is closest—the lower projections of the State Data Center or the much higher projections of the “Clemson Report”. For purposes of the Comprehensive Plan the County must anticipate the higher population projection and modify its policies and capital investments for the actual growth of future years.

Table 1.3: Jasper County Population Projections 2000-2026, Clemson Report

Table 1 – Projected Population of Ridgeland, Hardeeville and Unincorporated Jasper County, 2007-2026

Year	Ridgeland	Hardeeville	Unincorporated Areas	Total
2007	3,191	8,063	17,556	28,810
2008	3,791	14,313	18,556	36,660
2009	4,391	20,563	19,556	44,510
2010	4,991	26,813	20,556	52,360
2011	5,591	33,063	21,556	60,210
2012	6,191	39,313	22,556	68,060
2013	6,791	45,563	23,556	75,910
2014	7,391	51,813	24,556	83,760
2015	7,991	58,063	25,556	91,610
2016	8,591	64,313	26,556	99,460
2017	9,191	70,563	27,556	107,310
2018	9,791	76,813	28,556	115,160
2019	10,391	83,063	29,556	123,010
2020	10,991	89,313	30,556	130,860
2021	11,591	95,563	31,556	138,710
2022	12,191	101,813	32,556	146,560
2023	12,791	108,063	33,556	154,410
2024	13,391	114,313	34,556	162,260
2025	13,991	120,563	35,556	170,110
2026	14,591	126,813	36,556	177,960

Aside from the larger number of county residents, the growth depicted in Table 1 will change the character of Jasper County. At present almost 80 percent of County residents live within the unincorporated areas of Jasper County under this growth scenario, Jasper County will become a more urbanized county with only 20 percent of county residents residing within the unincorporated areas in 2026. Approximately 70 percent of Jasper County residents will reside within the Hardeeville City limits. This growth scenario also results in a county that has different characteristics than the typical large county in present day South Carolina. In the largest South Carolina counties today, most residents – approximately 60 percent – live within unincorporated areas.

Strom Thurmond Institute of Government and Public Affairs, Clemson University
Source: Table 1, Pg. 12, Fiscal Impact Analysis: Jasper County, South Carolina, Hardeeville, South Carolina and Ridgeland, South Carolina (January 2006).

Table 1.4: South Carolina Data Center Projections

	Census	Estimate	Projection	Projection	Projection	Projection	Projection
	1-Apr	1-Jul	1-Jul	1-Jul	1-Jul	1-Jul	1-Jul
COUNTY	2000	2004	2005	2010	2015	2020	2025
Beaufort	120,937	135,725	137,800	152,000	166,190	180,390	194,570
Colleton	38,264	39,595	39,830	41,510	43,180	44,850	46,520
Hampton	21,386	21,301	21,560	22,430	23,300	24,170	25,040
Jasper	20,678	21,193	21,280	22,880	24,480	26,080	27,680

INCOMES AND POVERTY

Significantly, as the population grew the economic conditions of the population improved as well, both absolutely and in comparison to the rest of the Lowcountry Region and the state. Jasper County residents have higher incomes than previously and a smaller portion of the population is living below the poverty level than in 1990.

Table 1.5: Jasper County Income and Poverty Levels

Jasper County Income and Poverty Levels

	Median Household Income		% Change 1990-2000	% Individuals Below Poverty Level		% Change 1990-2000
	1990	2000		1990	2000	
Ridgeland	\$16,029	\$27,679	42.09%	21.5%	20.0%	-6.98%
Hardeeville	\$18,466	\$28,977	36.27%	28.4%	27.7%	-2.46%
Jasper County	\$18,071	\$30,727	41.19%	25.3%	20.7%	-18.18%
South Carolina	\$26,256	\$37,082	29.19%	15.4%	14.1%	-8.44%

Table 1.6: Jasper County Median Household Income

Median Household Income

	1990	2000	2002	% Change 1990-2002
Beaufort County	\$30,450	\$46,992	\$45,822	50.48%
Colleton County	\$20,617	\$29,733	\$28,919	40.27%
Hampton County	\$18,615	\$28,771	\$27,650	48.54%
Jasper County	\$18,071	\$30,727	\$27,117	50.06%
State Average	\$26,256	\$37,082	\$37,442	42.60%

The increase in income and decline in poverty rates is a result of improved employment conditions in Jasper County. Section 5 of this document discusses that in detail.

As well, unemployment rates continue to be lower than two of the three other counties in the Region and the state average. See Table 1.9 on page 16.

Table 1.7: Regional Unemployment Rates

	Dec. 2004	January 2005	February 2005	March 2005	April 2005	May 2005	June 2005	July 2005	August 2005	Sept. 2005	Oct. 2005
Beaufort County	4.9	5.3	5.5	4.7	4.0	3.9	4.8	4.5	4.6	5.0	5.3
Colleton County	8.1	8.5	8.4	7.6	6.9	6.3	7	6.8	6.8	7.3	7.4
Hampton County	9.5	10.0	10.1	8.7	7.9	7.5	8.3	8.1	7.6	8.3	8.5
Jasper County	5.3	5.6	5.9	5.4	4.8	4.6	5.1	5	5	5.6	5.4
South Carolina	6.9	7.0	7.1	6.7	6.5	6.3	6.3	6.1	6.2	6.6	6.9
US	5.4	5.2	5.4	5.2	5.2	5.1	5	5	4.9	5.1	5

AGE GROUPS

Unlike the rest of the Lowcountry and the state of South Carolina, and the entire United States, Census data showed that the percentage of Jasper County’s older population did not increase between 1990 and 2000. As the table on the following page illustrates, the population aged 65 and over declined significantly; the population aged 45 to 64 (a number of whom would be classified as “Baby-Boomers”) also decreased, although to a lesser extent. Young children and school-age children also declined as a percentage of the population. Significant growth, however, occurred among the population aged 18 to 44. This is the group that generally makes up much of the labor force and has the largest rate of new household formation.

Table 1.8: Age Group Composition

Age Group Composition: Percent of Population												
	0-5 years old		6-17 years old		18 - 24 years		25 - 44 years		45 - 64 years		65 years +	
	1990	2000	1990	2000	1990	2000	1990	2000	1990	2000	1990	2000
Ridgeland	8.70%	5.90%	18.80%	9.00%	9.80%	16.60%	27.80%	44.50%	17.20%	15.80%	17.70%	8.20%
Hardeeville	0.20%	9.30%	23.40%	21.60%	10.50%	11.40%	30.80%	30.30%	14.80%	16.30%	9.10%	10.90%
Jasper County	8.80%	7.20%	22.80%	19.50%	9.70%	10.30%	28.10%	30.70%	17.90%	21.20%	12.60%	11.00%
Lowcountry Total	8.30%	7.00%	19.20%	17.90%	12.40%	10.70%	30.10%	27.80%	17.70%	22.50%	12.40%	14.20%
South Carolina	7.30%	6.60%	19.00%	18.60%	11.60%	10.20%	31.90%	29.60%	18.50%	23.00%	11.30%	12.10%

ETHNICITY

The years since 1990 have seen a truly notable increase in the Hispanic population of the Lowcountry, with Jasper County's rates of increase truly the most dramatic. This has the potential for altering the historic balance between the African-American and white segments of the population.

Table 1.9: Ethnicity

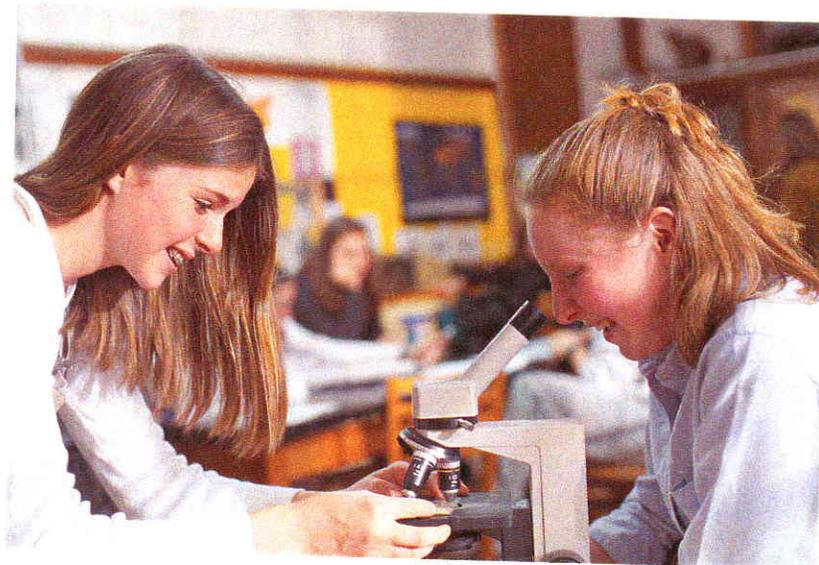
		1990	2000	% Change 1990-2000	2002	% Change 2000-2002
Beaufort	Total Population	86,425	120,937	39.93%	127,977	5.82%
	White	59,843	85,451	42.79%	93,878	9.86%
	Black	24,582	29,005	17.99%	31,080	7.15%
	Hispanic	2,168	8,208	278.60%	9,572	16.62%
Colleton	Total Population	34,377	38,264	11.31%	38,804	1.41%
	White	18,671	21,245	13.79%	22,001	3.56%
	Black	15,469	16,140	4.34%	16,259	0.74%
	Hispanic	176	551	213.07%	642	16.52%
Hampton	Total Population	18,191	21,386	17.56%	21,316	-0.33%
	White	8,279	9,173	10.80%	9,204	0.34%
	Black	9,884	11,906	20.46%	11,984	0.66%
	Hispanic	71	547	670.42%	581	6.22%
Jasper	Total Population	15,487	20,678	33.52%	20,969	1.41%
	White	6,529	8,766	34.26%	9,687	10.51%
	Black	8,889	10,895	22.57%	11,067	1.58%
	Hispanic	69	1,190	1624.64%	1,567	31.68%

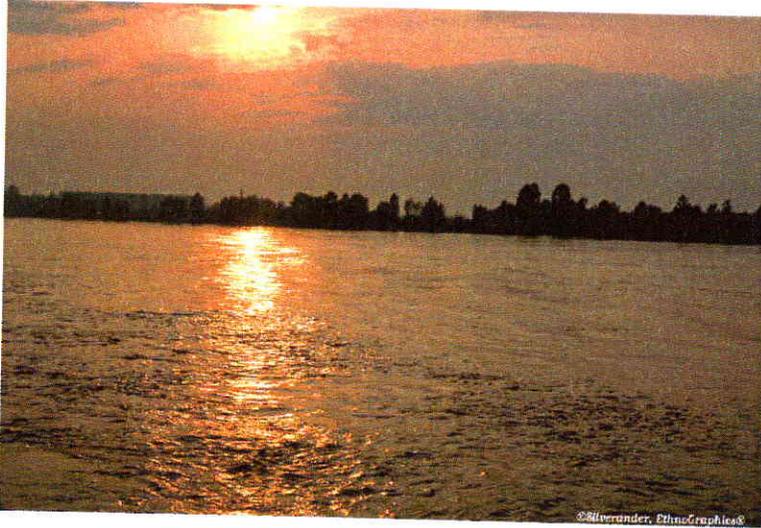
EDUCATIONAL ATTAINMENT

In spite of the several positive socio-economic indicators, Jasper County's levels of educational attainment, including the percentage of adults who have graduated from high school and still need improvement (although the high school grad ratio is actually higher than the state average.). The percentage of adults with either two-year or four-year degrees, though, is definitely lower than the four-county Lowcountry average or the South Carolina average.

Table 1.10: Educational Attainment

Educational Attainment for Population over 25 Years Old										
	Less than 9th Grade		Some High School		High School Grad		Associate Degree		Bachelor Degree	
	Percent of Adult Population		Percent of Adult Population		Percent of Adult Population		Percent of Adult Population		Percent of Adult Population	
	1990	2000								
Ridgeland	10.63%	14.64%	27.51%	25.68%	35.08%	34.11%	4.51%	1.39%	5.82%	6.45%
Hardeeville	12.53%	19.81%	24.94%	24.68%	40.57%	32.94%	5.86%	2.33%	3.33%	2.65%
Jasper County	21.65%	12.39%	23.81%	22.46%	35.06%	35.94%	4.03%	3.74%	2.44%	6.16%
Lowcountry Total	11.39%	6.87%	15.83%	13.24%	30.37%	29.22%	5.79%	5.98%	12.90%	15.82%
South Carolina	13.62%	8.31%	18.09%	15.35%	29.50%	29.97%	6.33%	6.68%	11.22%	13.54%





Chapter 2: Natural Resources

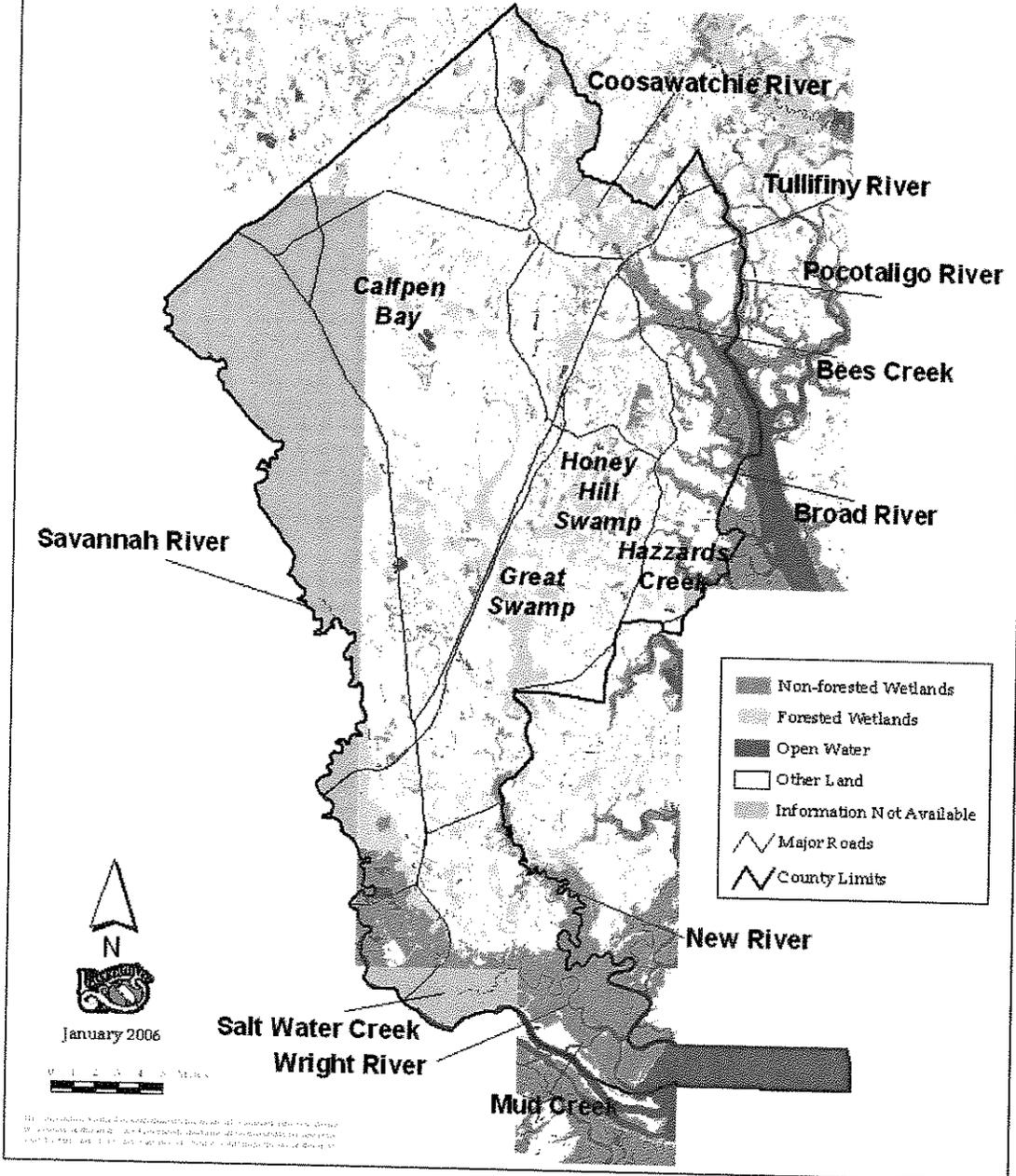
Jasper County is the southernmost county in South Carolina and its boundaries are primarily natural drainage systems: the north central boundary is formed by the Coosawhatchie and Tullifinny rivers; the northeastern by the Pocatalico and Broad Rivers; the western and southern by the Savannah River; and the southern by the New River. The total land area of the County is 428,000 acres or 668.75 square miles, 10 percent of which (over 40,000 acres) is marshland. Jasper County is truly a part of the Lowcountry, with elevation ranging from sea level to 103 feet above sea level, and the southern portion of the County (south and east of Hardeeville) at an elevation of 20 feet or less. A few sand ridges run along the Savannah River and there are low hills in the extreme northern part of the County.

Included in this discussion of natural resources are surface and ground waters, floodplains, wetlands, soils, flora and fauna, and natural areas.

2.1 SURFACE WATERS

The County's rivers and streams also provide fishing and boating opportunities for residents and visitors (Map 2). The Coosawhatchie River and its tributaries comprise a significant watershed in the northern part of the County and the Savannah River in the southern portion. The Savannah River is the primary water supply for the Beaufort-Jasper Water and Sewer Authority, primarily serving Beaufort County demands at this time. While the river does not currently supply much of the County's existing water, it is likely that it will play a major role in the future.

Map 2 Jasper County Water Resources



The South Carolina Department of Health and Environmental Control (SCDHEC) has classified all of the surface waters in the State based on the characteristics and use of the waters and water quality standards. Each of the classifications must be protected from degradation resulting from development or other activity. The waters in Jasper County fall into the following four categories:

Shellfish Harvesting Waters (SFH) - tidal waters protected for shellfish incubation and harvesting. Specific water quality standards must be maintained for harvesting to be allowed.

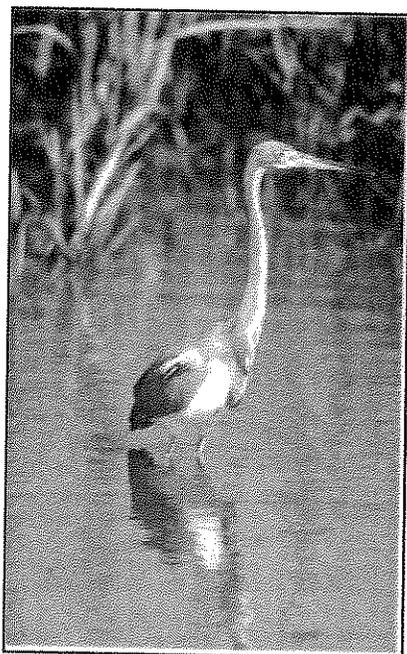
- **Freshwaters (FW)** - suitable for primary and secondary contact recreation and as a source of drinking water supply after conventional treatment. Suitable for fishing and the survival and propagation of a balanced indigenous aquatic life. Specific water quality standards are required.
- **SA** - tidal saltwaters suitable for primary and secondary contact recreation, crabbing, and fishing. Harvesting of clams, mussels, and/or oysters for human consumption is not allowed. Suitable for fishing and the survival and propagation of a balanced indigenous aquatic life. Specific water quality standards are required.
- **SB** - same as SA, except standards for water quality are lower.

The surface water resources of Jasper County are shown on Map 2 and include the following: (a * indicates site-specific standards have been set)

- Bees Creek, the entire stream tributary to the Coosawhatchie River - SB
- Broad River, the entire stream tributary to the Broad River - SFH
- Coastal Waters, offshore to the land to the limits of State jurisdiction - SFH
- Coosawhatchie River, headwaters to salt water intrusion - FW
- Coosawhatchie River, salt water intrusion to Broad River - SFH
- Fields Cut, the entire stream - SA
- Mud Creek, the entire stream between Savannah and Wright Rivers - SA
- New River, entire stream tributary to Atlantic Ocean - SA
- Salt Water Creek, the entire stream - SA
- Savannah River, from Ft. Pulaski to Atlantic Ocean - SA
- Savannah River, from Seaboard Coastline RR to Ft. Pulaski - SB*
- Wright River, entire stream tributary to Atlantic Ocean - SA

☞ **Water Quality and Stormwater Management.** It is critical that water quality in both surface and ground waters be maintained to ensure future use of these resources. Impacts from development on the water cycle is increased runoff from increased

impervious surfaces which causes more frequent and more severe flooding and changes to the stream channel. Unmanaged runoff also results in decreased infiltration with less groundwater recharge and a decrease in the base flow to streams. There is also more pollution generated which is delivered directly to the streams.



This unmanaged runoff flowing into bodies of water is called nonpoint source pollution which is responsible for more than half of the water contamination in the US today. Included in this runoff can be bacteria and viruses, soils and sediments, pesticides, fertilizers and nutrients, trash, oxygen-consuming substances, and motor vehicle fluids. Everyday activities in and around homes can cause the introduction of toxic chemicals into local water runoff: lawn and garden care, household chemical usage, inappropriate solid waste disposal, excessive water use, animal waste, and motor vehicle maintenance. Another factor of concern of nonpoint source pollution is from septic systems. Septic systems which are correctly installed and properly maintained will not cause a problem of pollutant transfer for a long period of time. A system which is improperly installed, poorly located, or ill

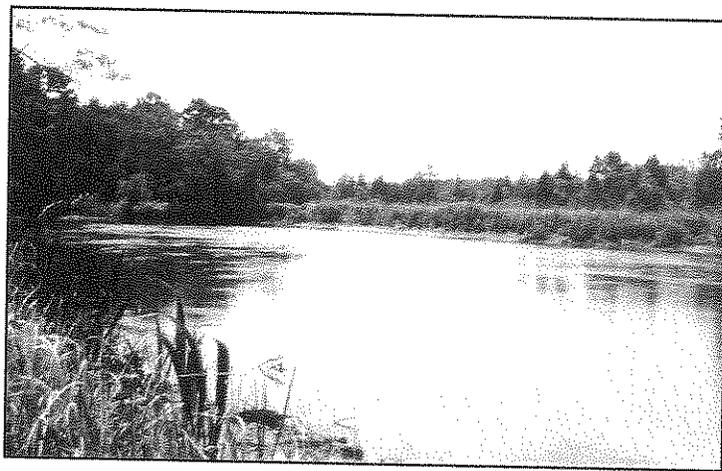
maintained can and will cause a problem with leakage of fluids. Many programs have been developed to educate and work toward the elimination of nonpoint source pollution. Jasper County should investigate the use of these programs in the County.

To prevent further damage to streams, land development design has moved from the design of systems to remove massive amounts of water from a site quickly to the use of techniques to store and filter stormwater on-site prior to releasing it to local surface waters. Numerous communities across the nation are finding it necessary to institute stormwater management plans to address remediation of streams resulting from unregulated stormwater discharges from past development activity. Jasper County has the clear advantage of being able to develop a stormwater management plan to prevent this type of pollution rather than spending millions of dollars to remediate streams later after the damage is done. At a minimum, stormwater management plans state regulatory framework for these actions, describe local issues, delineate practical and cost-effective best management practices (BMPs) for construction and special slopes, and provide performance standards. Some methods for stormwater protection include: requiring substantial drainage control and stormwater management plans for major new development which create stormwater storage basins with appropriate buffering or requiring natural buffers (not lawns) immediately adjacent to waterways and water bodies. Other methods should also be investigated.

œ **Floodplain Management.** Waterways and their floodplains provide natural green space in cities and also serve important functions including providing habitat, maintaining water quality, controlling floods and erosion, and recharging groundwater. These functions need to be encouraged and the integrity of the floodway protected. The Federal Emergency Management Agency (FEMA) encourages cities and counties to restore natural areas and relocate threatened structures, and offers some financial assistance for this work. The floodway is the most important component of this restoration effort. Floodways are described as: "...the area of the watercourse plus adjacent land which must be preserved to allow the discharge of the base flood without increasing flood heights..." (FEMA). Jasper County should carefully examine its floodway and investigate relocation of any potentially affected structures. Although future development within the floodway is prohibited by federal law, many communities have increased the area in which development is restricted, particularly development resulting in impervious surfaces or which would result in higher flood levels. Jasper County should consider these restrictions for its floodplains.

A recent issue of the SCDNR *The Floodplain Manager* stressed the importance of treating floodplain variances with extreme caution as FEMA considers variances as very serious matters. The newsletter provides a suggested format for determining the appropriateness of granting a variance to the floodplain ordinance.

œ **Scenic River Designation.** One possible way to protect the rivers of Jasper County is to apply for designation as a South Carolina Scenic River for all rivers that qualify. This designation does not add regulations for the rivers chosen for inclusion, however, all of the property owners along the river are asked to participate in the formulation of a River Management Plan. The Plan addresses the use and protection of each river and is prepared by the adjacent land owners with assistance from the SCDNR. After the Plan is prepared and agreed to by each property owner, it is administered with the assistance of SCDNR. The Plans cannot provide less protection than state, federal, or local ordinances, but they can provide increased protection, as appropriate, and even more important, address issues not covered by other ordinances. The designation of a Jasper County river as a South Carolina Scenic River would elevate interest in traveling the



river and would increase tourism and the use of local liveries as well as other retail businesses.

☞ *River Basin Studies.* A number of studies have been initiated by State and federal agencies, universities, and local special interest groups to examine the region's rivers and wetlands. Jasper County should provide information requested to those conducting these studies and request the results of each investigation. Where appropriate, the County should consider ordinance or development review revisions based on the results of these studies.

2.2 WETLANDS

Wetlands are the transitional zone between uplands and water bodies. Because of their unique position in the landscape, many types of wetlands are among the most productive ecosystems on the earth. They provide value to the land and prevent harm to communities and the environment. Almost 22 percent of the land area of Jasper County can be classified as wetlands (Map 2) (SCDNR, 1991). Many of these wetlands are coastal marshlands, estuaries, and tidal waters.

These environmentally sensitive areas provide critical habitat for many parts of the life cycles of finfish, shellfish, birds, and other animals and plants, as well as providing some extraordinary scenic beauty. Wetlands provide economic benefits to their adjacent communities including flood control and mitigation, erosion control, storm abatement, recharge of ground water, fisheries, habitat for game, and open space for enjoyment and recreation. Wetlands can improve the quality of water in rivers, streams, and other water bodies by filtering pollutants and nutrients. Wetlands are the key elements in the water cycle, continuing to replenish and purify our water supply.

Although wetlands are protected by state and federal legislation, local governments have the authority to conserve wetlands. Some of local governments' available tools are the development of regulations which support lower ratios of impervious surfaces, resource protection areas, performance-based development, overlay protection corridors, and environmental guidelines for subdivisions, and land use planning based on infrastructure availability. Implementation of any of these tools should be based on a comprehensive wetlands protection plan.

Concern for these coastal wetlands is increasing as more becomes known about the interdependence of wetlands with many other segments of the natural and man-made environment. For this reason, it is important to evaluate wetland impacts, particularly on a watershed basis, which may require some study on the part of Jasper County. Protection of these wetlands is vital to the continued prosperity and quality of life for Jasper County and its residents.

2.3 GROUND WATER

All ground waters in the State have also been classified. Jasper County's ground waters have been classified GB, as have the majority of State ground waters. Only those resources with exceptional value, that are irreplaceable, or are ecologically vital are classified GA. Those with little potential as a drinking water source are classified GC. Standards have been set for each of the classifications with those in GB referring to natural organic and inorganic chemicals and synthetic chemicals and radio nuclides.

There is an abundant supply of high-quality ground water in the region, the Floridian Aquifer. Some problems associated with ground water supply have been declining water levels and saltwater encroachment due to heavy pumping in nearby Savannah, Georgia and on Hilton Head Island. Southern Beaufort County, and Hilton Head Island in particular, are most vulnerable to this problem and are planning to resolve it through long-range plans to obtain water from the Beaufort-Jasper Water & Sewer Authority whose primary water supply source is surface water from the Savannah River, which forms part of the County's southern border.

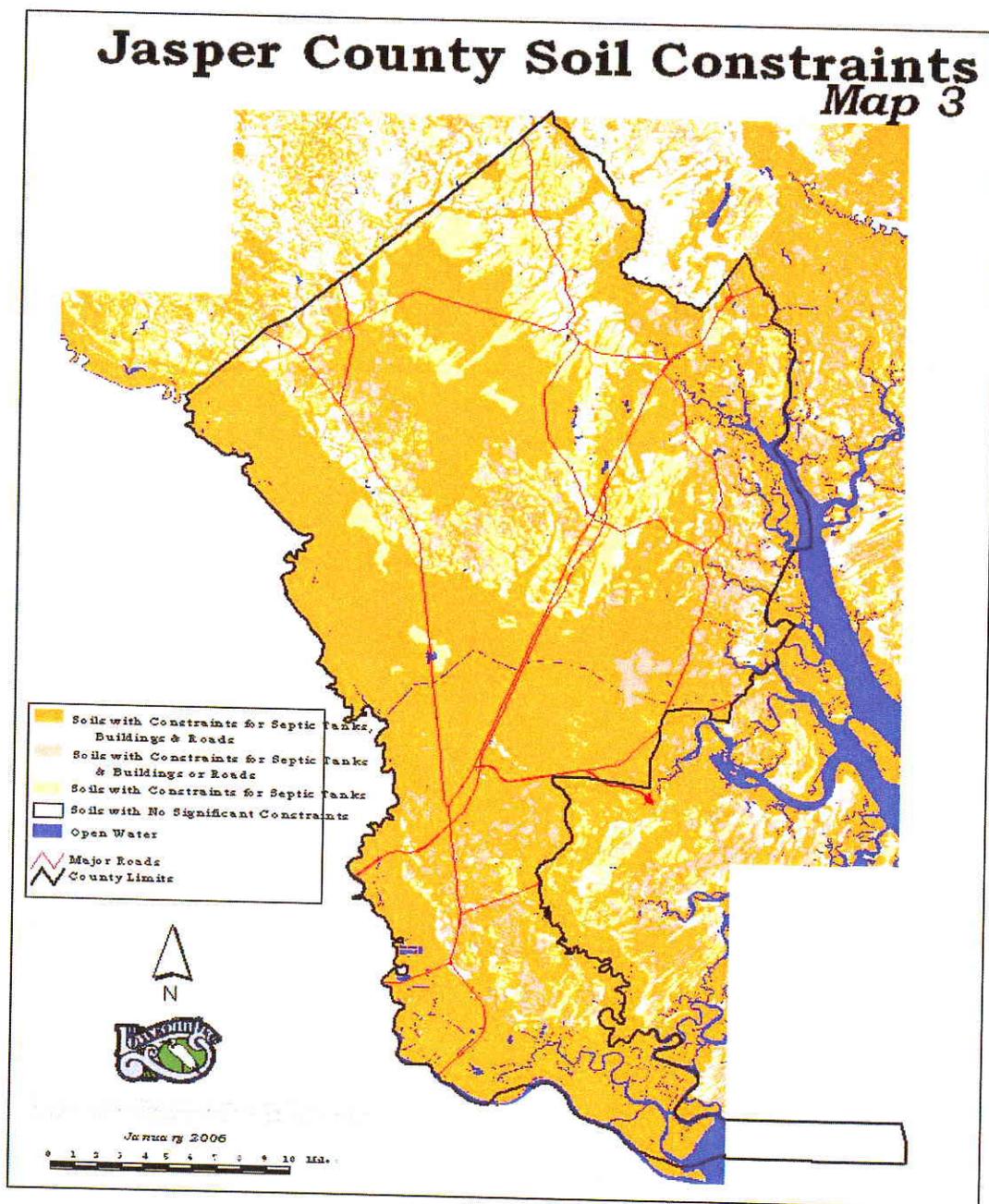
To address long-term water use in the Floridian Aquifer, which lies under 34 counties along the Eastern Seaboard, environmental officials in affected states have begun to work toward requiring "Floridian" counties to prepare ground water management plans. It would be most appropriate for this type of planning to be regional and comprehensive in nature, addressing all regional utility and water quality issues, and would be most effective using GIS technology.

In the region, the water table is very close to the surface and many mining operations actually occur in the aquifer. While small mining operations may not affect the quality of water in the aquifer or cause saltwater intrusion, the County should track all mining activity to ensure cumulative effects are addressed while they can be easily remedied.

2.4 SOILS

In addition to the wetlands in Jasper County, the degree of limitation on development by soils is also significant. Approximately 70 percent of the County's soils (50 percent, if marsh and wetlands are excluded from the calculation) have limitations for building foundations, septic fields, and sewage lagoons, as shown on Map 3. Because the soil survey is conducted by widely scattered sampling, the information can be used to signal potential areas where development should be limited, and site-specific sampling would be necessary to determine the appropriateness of development on each specific

site. Engineering practices can overcome the majority of the limitations presented by poor soils, however, the area's most sensitive, those around wetlands and marshes, should be protected, as they are critical for the continued health of the local waterways and wetlands as well as waterways and wetlands further downstream. Some protection devices would include requiring strict erosion control measures during construction near surface waters.



2.5 FLORA AND FAUNA

The current land use pattern in Jasper County has resulted in an extraordinary habitat for plants and animals of all kinds. Studies provide remarkable facts, such as a salamander will travel a mile to get to a pond and most creatures will not or cannot travel a narrow corridor between nesting, feeding, and breeding grounds. Isolation of animals due to development can lead to over population, inbreeding, disease, and potential failure of the species. Paving or creating lawns right up to the edge of marshland, ponds, or rivers eliminates critical habitat and can also cause damage to the wetlands themselves from chemical use (lawn fertilizing) or erosion and siltation from construction.

œ *Threatened and Endangered Species.* A number of studies have been initiated by State and The South Carolina Department of Natural Resources (Heritage Trust) has identified the following rare, threatened, and endangered species in Jasper County to include the following 30 animals plus 39 species of plants:

Shortnose sturgeon	Bachman's sparrow
Flatwoods salamander	Barrel floater
Spotted turtle	Bluebarred pygmy sunfish
Carolina slabshell	Gopher tortoise
Bald eagle	Southern hognose snake
Bird-voiced treefrog	Striped mud turtle
Pygmy sperm whale	Yellow lampmussel
Rayed pink fatmucket	Wood stork
Eastern woodrat (2 varieties)	Mimic glass lizard
Red-cockaded woodpecker	Pine/gopher snake
Florida pine snake	Dwarf siren
Gulf coast mud salamander	Eastern floater
Eastern fox squirrel	Least tern
Paper pondshell	Eastern creekshell.

A complete listing of the plant species and the scientific names of the above animal species are included in Appendix A.

The Wildlife Diversity Section of the South Carolina Department of Natural Resources (Heritage Trust) maintains information on sightings of threatened and endangered species as well as habitat locations. The County should request this information and use it when reviewing requests for new development.

Illegal collection of snakes is a current problem in the County due to its extraordinary snake population. To limit this poaching, SCDNR and other groups are recommending a new State law regarding collecting. The County should support this effort.

Several federal programs exist which provide cost-assistance for projects designed to establish and improve wildlife habitat: Forest Stewardship, WHIP, CAP, and EQIP. Jasper County should investigate these sources when considering habitat issues.

☞ *Specimen Trees.* Jasper County should recognize certain specimen trees as a significant natural resource and implement a preservation ordinance for their protection. The County should define these specimen trees (usually over a specific diameter/circumference) and allés which provide exceptional accents to the County.

☞ *Pesticides Herbicides, and Fertilizers.* Another threat to plants and animals is the mis-use or over use of pesticides, herbicides, fertilizers, and other chemicals. Many programs have been initiated in other communities to address the use of these chemicals and to encourage more environmentally-friendly landscaping practices. They include "green" policies directed at limiting the use of chemicals on golf courses, which most golf course management associations espouse and xeriscape programs designed to encourage the use of local plants in landscaping so there is less need for additional water or pest control. The above-mentioned landscaping practices would primarily involve public information campaigns.

2.6 FORESTS AND FORESTRY

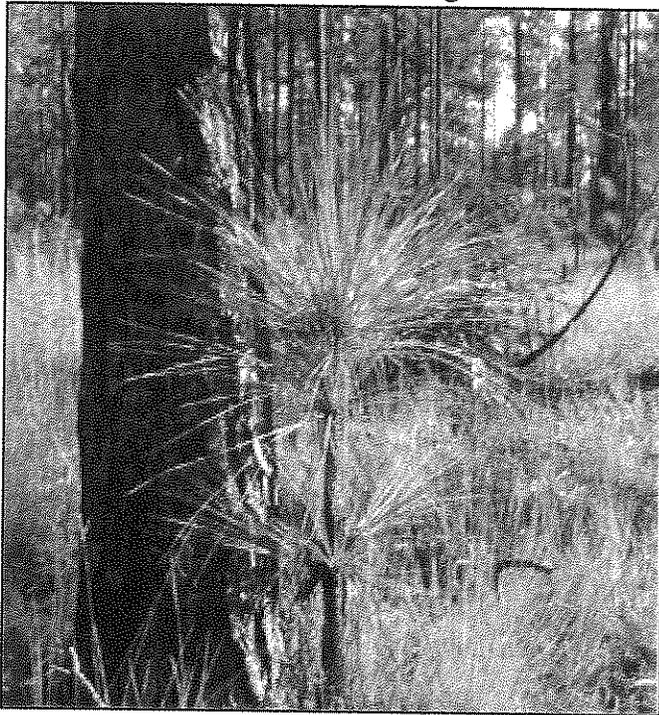
Almost 75 percent of Jasper County's landscape is forested. Commercial forest land in Jasper County was over 299,600 acres in 1997, representing over 70 percent of the County's land area and an increase from 1986 figures. The forest types were as follows:

- Planted longleaf/slash pine - 23,900 acres
- Natural longleaf/slash pine - 20,000 acres
- Planted loblolly/shortleaf pine - 88,800 acres
- Natural loblolly/shortleaf pine - 40,100 acres
- Oak/pine - 22,000 acres
- Oak/hickory - 9,500 acres
- Oak-gum/cypress - 95,400 acres.

Existing stock in 1997 was 559.5 million cubic feet with annual growth of 25.6 million cubic feet and annual removals (harvesting and land use changes) of 17.9 million cubic feet (S.C. Forestry Association, 1998). The 193,900 acres of non-industrial private forests in Jasper County accounted for almost 65 percent of this total, with industrial

landowners and public agencies responsible for the balance. The economic impacts of forestry in the County are significant, yielding a delivered value of over \$24 million in 1996 and exceeding the combined value of all crops, livestock, and livestock products in the County (Clemson Extension, 1996).

The American Forest & Paper Association developed the Sustainable Forestry Initiative for forest stewardship as a “pledge to manage existing forests to meet present needs without compromising future generations’ ability to use the forest”. Principles include responsible practices, ensuring forest health and productivity, protecting special sites,



and continuous improvement of forestry practices. Members of the organization must comply with the principles of sustainable forestry to remain on the roles.

South Carolina has adopted a set of Best Management Practices (BMPs) to minimize the impacts of forestry on water quality, reduce soil erosion, and protect streamside areas. The BMPs address streamside management zones, stream crossings, road construction, harvesting, site preparation, reforestation, prescribed burning, chemical use, endangered species, and wildlife management. Use of these BMPs are voluntary and a recent audit

(1991) of harvested sites showed that only 56 percent of private landowners were aware of the BMPs and 86 percent were in compliance. The Association is engaged in a public awareness campaign to increase compliance. There has been an increase in the use of BMPs, reaching 92 percent compliance in statewide forest removals in 1996. Regional conformance is said to be higher than other areas. The County should ensure that any requirements placed on similar or adjacent property being developed should also apply to forestry/silviculture activities, such as buffers along streams and/or roads, as practicable for the County, or unless scientifically proven to be unnecessary.

One area in which County land use patterns can come in conflict with forestry is in the instance of allowing widespread scattered residential development “sprawl”. This pattern not only is more costly for the County to maintain, it breaks up the larger acreages needed for wildlife habitat, and also increases the occasions for misunderstandings between neighbors (residents and forest land owners). This potential conflict is particularly apparent in the instance of controlled burning of

forested parcels, an activity necessary for ensuring the vitality of the forests. The County should provide assistance to lessen the potential for these conflicts. In addition, a significant amount of hunting and tourism activities take place on large, forested acreages.

It is important for Jasper County to recognize and support forestry as a renewable resource that is an important segment of the County's economic base and support its continuation as a viable and significant industry.

2.7 WILDLIFE MANAGEMENT

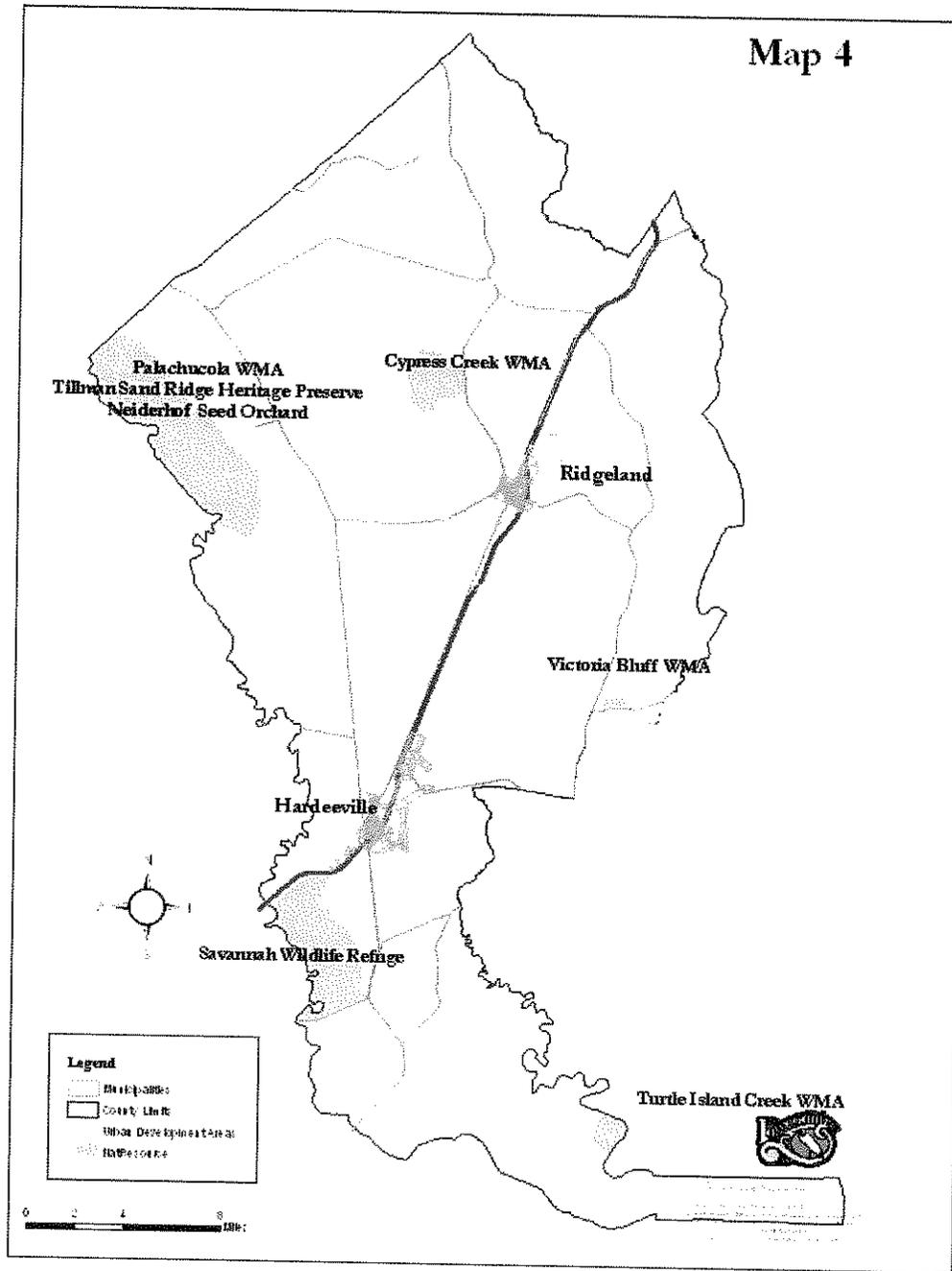
A large segment of the County's forested land is under wildlife management, actively and studiously maintained as wildlife habitat primarily used for hunting. Some of these lands are vast and contain significant ecosystems and species. The hunting leases on these lands provide an economic impact to the County. A study completed by the Clemson Extension Service in 1992 estimated 2,395 hunters on private lands in Jasper County, a majority of which (83 percent) did not live in the County and over half lived out of state. The results of hunter surveys indicated an estimated \$6 million in-County expenditures in Jasper County during the 1991-1992 season. The estimated expenditures to local business were over \$4 million, to landowners for hunting access was over \$1.6 million, and the estimated annual expenditures by landowners for wildlife management exceeded \$2.2 million. Using multipliers, the total annual economic impact of private land hunting in Jasper County was \$8,984,818. This total does not include landholdings under 50 acres. Because these activities contribute substantially to the economic well-being of the County, the County should encourage the continuation of these wildlife management landholdings. However, because the majority of existing clubs are used by persons outside the County, it would be of great benefit to the residents of the County if additional public hunting were available, particularly on public lands.



2.8 SPECIAL/SIGNIFICANT NATURAL AREAS

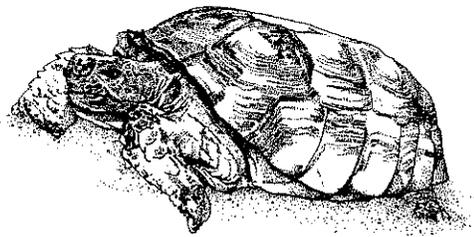
A number of special or significant natural areas exist in Jasper County (Map 4). Some that are protected include the Savannah River National Wildlife Refuge, the Tillman Sand Ridge, the Niederhof Seed Orchard, and Turtle Island. Partially protected areas include longleaf pine ecosystems on the large plantations. Some of the less fragile of these special areas could be linked by trails with other natural areas, parks, bike paths, and historic sites to form a County-wide network which could be very well-used by the residents and effectively marketed to visitors. South Carolina Parks, Recreation and Tourism has a grant program for recreational trails which should be investigated.

Significant Natural Resources



☞ **The Savannah River National Wildlife Refuge.** The 25,608-acre Refuge is located along Jasper County's southern border. The Refuge was established in 1927 and currently comprises approximately 6,000 acres of former rice fields managed as impoundments to provide overwintering habitat for migratory birds. The objectives for the Refuge include providing wintering habitat for migratory birds, breeding and nesting habitat for wood ducks, habitat and protection for endangered species, habitat for a diversity of wildlife, habitat for neotropical migratory birds, and opportunities for education and recreation. The US Fish and Wildlife Service (USFWS) has proposed to add 12,600 more acres in Jasper County and Chatham County, Georgia, 728 acres of which are to be added from Jasper County. Originally the plan was to acquire 4,815 acres of land, but public outcry was so significant, the USFWS increased the amount of land to be added. One of the targeted portions of Jasper County has already been acquired and plans are underway for a new entrance and, if funding is available, a parking lot and boat ramp on that portion. There has been some attempt to build a visitors' center on the Jasper County side of the Refuge, however, funding has not been available. Suggestion for the need for this facility in Jasper County has even been voiced by politicians in Georgia. There appears to be an opportunity for a unified effort of governments to build the visitors' center, which would be a benefit to Jasper County.

☞ **Tillman Sand Ridge Heritage Preserve.** Located five miles west of Tillman, this 953-acre site was donated by the Georgia Pacific Corporation to the South Carolina Nature Conservancy, which in turn donated the land to the SCDNR in 1986. It is one of



the few places where the endangered gopher tortoise is established and one of 51 South Carolina Heritage Preserves. Less than two thousand live in South Carolina, and almost all of these are located in Jasper County. The tortoise is fairly large, over one foot long and 10 pounds, and makes its home in dry sand ridges and sandhills by burrowing. Diligent

excavators, many of its tunnels are used by the other species in the area. Ecosystems include the xeric sandhill longleaf pine, bottomland hardwood, and pine and cypress-tupelo swamp. The preserve is open for recreational use when hunting is not in progress.

☞ **C. H. Niederhof Seed Orchard.** This tree improvement center for pines in South Carolina is located two miles north of Tillman. The orchard is run by the South Carolina Forestry Commission and covers over 300 acres. A number of pine varieties are grown and improved upon here, producing straighter trees with fewer branches that yield more volume and are more disease resistant.

☞ ***Turtle Island.*** This 1,750-acre barrier island off Jasper County is home to a colony of a plant which is only found in South Carolina and Florida. In 1984, it was the only known colony in South Carolina. The island is owned and managed by the South Carolina Department of Natural Resources.

☞ ***Tybee Island National Wildlife Refuge.*** Established in 1938 as a breeding area for migratory birds, the 100-acre refuge is now predominantly covered with sand deposits from US Army Corps of Engineers dredging activities in the Savannah River. The remaining stable portions of the island are densely covered with southern red cedar, wax myrtle, and groundsel. At low tide, the shoreline still provides resting and feeding space for migratory birds. Located near the mouth of the Savannah River, the refuge is closed to public use.

☞ ***Longleaf Pine Ecosystems.*** Longleaf pine ecosystems dominated an estimated 90 million acres of the southeast at the time of early European settlement. Now, less than 3 million acres still exist in scattered, isolated locations, often threatened by development. In Jasper County these ecosystems are most often found on the large plantations. The longleaf pine ecosystem supports a wide variety of species including wire grass, turkey oaks, quail, deer, wax myrtle, and many threatened and endangered species, such as the red-cockaded woodpecker. Nationwide over 30 threatened and endangered species are associated with longleaf pine forests. The longleaf ecosystem is dependent on fire for its survival, being very fire tolerant, possibly from adaptation to a location with many lightning-caused fires.

☞ ***Carolina Bays.*** Scattered across the eastern coastal plain from southern New Jersey to northern Florida, these wetland depressions are perfect or near-perfect ovals ringed by ridges of sand all pointing northwest to southeast. Theories of their origin are many and varied. Viewed as unproductive in the past, many of these bays have been filled in and/or drained and used for agriculture, forestry, or even home sites, but most are still visible from the air. Many of those that remain have been found to contain rare plants and animals. It would be interesting to identify the Carolina Bays, if any, which are extant in Jasper County and work toward their protection.

☞ ***Potential Significant Natural Areas.*** In 1984, a systematic survey of botanical natural areas of Jasper County was conducted by the then South Carolina Wildlife and Marine Resources Department to identify all natural areas of potential ecological significance with accompanying in-depth studies of those areas found to have potential. That survey identified 43 natural areas, 14 of which were determined to be significant. The Okatie Savannah was classified as "of national significance" and seven sites were classified as "of statewide significance" -- the Tillman Sand Ridge, Forks Lake Bluff, Turtle Island, Grays Sand Hill, Hodgins Hill, and two locations of specific species. Jasper County, in cooperation with SC DNR, should undertake a new survey to

determine which of these sites is still in existence and whether they are or should be protected as well as to identify new sites.

2.9 ENVIRONMENTAL PROJECTS

There are a number of environmental projects that may be appropriate for Jasper to adopt. Many of these can be funded through grants programs, others would be appropriate for local conservation groups or the Senior Think Tank to initiate.

- Median plantings for Jasper County roadways - to eliminate the need for mowing and enhancement of the corridors
- Partner with schools, vocational rehabilitation centers, and youth organizations to build animal or bird boxes and provide them to schools, garden clubs, and other organizations for maintenance - shelter for wildlife, education and training for humans
- Consider creating an environmentally-conscious building (a Green Builder) program with increased energy efficiency a choice for buyers
- Develop education programs focused on educating children as well as adults addressing: the benefits of irregular edges along fields or large lawns, plantings of indigenous plants, planting in masses rather than rows and varied rather than single species, wetlands, septic systems, recycling, and the benefits of using forestry BMPs
- Investigate programs for wildlife-friendly utility rights-of-way with the National Wild Turkey Federation and local utilities - improved habitat, increased communication.

This list is just a sample of the possible projects that community groups can tackle and accomplish.

2.10 CONSERVATION EASEMENTS

Another tool for land use planning and focusing development is a conservation easement. According to the Nature Conservancy of South Carolina:

A conservation easement is a legal agreement by which a landowner voluntarily restricts the type and amount of development that may take place on his or her property. Each easement's restrictions are tailored to the particular piece of property, the interests of the individual owner, and the resources being protected.

The land can still be used and managed by the owner. Easements run with the deed in perpetuity. Examples of allowable uses are residential, recreational, agricultural,

forestry, and wildlife management. The easement can provide tax benefits to the owner (federal income tax and property tax) and estate benefits to the heirs. The amount of the tax deduction is based on the value of the development rights given up. The easement is evaluated to determine whether the easement qualifies for a deduction, or put through a "conservation purposes test". Simply put, "... the more significant the property is, the more it contributes to the public good, the more likely that you will qualify for the deduction" (SC Dept. of Revenue 1997).

The right to enforce the agreement is given to a qualified tax-exempt charitable organization, as determined by the Internal Revenue Service, or government agency. If a local trust is chosen as the primary designee, designation of a secondary land trust of national acclaim is recommended. Among the Trusts involved in Jasper County are the Lowcountry Open Land Trust (the only one with a holding in the County), the Nature Conservancy of South Carolina, Ducks Unlimited, and the Beaufort County Open Land Trust. A Trust will assist a landowner on all the available techniques and incentives for land preservation, evaluate land for suitability, and assist in the development of land preservation planning. Currently, there is an effort to form a consortium of stakeholders when forming a conservation easement, such as the property owner, nearby landowners, large developers, public officials, and Trust representatives. This group of partners examines large-scale, comprehensive plans for preservation of lands, particularly as part of new development.

Ducks Unlimited's Wetlands America Trust has identified specific areas of the US which are important to waterfowl. Their Lowcountry Initiative for coastal South Carolina is designed to protect areas of outstanding ecological value. One of the five focus areas of this conservation effort is the South Lowcountry (SOLO) Focus Area, which includes land in Allendale, Beaufort, Hampton, and Jasper counties. Attributes of the Basin include 19 rivers, 60 plantations incorporating 315,000 acres, one million acres of forests, and over 90,000 acres of coastal wetlands. The SOLO Focus Area is said to be "a mecca for wildlife and outdoor recreationists."

2.11 THE ECONOMICS OF NATURAL RESOURCE CONSERVATION

The natural resources of Jasper County are remarkable; however, observers note that they are not always viewed as resources, but fixtures. Consider the question "Is it a river or a resource?" Viewing the rivers as a resource, and a significantly valuable one, it is clear that they should be conserved and used wisely so they remain as unchanged as possible in the future. Economic gain from these resources can be in the form of increased residents and employers as quality of life improves and nature-based tourism, among others.

Preservation is the practice of keeping something intact. Conservation is the use of resources in a manner that allows those resources to retain their integrity in perpetuity

☞ *Quality of Life.* It has been noted over the past few years that a change is occurring in the way people decide on where to live and work as well as in the way businesses locate new offices. Due to the changes in technology and job

structures, workers do not feel as obligated to remain in close proximity to their firm or client companies. Also, many people are deciding that where they live is as important as their work, and will move to a preferred location even for less pay. More and more, people are searching first for a place to live with a high quality of life then finding work, or connecting with work in another area. Generally these workers are highly skilled and/or highly educated. As this trend continues, companies, usually the most sought after firms, are also looking for the types of locations which also attract these skilled workers. One of the most often quoted requirements for an area to qualify as having a high quality of life is the availability of a variety of outdoor sports and activities as well as a pleasant climate. By conserving and enhancing its natural resources, Jasper County can gain a reputation for being this type of location, one that is desired by skilled workers and firms alike.

☞ *Nature-Based Tourism.* Jasper County can easily call itself a “sportsman’s paradise.” Outdoor activities that could be strengthened include: boating and kayaking, bird and wildlife observation, hunting, hiking, biking, fishing, and others. Each of these activities can be accomplished on land and waters that are being conserved and add to the County’s economy as well.

Comments on the economics of watershed protection offered in the June 1997 issue of *Watershed Protection Techniques* included:

- Two regional economic studies document that conserving forests on residential and commercial sites can enhance property values by an average of six to fifteen percent and increases the rate at which units are sold or leased.
- Conserving trees in subdivisions and on commercial and industrial lots saves money on energy bills, 20 to 25 percent.
- Buffers can increase the value of adjacent property as shown in a 32 percent increase in values of properties adjacent to a greenbelt in Colorado.
- Properties near Pennypack Park in Philadelphia experienced an increase in value of 33 percent after the park was developed.
- A three-foot improvement of water clarity through buffer improvements along Maine lakes resulted in an increase of \$11 to \$20 per foot of shoreline, generating millions of dollars in tax revenues.

- Buffers sharply reduce the number of drainage complaints to public works departments because they work to mitigate or prevent shoreline erosion.
- Corporate landowners (commercial and industrial) can save between \$270 and \$640 per acre in annual mowing costs when open lands are managed as natural areas rather than turf.

The National Parks Service published the following figures concerning income from tourist activities in *Economic Impacts of Protecting Rivers, Trails, and Greenway Corridors* (1995):

- A typical visitor to the Ramsey Canyon Reserve and the San Pedro National Conservation Area in southern Arizona spends \$55 per day in the nearby town.
- Visitors stay half a day longer and spend \$62 more at historic sites than other locations.
- For every dollar of public investment in an historic site in Massachusetts, there has been a total private investment/return of \$7.
- In 1988, users of the Elroy-Sparta Trail in Wisconsin averaged expenditures of \$25.14 per day on trip-related expenses, with the typical user traveling 228 miles to get to the trail.
- In Florida, every dollar spent with canoeing outfitters, \$5 were spent for gas, food, and lodging.
- Fishermen traditionally spend more than other tourists in northern Maine, spending over six times more per person, per day in the local economy than canoeists and outspending all other recreationists combined.

To earn significant income from outdoor tourists, the County needs to have motels, restaurants, guides, outfitters, and more trails (land and water) or road tours which highlight the County's natural (and historic) resources. One possibility is to locate an outdoor-focused retail outlet along I-95 which is designed to be a destination (many and varied shops with a theme of nature and outdoor recreation, good food, a major outdoor retailer or outlet store, and a storefront for local guides. One possible location would be Point South. This location provides a "gateway" to Jasper County, the Beaufort and Edisto coasts, and the ACE Basin.

☞ **Offsetting Costs.** Many studies have found that the development of parks, greenways, and trails increase property values of nearby homes and businesses. The associated increase in revenue for government entities can help to offset some of the acquisition costs. Increased spending by local greenway users, expansion of businesses, and increased tourism are all cited as additional factors which can offset acquisition costs.

2.12 CONSERVATION IN JASPER COUNTY

Jasper County's unique natural resources largely define the County's overall character and should be preserved. Jasper County offers a unique, attractive, and diverse landscape that is a source of pride to County residents. While new development offers economic opportunities for the County, most residents are not willing to accept growth "at any cost". This view was recently enforced by Robert V. Royall, the Secretary of Commerce for the State of South Carolina: "Development for development's sake, at the expense of natural resources, will not happen while I'm in office." Fortunately because water (rivers, swamps, and wetlands) is the primary source of Jasper County's scenic landscape, development in these areas is regulated to a certain extent by Federal and State regulations. It is critical, however, that Jasper County regulations acknowledge these protections and include them in the local development review process to ensure compliance. In addition, as discussed in Chapter 5, Economy, one significant segment of a comprehensive Jasper County economic development program should be nature-based tourism, which would require a strong conservation effort in the County.

A study conducted by MIT in 1992 found that "a community is more likely to enjoy a robust local economy if it adopts policies or initiatives that preserve its scenic, ecological, or historic assets."



GOAL & IMPLEMENTATION STRATEGIES FOR NATURAL RESOURCES

NATURAL RESOURCES

As both development and pressures for development in Jasper County continue to increase, this Goal and these Strategies will become increasingly important in maintaining the quality of life that present residents enjoy and that will attract future residents.

GOAL: "Protect the natural and scenic beauty of the County's landscape; the forests, tree canopied roads and wildlife habitat for natural, ecological, and economic benefits; and the quality of water resources for potential recreational opportunities and long term public water supplies."

OBJECTIVE #1: Ensure the continued functional integrity of the County's rivers, streams, and wetlands systems.

STRATEGIES:

1. Stormwater management must be addressed to handle the high frequency of 100 year flooding events in Jasper County. The inspection and maintenance of canals and drainage ditches must be performed regularly in order for proper water flow and drainage. An ordinance should be created to require BMPs for all construction projects including: tree protection, silt fencing and setbacks from streambanks and vegetation. "Natural services" provided by the County's environmental features should be protected to the best of a developer's ability (example: preserving wetlands for natural flood control or protecting riparian vegetation to ensure streambank stabilization).
2. Jasper County should develop an ordinance to require a 50' natural riparian buffer (at minimum) to adjacent streams, rivers and lakes to maintain water quality, streambank stabilization and erosion control.
3. Jasper County should continue its involvement in the Water Quality Management (208) Plan update. The updated 208 plan will assist in development decision-making in Jasper County.

4. The following recommendations (and others that may be developed by the committee) from the Jasper County Natural Resources Conservation Plan.

a. Ex-Officio Member of the Planning Commission: Representative of the Jasper County Conservation Plan Advisory Committee

An Environmental Advisory Committee is to be established through the Jasper County Conservation Plan planning process to assess future development. The committee will consist of key environmental resource group representatives. After reviewing the natural state of the location and identifying environmental concerns, one representative will present committee findings to the Jasper County Planning Commission.

b. Stormwater Management

Provide incentives for developers to incorporate creative stormwater management techniques into their developments including, but not limited to, green building technology, pervious surfaces, rain gardens and bioretention areas.

c. 100 Year Flood Plains Preservation

Adopt stringent building requirements to prevent land disturbance and development in the 100 year flood plain.

d. Contiguous Critical Ecosystem Preservation

Strive to limit the location of uses that would increase fragmentation of important natural and wildlife habitat areas.

e. Preservation of Natural Vegetation

Provide incentives for developers to preserve natural vegetation at residential/commercial development sites.

f. Encourage and Enforce Silviculture BMPs on private lands

Include silviculture BMP standards as components of the regulations in the revised land development ordinances.

g. Stormwater Discharge Measures

Avoid direct discharge of stormwater into streams and wetlands by encouraging the use of grassed swales in place of curb and gutter. Provide adequate storm water retention ponds.

h. Wildlife Habitat Preservation

Evaluate planning and zoning regulations to provide buffers to critical habitat. Example: wading bird rookeries in Jasper County.

5. Jasper County should encourage "Xeriscape" practices (that is, landscaping practices that reduce the need for water and other resources) as well as grey water reuse (for large-scale irrigation at golf courses, sod farms, etc.) to help keep waterways pristine. Measures to reduce runoff and nonpoint source pollution are also encouraged. The comprehensive plan also supports other environmentally-friendly landscaping practices documented in the Lowcountry Water Quality Management Plan (see Appendix).
6. An ordinance to protect wetlands is required.

OBJECTIVE #2: Promote the conservation of native plant and wildlife ecosystems.

1. The establishment of a Jasper County Open Land Trust to preserve natural areas and wildlife habitat is essential. A land trust will oversee the donation and purchase of environmentally sensitive areas, critical masses of land, wildlife habitat and landforms and vegetation that provide important "natural services." It will also develop a conservation easement program for Jasper County landowners. A land trust will also hold purchased or donated development rights to ensure development is prohibited in the areas agreed upon.
2. Jasper County should develop plans for interpretive nature trails and apply for funding for projects through the State Parks and Recreation and the SC Department of Transportation. This policy should be part of the Parks and Recreation Master Plan (see "Community Facilities" sub-section).
3. An environmental inventory should be conducted in order to identify and document specific areas that contain these types of species. Once this is complete, appropriate regulations can be developed and adherence can be enforced. The Natural Resource Conservation Plan will serve as a starting point for a full environmental inventory (see appendix). An ordinance should be required for all development in areas that contain rare, threatened, and/or endangered species to ensure permits will be issued before land is disturbed.
4. Potential incentives for innovative and flexible development should be identified and examined. Innovative development is encouraged to preserve open space and habitat as well as environmentally sensitive areas.

OBJECTIVE #3: Promote the long-term protection of the County's groundwater resources.

1. The county should maintain a database of DHEC permitted mines, including soil mining operations. Rehabilitation to at least state-mandated standards when the operation concludes should be enforced by Jasper County. All mining permits should be forwarded to the Planning Commission or Zoning Board of Appeals before any land is disturbed.

2. Research should be carried out to identify practices (such as grey water reuse) and possible incentives for such practices. Providing incentives, by means of the zoning ordinance, for developers to use low-water demand landscaping will encourage the practice of such development.

OBJECTIVE #4: Revise the County's development review process to include consideration of natural resources.

1. A database should be established to store GIS files from resource agencies in order to guide future decision making.

2. An ordinance requiring the homeowner's associations of gated communities to follow all county development regulations is recommended. This ordinance should also allow for access for development and environmental inspections by county officials and resource groups.



Chapter 3: Historic Resources

Jasper County has many sites of historic significance. As stated in the 1996 *Architectural and Historical Survey of Jasper County* performed by Brockington and Associates:

Few of Jasper County's historic resources are clearly visible to the passing visitor. Old houses in the small villages and in the countryside are far from the interstate which now bisects the County, while the plantations remain hidden, veiled subtly behind screens of pines and avenues of live oaks. Buildings and structures spread throughout the County, however, speak quietly of the County's history to those willing to look and reflect. Change has been slow while continuities remain strong. Concentration of land exists side-by-side with small farms, from the plantation owners and yeoman farmers of the eighteenth and nineteenth centuries to the timber companies and local residents of the twentieth century. The County's progress of growth shows in the buildings that remain; guardians of Jasper County's future will do well to look to them and to the patterns which they represent.

Today, many forces threaten our historic and archaeological resources, including population growth, new development, and technological advances in agriculture and industry. It is important to remember, as the County looks to its future, that these historic and prehistoric properties link us tangibly to our past and contribute to our understanding of the history of our communities. All are irreplaceable resources that endow Jasper County with a special character. Through the identification, preservation, and use of these sites, Jasper County can become a better place to live, work, and visit.

Many of the ancestors, having been forced into slavery, cultivated the rice fields for the many wealthy landowners in South Carolina and Georgia. Rice was the backbone of the Low Country's economy. One of the most famous African Americans is Thomas Ezekial Miller, who was born to a free black couple in Ferebeeville community near Switzerland. He went on to become a Republican representative in the State General Assembly in 1874 and also to become the first president of South Carolina State University in Orangeburg.

3.1 HISTORIC RESOURCES SURVEY

In 1995, Jasper County, in cooperation with the Lowcountry Council of Governments, contracted with Brockington and Associates to undertake a comprehensive survey of the historic resources in Jasper County under a grant from the South Carolina Department of Archives and History. The survey report, completed in 1996, contains a compendium of above-ground historical resources in the County including buildings, sites, objects, districts, and structures of historical or architectural significance. Historical research and fieldwork provided additional documentation to serve as an archival record of the County's resources as well as to allow Jasper County to set priorities for the protection and use of its historic resources as it plans for future development.

- ☞ ***Surveyed Sites.*** The survey project for Jasper County was part of the Statewide Survey of Historic Places being carried out by the State Historic Preservation Office (SHPO). The purpose of this statewide survey is to identify resources that are eligible for the National Register of Historic Places (NRHP), and to provide information to the SHPO as it reviews projects requiring OCRM permits or those receiving federal funding to ensure that the State's historic resources are protected from adverse impacts. The information developed through the Jasper County survey gives the SHPO a basis for these reviews. In addition, properties eligible for the NRHP may qualify for federal and state historic preservation grants and tax incentives that are administered by the SHPO.



The National Register of Historic Place Includes significant national, state, and local historical, architectural and archaeological resources. In South Carolina, over 1,000 properties (some entire districts) have been listed in the Register. Nominations to the National Register of Historic Places are submitted by the State to the National Park Service for consideration. Sites which qualify for nomination include those which:

- ❖ Are associated with events which have made a significant contribution to our history
- ❖ Are associated with the lives of significant historic persons
- ❖ Embody a distinctive architectural or artistic style
- ❖ Have yielded information which is important in prehistory or history.

Jasper County currently has five properties listed in the NRHP:

Gillisonville Baptist Church -- SR 462, Gillisonville. The church was constituted in 1836 as the summer home of the Coosawhatchie Baptist Church. The building, completed in 1838, is in the Greek Revival style and was used as a headquarters by a contingent of Union troops during the Civil War.

Robertville Baptist Church -- Junction US 321 and SR 26, Robertville. The Robertville Baptist Church was organized in 1781 as Black Swamp Baptist Church, but the name was changed in 1934 to Robertville, honoring the Robert family, all descendants of Pierre Robert, a Huguenot minister. The frame church, built in about 1847, retains architectural features of the

Greek Revival Period. The building was formerly the Ascension Episcopal Church of Gillisonville, but was purchased by the Baptists about 1867 and moved to Robertville.\

Grays School—The Grays School was built in 1931 and is eligible for the National Register of Historic Places. The Grays School is an “outstanding example of school architecture typical of small American towns in the early 20th Century. The historic architectural features are intact and relatively distinctive. Jasper County is supportive of the efforts to renovate the Grays school for an appropriate adaptive reuse. Recently a citizen committee has been formed to ensure that the former Grays School is preserved.

Jasper County Courthouse -- Russell Street, Ridgeland. Built in 1915, this courthouse is a Georgian Revival style structure designed by architect W.A. Edwards.

Church of the Holy Trinity -- Junction CR 13 and CR 29, Grahamville. In 1829, William Heyward donated land at the “crossroads” in the village of Grahamville for the construction of an Episcopal chapel. By 1855, the congregation had outgrown the small frame chapel built in 1830. James Bolan, planter of Bolan Hall Plantation, was a major contributor toward the construction of a larger building, which is still standing.

Thomas Heyward, Jr. Tomb -- Junction SR 462 and SR 336, Old House. Thomas Heyward, Jr. (1749-1809) was admitted to the South Carolina bar in 1771 and served in the Commons House of Assembly and the provincial Congress in Charles Town. In 1776, Heyward was named as a delegate to the Continental Congress and signed the Declaration of Independence. He lived at White Hall Plantation, across the creek from where he is buried. The burial site is at the location of his father’s plantation house, at the end of a half-mile-long alley of live oaks.



During the survey, other properties which appeared to be constructed before 1945 and which appeared to have retained their historical integrity and condition were identified. These sites are shown in Table 3.1.

Over two-thirds of these sites date between 1915 and 1945. In fact, only 38 of the surveyed sites pre-date 1890, which is a result of both the destructive legacy of the Civil War in Jasper County, and the County's traditional land-use pattern of large, agricultural land holdings. The ranges dates of construction of the surveyed sites are shown in Table 3.2.

A survey of Jasper County Civil War Fortifications was completed in 2000. In this survey locations were identified of the known earthworks constructed for the defense of the Charleston to Savannah Railroad. This railroad ran through Jasper and Beaufort Counties. This survey was completed under a grant from the Department of the Interior's American Battlefield Protection Program.

Table 3.1. Types of Historic Sites Identified in Jasper County

Site Type	Number	Percent
Single family residences	286	70.3
Commercial buildings	26	6.4
Barns/sheds/stables/kennels	20	4.9
Tenant houses/quarters/slave buildings	17	4.2
Shacks ¹	10	2.4
Churches	7	1.7
Civil War batteries	7	1.7
Roads/causeways/bridges	7	1.7
Schools and education buildings	6	1.5
Railroad beds	3	0.7
Rice works	2	0.5
Jails	2	0.5
Cemeteries	2	0.5
Political buildings	2	0.5
Ruins	2	0.5
Miscellaneous ²	8	2
Total	407	100

¹ Shacks include all one-room buildings which could not be otherwise identified.

² The "Miscellaneous" category includes all buildings and sites which have only one representative; these include a motel, a public courthouse square, a pump house, a drying kiln, a temporary doctor's office, a well, a post office, and a lumber railroad steam engine.

Source: *Architectural and Historical Survey of Jasper County, Brockington and Associates, Inc., 1996*



Table 3.2. Range of Dates of Historic Sites Identified in Jasper County

Date Range	Number	Percent
pre-1800	5	1.2
1800 - 1860	16	3.9
1861 - 1889	17	4.2
1890 - 1914	55	13.5
1915 - 1924	98	24.1
1925 - 1934	159	39.1
1935 - 1945	57	14
Total	407	100

Source: *Architectural and Historical Survey of Jasper County*
Brockington and Associates, Inc., 1996

- ☞ **Data Gaps.** The historic survey of Jasper County involved traveling all public roads within the County and, where permission was granted, surveying large, private tracts of land. Several plantations were not included in the survey effort, including Bird Hope, Mackays Point, Okeetee Club, Hoover, Tarboro, Roseland, Gregories Neck and Sherwood, as well as federal holdings in the Savannah River National Wildlife Refuge. In addition, it is important to note that this survey was not exhaustive, and that the process of identifying and evaluating historic properties is never complete. The Grays school is an example of the need to update the historic survey.
- ☞ The County should encourage property owners and other interested persons to alert them to sites that may have been omitted during this survey and evaluation. The County should also work to coordinate with the State Historic Preservation Office, local preservation groups, and private landowners to complete the gaps in the survey data.

☞ **Properties Eligible for Listing on the National Register of Historic Places.** Based on the present architectural integrity and available historical information for the properties included in the survey, the State Historic Preservation Office (SHPO) determined that 22 of the surveyed properties and nine plantations and hunting clubs were eligible for listing in the National Register of Historic Places. One of these, the Thomas Heyward, Jr. Tomb, was added to the National Register in 1997. The National Register sites and those properties in the unincorporated County that are eligible for listing are shown on Map 5 and are described in Table 3.3.

Jasper County Historic Resources

Map 5

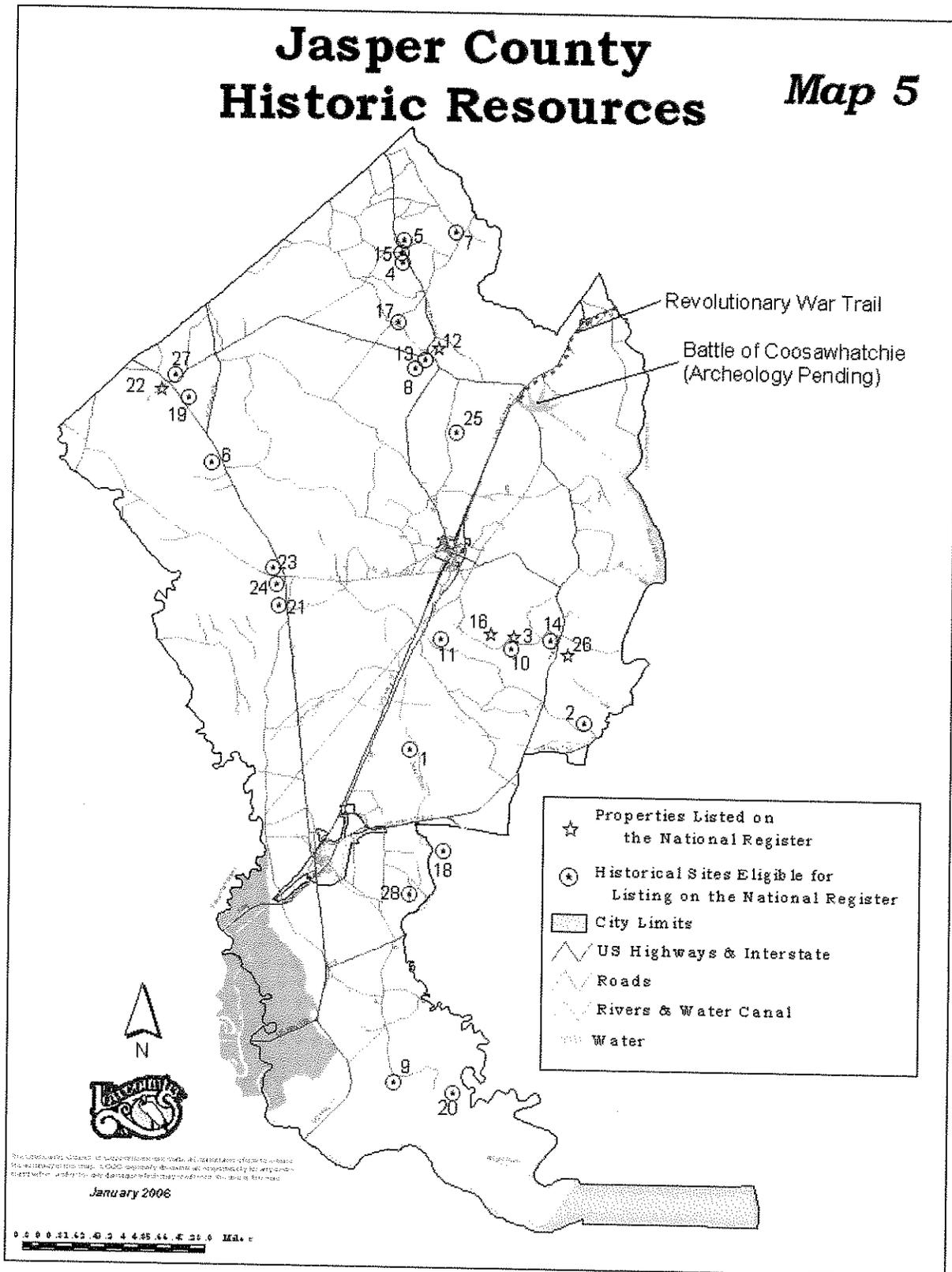


Table 3.3. Significant Historic Resources in Jasper County

1. Charleston and Savannah Highway (CR 169), Purrysburg to Switzerland
2. Chelsea Plantation
3. Church of the Holy Trinity, Grahamville (National Register)
4. Cleland House, Grays
5. Cope House, Grays
6. Cypress Creek Plantation
7. David Thomas Freeman House, Grays Vicinity
8. Davant Plantation
9. Delta Plantation
10. Euhaw Baptist Church, Grahamville
11. Fleming House, Tillman Vicinity
12. Gillisonville Baptist Church, Gillisonville (National Register)
13. Gillisonville Square, Gillisonville
14. Grays Consolidated School, Grays
15. Jasper County Courthouse, Ridgeland (National Register)
16. Langford House, Gillisonville
17. Maureen Plantation
18. Pineland Club
19. Red Bluff Plantation
20. Ritter Lumber Company Drying Kiln Ruins, Tillman Vicinity
21. Robertville Baptist Church, Robertville (National Register)
22. Tillman Consolidated School, Tillman
23. Tillman Doctor's Office, Tillman
24. Turkey Hill Plantation
25. Thomas Heyward, Jr. Tomb, Old House (National Register)
26. Warnock House, Robertville
27. White's Grocery and Gas Station, Levy

*Source: Architectural and Historical Survey of Jasper County
Brockington and Associates, Inc., 1996*

☞ **Archaeological Resources.** The historic survey of Jasper County did not provide full documentation on archaeological sites with no above-ground features, however, the survey report did indicate that, compared to some its neighboring counties, Jasper County has received relatively few concentrated archaeological investigations. This has much to do with the relatively slower pace of development in Jasper County. The bulk of the archaeological sites which have been identified to date have been in the region between Hardeeville and the Savannah River. In general, it can be expected that both high ground and swamps near rivers, particularly tidal rivers, will have a high potential

for archaeological resources. As a result, similar conditions may exist along the New, Wright, Coosawhatchie, Pocotaligo, and Tullifinny rivers and along Bees, Boyds, Coles, Hazzards, Cypress, and Union creeks. The survey also noted that, while development pressures do not now seem as intense in the northern portions of the County, there are locales in the Gillisonville, Pineland, and Grays areas which contain a high potential for prehistoric archaeological resources. Although not fully surveyed, archaeological sites are important aspects of the County's cultural heritage and should also be taken into consideration in planning future development activities. As a start, the County should request copies of archaeological survey reports as they are completed by governmental agencies and the private sector, request GIS information on archaeological sites (with appropriate confidentiality restrictions), and investigate alternatives to funding additional survey work in the County.

3.2 HISTORIC PRESERVATION STRATEGIES

Local actions and decisions by private property owners and County government will help decide the fate of Jasper County's irreplaceable historic and prehistoric resources. If these properties are to be protected for future generations, Jasper County will need to work with local historic preservation organizations, the SHPO, and private citizens to develop an effective preservation program. This program may include several closely linked components:

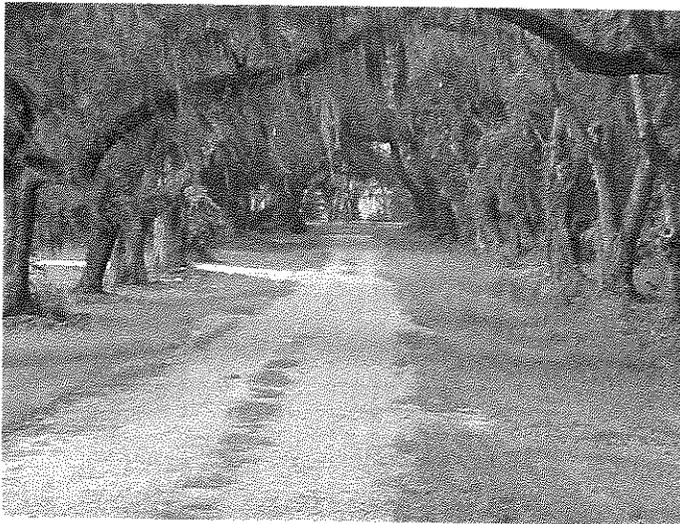
- Creation of development regulations that assist preservation of historic resources;
- Strengthened efforts to identify and preserve historic and archaeological sites;
- Development of public education programs.

<p>BENEFITS OF HISTORIC PRESERVATION:</p> <ul style="list-style-type: none"> ◇ Revitalization through rehabilitation of historic properties ◇ Increased travel and heritage tourism ◇ Attraction of new residents and businesses ◇ Improvement in the overall quality of life
--

∞ *Development Regulations.* One way to recognize the important value of historic resources is to establish regulations that are designed to minimize the adverse impacts of incompatible development. To do this, some communities review their list of historic and prehistoric archaeological sites before new construction begins. This is most appropriate for places, like Jasper County, that have numerous sites scattered over a large area. Listed properties are also reviewed by the State which helps protect historic resources from the adverse affects of projects requiring OCRM permits or receiving federal funding. It is critical, however,

that Jasper County regulations acknowledge these protections and include them in the local development review process to ensure compliance. For this type of regulation to be effective, the County must maintain an up-to-date, preferably GIS, inventory of properties listed, and determined to be eligible for listing, in the National Register. Then, as developments are proposed, the list can be consulted for potential impacts to historic resources.

As the County grows and development pressures become more apparent, Jasper County should add reasonable local regulations to compliment or expand federal and state protections of historic resources. Some communities enact preservation ordinances that allow local governments to designate certain properties and/or districts as historic, and then to establish use regulations and architectural design standards to enhance and maintain the historic qualities of those areas. These types of ordinances are most common in cities and towns with a concentration of historic properties. Jasper County has numerous small town centers and villages that have historically provided the commercial and social focus for the surrounding rural population. Buildings in these villages, from the churches to the general stores, clearly reflect the significance of these centers. The County should ensure that its development regulations encourage development that is compatible with and enhances these villages, many of which are proposed as *Community Village Districts* in the Land Use Chapter of this Plan. In the future, the County may want to investigate the possibility of establishing a local historic district for one or more of these communities to protect their integrity and character.



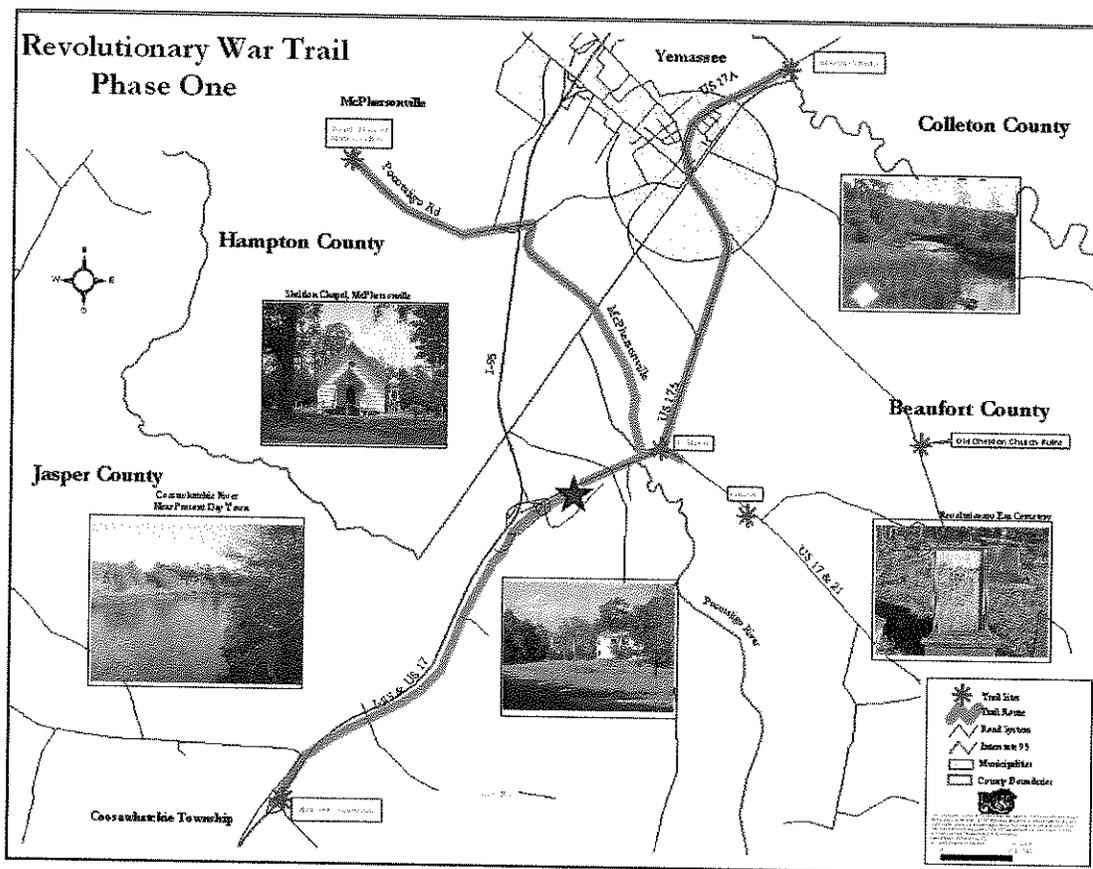
☞ ***Identify and Preserve Resources.*** The South Carolina Department of Archives and History awards historic preservation grants to help preserve historic resources. To qualify, properties must contain sites that are listed in or formally determined eligible for listing in the National Register of Historic Places. Jasper County can assist in the nomination process for

significant historic and prehistoric resources so that more properties are eligible for preservation funding. Another specific recommendation of the Brockington study was for the County to develop a thematic historic district to document its Civil War history. In addition, the County should support efforts to complete the data gaps in the Jasper County Historic Survey. This

will help the county protect its valuable resources by supplying the information needed for future planning efforts.

☞ **Public Education.** The success of any preservation effort depends on community support. Public education about local historic preservation helps to teach the community that its sense of place depends to a large extent on the preservation of the communities, buildings and sites that symbolize its history. This should be a joint effort primarily between the County, local historic preservation organizations, and the State Historic Preservation Office. In addition, the County can help by providing information to land owners and developers about the County's historic resources and, where appropriate, providing technical assistance in pursuing nominations to the National Register of Historic Places.

Jasper County should continue to support the Lowcountry Revolutionary War Trail and to investigate opportunities to link recreational sites to this historic resources as a way to promote public awareness of historic preservation linked with fitness. A future phase of the trail will feature the Old Charleston and Savannah Highway, which is eligible for listing on the Natural Register.



GOAL & IMPLEMENTATION STRATEGIES FOR HISTORIC PRESERVATION

The same can be said about historic resources as natural resources, namely: As both development and pressures for development in Jasper County continue to increase, this Goal and these Strategies will become increasingly important in maintaining the quality of life that present residents enjoy and that will attract future residents.

GOAL: "Protect and enhance historic sites, structures and resources, and foster compatible development to maintain the county's historic and cultural character."

OBJECTIVE #1: Protect historically significant resources by establishing development requirements that minimize encroachment by incompatible land uses.

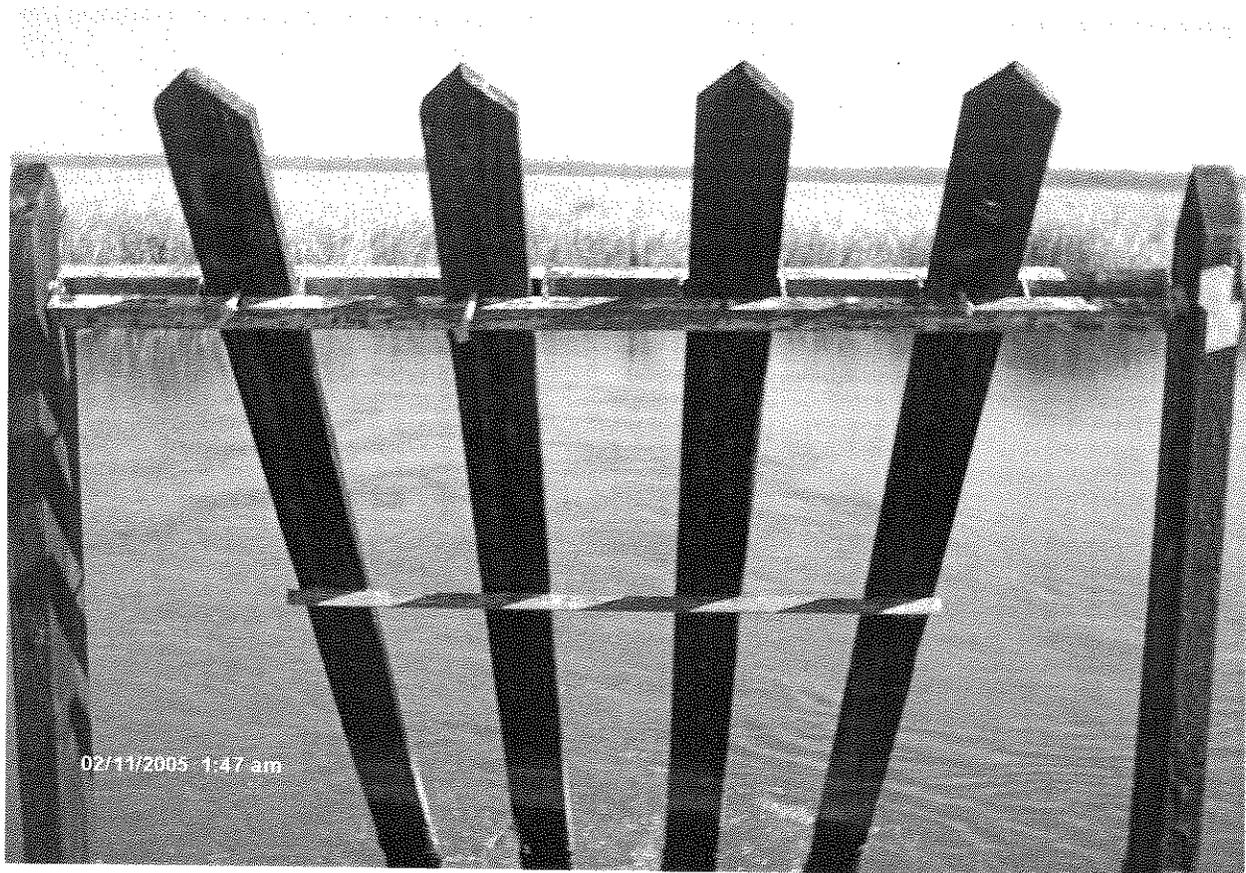
1. Map the historic resources inventory utilizing GIS methodology. Utilize the inventoried resources, *Jasper County Civil War Fortifications* and *Architectural and Historical Survey of Jasper County*, to protect the existing structures and sites including the education of current property owners and prospective developers
2. Include in the zoning ordinance specific provisions to avoid impacts to all historically significant sites and structures. The historic inventories should be utilized to direct development.
3. Grant funding should be obtained for further historic site and resource identification and documentation.

Initiate and promote conservation easements and establish a Jasper County Land Trust (see Natural Resources component). Develop an informational packet regarding benefits for landowners and developers concerning land trusts. The recommended Jasper County Open Land Trust can also serve to oversee the purchase and donation of historically significant sites and land.

OBJECTIVE #2: Support efforts to identify, designate and preserve historic and cultural resources in Jasper County, including archaeological sites.

1. Document the cultural heritage of the African Americans in Jasper County. A large population of descendants from many West African nations continues to live in Jasper County.
2. Ensure that the zoning ordinance contains provisions to ensure that the recommendations are followed for both new development and redevelopment.

3. Work with groups such as the Lowcountry Revolutionary War Trail project to develop and maintain the Jasper County segment of the trail.
4. Jasper County will be provided with archaeological reports of findings. Grants funding can be sought for further archaeological work in Jasper County. For instance, the archaeological assessment of the Coosawhatchie Revolutionary War battle site will be appended to this document.
5. Seek grant awards and funding to improve and expand bicycle and pedestrian facilities that link county and municipal facilities, historic, and cultural resources. This should be a part of a Parks and Recreation Master Plan.
6. Efforts to document and map cemeteries should be carried out to ensure the grounds are preserved and undisturbed by future development. This documentation can be incorporated into future development review processes.





Chapter 4: Housing

Housing is one of the most basic human needs -- important not only to the well-being of the families who occupy it, but contributing to the overall economic well-being of the entire community. To attract new businesses and industries, there must be an adequate supply of housing for all occupational and income levels.

The housing needs of Jasper County are similar to those of other counties in the region. Increased development in Beaufort County and the Savannah area, accompanied by increases in population and housing demand, are placing stress on local housing markets and forcing both land and housing costs to rise.

Affordable housing is becoming an increasingly important issue. While the higher end housing is good for Jasper County's tax base, some of these revenues should be dedicated to providing affordable rental and homeownership housing. These funds should be used to leverage substantial additional state, federal and private funds and participation from non-profit and faith based groups.

4.1 OVERVIEW OF THE COUNTY'S HOUSING STOCK

There were a total of 7928 housing units in 2000, according to the Census for Jasper County, compared to 6070 in 1990—an increase of nearly 31 percent. Of these, slightly more than 69 percent were owner-occupied, as shown in Table 4.1. A large majority of owner-occupied homes is generally a good indicator of well-maintained homes. Another significant, and positive, housing indicator is that almost all housing units have complete plumbing and kitchen facilities, although the percentages have decreased slightly since 1990.

Median home prices and gross rents increased notably between 1990 and 2000. Since the Census, building permit data from 2000-2004 (the most recent available) show that housing prices have continued to increase even more rapidly and substantially. In 2004, the average single-family building permit value in Jasper County was \$100,896. Since this figure does not include land, and since building permit values may be lower than final construction costs, the actual selling price of a single-family home would have been higher.

Table 4.1. Jasper County Housing Unit Profile

		1990		2000	
Total Housing Units		6070		7928	
			% of Total		% of Total
	Occupied	5298	87.28%	7042	88.82%
	Vacant	772	12.72%	886	11.18%
	Owner Occupied	4132	68.07%	5476	69.07%
	Renter Occupied	1166	19.21%	1566	19.75%
	Median Year Structure Built	1973		1979	
	Complete Plumbing Facilities	5926	97.63%	7629	96.23%
	Complete Kitchen Facilities	5940	97.86%	7608	95.96%
			% Change 1990-2000		
	Median Value for Owner-Occupied Housing Units	\$44,400	46.17%	\$64,900	
	Median Gross Rent	\$265	86.04%	\$493	

Source: US Bureau of the Census, 2000 and 1990

With traditional stick-built homes becoming less affordable for Jasper County residents, mobile homes have become a solution. Between 2001 and 2004 a total of 1495 dwelling units were added to the Jasper County stock. Of that number slightly less than 22 percent (327 units) were single-family homes; the rest (1168 units) were mobile homes.

Table 4.2. Jasper County Residential Building Permits

	2001	2002	2003	2004
SF Number	74	79	63	111
SF Value	\$6,315,951	\$16,011,284	\$6,033,664.00	\$11,199,465.00
Average SF (w/o Land)	\$85,351	\$202,674	\$95,772	\$100,896
MH Number	341	331	249	247
MH Value	\$13,640,000	\$13,240,000	N/A	\$8,645,000
MF Number	1	0	0	0
MF Value	\$190,320	\$0.00	\$0.00	\$0.00

4.2 REGIONAL HOUSING COMPARISONS

Because of the very rapid residential growth that has occurred in parts of the Lowcountry region during the last several years, even Census 2000 data is no longer very useful in assessing the current situation. Therefore the most recently available building permit data has been utilized to provide an overview of numbers of new units and their relative average prices without land.

Table 4.3 on the next page compares the numbers, types and values of residential building permits issued within the four counties of the Lowcountry region between 2001 and 2004. While Beaufort (especially the southern portion of the county) definitely leads in both numbers and prices, it also provides almost all of the multi-family housing opportunities in the region. Colleton is in second place overall, but house prices are not generally trending upwards.

Jasper is most noteworthy for the number of mobile homes that have been added to the housing stock during this period, largely on septic tanks. Table 4.4 follows the Building Permits table and compares new residential development on sewers compared to septic tanks for the 2003 and 2004 period. As mentioned above, the two combined are an indicator of how housing affordability is being approached at this time in Jasper County. However, the two trends together are also an indicator of scattered development that will contribute to suburban sprawl as the County grows and will be disproportionately expensive to provide with regional, county or municipal services and utilities in the future.

Table 4.3. Lowcountry Residential Building Permits

County		2001	2002	2003	2004
Beaufort	SF Number	1,712	2,345	2,283	3,407
	SF Value	\$411,004,580	\$541,668,600	\$468,015,038	\$654,005,255
	Average SF (w/o Land)	\$240,072	\$230,988	\$205,000	\$191,959
	MF Number	246	52	22	156
	MF Value	\$54,279,912	\$20,172,293	\$35,826,598	\$29,764,630
Colleton	SF Number	62	83	68	122
	SF Value	\$7,176,392	\$10,183,878	\$7,536,469	\$7,328,754
	Average SF (w/o Land)	\$115,748	\$122,697	\$110,830	\$60,071
	MH Number	500	N/A	377	0
	MH Value	N/A	N/A	N/A	\$0.00
	MF Number	2	2	0	0
	MF Value	\$497,280	\$186,000	\$0.00	\$0.00
Hampton	SF Number	25	33	31	33
	SF Value	\$2,544,436	\$3,376,967	\$3,119,357	\$3,550,365
	Average SF (w/o Land)	\$101,777	\$102,332	\$100,624	\$107,587
	MH Number	230	169	0	158
	MH Value	\$6,291,933	\$4,159,805	\$0.00	\$2,537,323
	MF Number	1 (4 units)	0	0	0
	MF Value	\$75,000.00	\$0.00	\$0.00	\$0.00
Jasper	SF Number	74	79	63	111
	SF Value	\$6,315,951	\$16,011,284	\$6,033,664.00	\$11,199,465.00
	Average SF (w/o Land)	\$85,351	\$202,674	\$95,772	\$100,896
	MH Number	341	331	249	247
	MH Value	\$13,640,000	\$13,240,000	N/A	\$8,645,000
	MF Number	1	0	0	0
	MF Value	\$190,320	\$0.00	\$0.00	\$0.00

Table 4.4. Total Residential Lots 2003 and 2004

	2003		2004	
	Sewer	Septic	Sewer	Septic
N. Beaufort County	328	22	181	4
S. Beaufort County	3019	36	1371	13
Colleton County	18	77	13	131
Hampton County	27	9	0	17
Jasper County	82	65	0	166
Subtotal	3474	209	1565	331
TOTAL		3683		1896

Source: LCOG 208 certifications

4.3 HOUSING AFFORDABILITY

Many factors affect the affordability of housing: the housing finance system, employment and wages, land and construction costs, provision of water and sewer services and regulatory requirements. Many of these factors are dependent upon regional, state, and national trends; however, it is important for the County to focus on what steps can be taken at the local level to make housing safer and more affordable for the residents of Jasper County.

The term “affordable housing,” though widely used, can only be appropriately used when a target population for the affordable housing is clearly stated. The standard definition of affordable housing is *housing for which the total cost (including utilities, taxes, insurance, and rent or mortgage payments) is no more than 30 percent of the household’s monthly gross income*. Because affordability is determined primarily by household income, it is difficult to define a single housing “price” that is affordable to all families. What may be affordable to a family of four with two working adults may not be affordable to a single person.

Jasper County’s median household income increased significantly between 1990 and 2002 (the latest year for which data is available), from \$18,071 in 1990 to \$27,117 in 2002. Using the 30 percent of gross income ratio, the median household (which means that half of the households in Jasper County had a lower income and half higher) could have afforded payments of \$678 a month for housing. In mortgage terms, assuming a 100

percent mortgage for 30 years at 7 percent, that household could have purchased a home for \$102,000.

4.4 AFFORDABLE HOUSING STRATEGIES

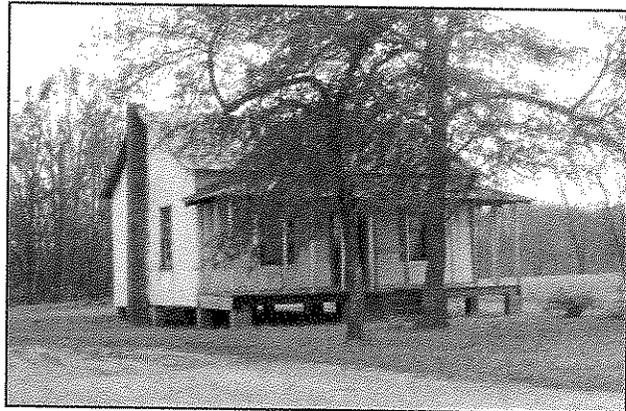
There are a number of housing strategies that may be appropriate for Jasper County to either continue to utilize or to adopt anew. The County and its municipalities, by already agreeing to become partners in the regional Affordable Housing Consortium, will be participating in some of these with the recent completion of the Consolidated Housing Plan in May 2006. Others will require changes to the County's development regulations.

Affordable housing strategies include:

- Rehabilitation to address substandard housing conditions;
- Programs to encourage and assist residents in becoming homeowners of affordable housing;
- Development standards to ensure quality residential development and to protect residential neighborhoods from incompatible development ;
- Flexible regulations to encourage new development of a wide variety of housing types for all income levels.

☞ *Housing Rehabilitation.* Unfortunately, there is a lack of recent and comprehensive data on the condition of the housing stock in Jasper County.

There are several grant programs available to address both the rehabilitation of substandard housing and the replacement of dwellings that are beyond repair. Two of these programs, CDBG and HOME, are administered nationally by the US Department of Housing and Urban Development (HUD) through grant funding passed through to the State. These programs are specifically targeted to families of low and moderate income. In the past several years, Jasper County has used the owner-occupied rehabilitation and replacement provisions of the HOME Program. The County should continue to pursue these and other grants for the rehabilitation and/or replacement of substandard dwelling units to ensure that those units, especially for low and moderate income families, are brought into standard condition, yet remain affordable for residents.



œ *Homeownership Programs.* Jasper County has historically had a high percentage of homeowners. Among current residents this may decrease, however, as increasing housing costs make home-buying more difficult for lower income families. Households within this income group often experience difficulty in the homeownership market and are often concerned with saving money for down payments and closing costs needed to purchase a home. Compared to Beaufort County, Jasper County is not a high cost/high price housing market, but the problems of prevailing low incomes and poorly qualified buyers are effective barriers to finding affordable housing and increasing homeownership opportunities for residents. Unfortunately, employment growth projected in the region will be primarily in the retail and service sectors which yield relatively low to moderate incomes, thus reducing the “affordability” threshold for a large segment of the workforce.

Jasper County should focus its attention on homeownership programs for the County to help residents overcome buyer qualification difficulties. A homeownership assistance program is especially important because there is federal funding for this purpose (both HUD and the Department of Agriculture have grant programs), in which the County can participate via its membership in the new Housing Consortium.

œ *Quality Residential Development.* One of the problems Jasper County currently faces is the need to offer consistent land use protections, such as zoning, that encourage new residential development that will fit in comfortably with existing communities. While it is difficult to dictate individual housing design, the County can address aspects of site design that will contribute overall to an increase in the quality of new residential developments. Examples of this include upgraded subdivision standards to insure adequate roads, access, and drainage systems; policies that discourage development on land that may be unsuitable for housing because of severe environmental constraints; and requirements that infill development in existing residential neighborhoods be compatible in terms of density and housing type.

Manufactured housing (mobile homes) needs to be given special consideration in promoting quality residential development. Manufactured housing is constructed to the national standards established by HUD. Where manufactured homes are installed, they should conform to standards which provide for a safe and attractive dwelling unit. Some factors to be considered include: density, setbacks, access, site location (parallel or perpendicular to the road), and buffering. Installation and foundation requirements are critical due to the potential threat from severe storms.

Modular houses are classified as “stick built” homes for the purposes of code construction requirements and location criteria including Home Owners Association criteria. Modular homes continue to provide entry level housing.

œ *Flexible Development Regulations.* When creating design standards to ensure quality development and encouraging development patterns to meet the various goals in the Comprehensive Plan, the County should not eliminate or preclude its ability to meet a range of housing needs. While a precise profile of new residential development cannot be accurately predicted, it will likely contain a diversity of housing types and prices. The more affluent will undoubtedly seek development located near water or with other amenities, while housing that is more affordable to middle and lower income households will tend to gravitate toward those areas where development costs are minimized. The current shortage of affordable rental housing in Beaufort County, and the location of the new USC-B and TCL campuses near Sun City on the Jasper County border make rental housing in Jasper County an attractive option. It is also anticipated that manufactured housing will continue to play an important role in providing residents an affordable alternative to stick-built housing.

The private sector housing industry is expected to continue to provide the vast majority of the County's housing stock; nevertheless, it is the County's responsibility to implement the overall regulatory framework within which the private sector must operate. Local development policies and regulations do affect the production and cost of housing. Development restrictions can effectively reduce the amount of land available for development and increase development costs. These increased costs have a disproportionate impact on the low to middle income housing sector of the market.

Jasper County can assist the private sector in meeting housing needs by ensuring that its land development regulations and permitting procedures are efficient, and that they contain no unnecessary regulations that may inflate the cost of housing. Land development regulations and policies, although necessary to ensure health, safety, and welfare, should also be considered for their impact on housing supply and affordability. For example, a policy to permit higher density in areas with in-place or programmed infrastructure can help developers take advantage of existing investments in these facilities and thus reduce the costs of providing housing. As well, density and other incentives can be utilized effectively to increase the supply of affordable housing.

As Jasper County works toward revising its Zoning Ordinance to implement the goals of the Comprehensive Plan, it will be critical to maintain open lines of communication with property owners, builders, and developers to ensure that new regulations do not cause confusion or unnecessary construction delays. The County should consider providing printed, easy-to-understand guidelines to explain new development requirements and review processes for subdividing property, setting up mobile homes, building new homes, and renovating or expanding existing dwellings.

4.5 THE LINK BETWEEN HOUSING AND PUBLIC FACILITIES

As residential housing demand grows, it will be necessary to provide infrastructure and services to accommodate that growth. Jasper County must guide the residential growth into the Joint Planning Areas. The costs of these improvements are to be fully supported by new development. Additionally these municipalities are experienced providers of the higher level of services needed within these areas.

Rural housing costs are initially lower because of less expensive land and the lack of urban services such as sewer and water. However, as the population increases, the services which were initially unnecessary to support a rural population become necessary and must be paid for. Development contiguous to present development, rather than scattered throughout the region, is more economical to serve with sewer and water, electricity, telephone, parks and roads. Other costs incurred in scattered suburbanization result from the need to travel farther to destination points. The transportation costs for individuals are much higher in rural areas than in areas where shopping, service and employment opportunities are convenient to all.

Residential growth also brings with it increased requirements for other community services such as fire protection, law enforcement, emergency services, and public education. The type and quality of services that Jasper County, Hardeeville, and Ridgeland will offer to the public will play key roles in determining the amount and type of residential growth in the County.

GOAL & IMPLEMENTATION STRATEGIES FOR HOUSING

A major challenge in the coming years will be to ensure that there is good housing available for all segments of the Jasper County population.

GOAL: "Ensure that an adequate supply of safe and affordable housing is available for all residents of Jasper County."

STRATEGY #1: Provide affordable opportunities for the housing needs of Jasper County residents to be met.

1. Utilize Section 9 in the County Development Regulations to encourage innovative developments that are economically sound, desirable and livable. The Planning Commission has the authority to approve innovative developments if the spirit of the county regulations is maintained.
2. Jasper County should make use of its participation in the Lowcountry Regional Affordable Housing Consortium to obtain financing for housing for low and moderate-income residents.
3. Develop and implement affordable housing programs, with as many participating partners as possible.

STRATEGY #2: Promote development practices that will increase the quality of housing and neighborhoods. Continually adhere to the **Three Universal Development Policies**.

1. While mixed use is recommended in areas of Jasper County, contiguous incompatible land use should be prevented by means of the County Zoning Ordinance.
2. The zoning ordinance and other development regulations should be in the form of user-friendly, illustrated documents and guidelines (see Town of Ridgeland Zoning Ordinance) to be distributed to developers to avoid confusion and potential conflicts. These documents should also be available on the County Website as well as compact disk for distribution.
3. The zoning ordinance should ensure that subdivision street design must take into consideration the size and maneuverability of Emergency Service vehicles. Bike and pedestrian systems should be provided in each development with lots less than 1/2 acre. Incentives should be instituted by means of the zoning ordinance (see Town of Ridgeland for examples) and a system implemented to encourage developers to connect bicycle and pedestrian systems to the countywide and regional system.



Chapter 5: Economy

A balanced and well-functioning economy is one that is dynamic, diverse, and sustainable. Entrepreneurs are encouraged to enter the local market and the strength of the economy allows the additional businesses a viable chance for survival and growth. An economy that remains dynamic over the long run can only remain so if the sources that contribute to its size and activity are diverse. An economy that is too dependent on one source for employment and income is more vulnerable to economic downturn and changes in demand and technology. Diversity in the local economy allows for a wider range of employment and career opportunities for employees and entrepreneurs and also stimulates the attraction and retention of the most qualified and educated workers. An economy that is diverse will attract a wider array of business prospects. A community with diversity in business opportunities, a trained and educated work force, and a dynamic economy is one that is sustainable through economic downturns and times of hardship.

The proposed deepwater port will be constructed along the Savannah River and will create an economic impact for the Low Country similar to the huge economic impact of BMW in northwestern South Carolina. Jasper County's economy has recently made significant progress in becoming more diversified with the addition of a hospital and medical buildings, new electrical generating and water treatment plants, small but growing manufacturing companies and a cluster of new automotive dealers/service centers (including three high-end makes) and other commercial development along US 278. Commercial Building Permit data (Table 5.1 on the following page) shows that Jasper County, especially in comparison to the other three counties in the region, has experienced considerable commercial building activity between 2001 and 2004. In 2004, Beaufort, with a population 6.4 times as large as that of Jasper County issued building permits for new commercial development worth only 2.6 times as much as those issued by the smaller county.

The RV/boating center being built in Ridgeland, modular home manufacturer and other businesses attracted to the business/industrial will add more trained technical jobs in Jasper County. For the longer term, implementing the 2005 *Lowcountry Economic*

Diversification Plan will advance this trend as will the development of a new deepwater port on the Savannah River in the County.

Table 5.1: Building Permits for New Commercial Construction

County		2001	2002	2003	2004
Beaufort	Commercial Number	149	97	111	105
	Commercial Value	\$74,763,469	\$79,413,634	\$43,912,940	\$31,220,589
Colleton	Commercial Number	6	16	4	23
	Commercial Value	\$2,659,998	\$7,267,394	\$3,710,800	\$2,954,774
Hampton	Commercial Number	19	10	12	23
	Commercial Value	\$3,334,837	\$355,898	\$713,301	\$2,496,621
Jasper	Commercial Number	29	28	39	33
	Commercial Value	\$9,213,997	\$14,926,632	\$13,617,564	\$11,875,439

This has already translated into higher net taxable sales in Jasper County, as the table below demonstrates for the 2000 to 2002 period (the most recent data available for the state of South Carolina).

Table 5.2: Net Taxable Sales

	2000	2001	2002	Increase 2000-2002
Beaufort	\$1,966,523,323	\$1,984,202,568	\$2,060,202,326	4.76%
Colleton	\$254,374,731	\$238,314,859	\$262,985,860	3.39%
Hampton	\$99,088,970	\$91,610,500	\$92,970,560	-6.17%
Jasper	\$148,254,200	\$191,138,378	\$203,492,038	37.26%

5.1 LABOR FORCE

Commuting Patterns and Employment and Wage Growth. Although diversifying, Jasper County's economy is still interrelated with that of Beaufort County and Savannah, especially in terms of employment opportunities. Census 2000 commuting data is the most recent available, and it shows that the relationship is two-way, with workers traveling both into and out of the County for employment. Table 5.1 on the following page summarizes this.

As the economy continues to become increasingly diversified and less dependent upon jobs outside Jasper County, both the level of out-commuting and the average length of commute (in 2000 it was 34.2 minutes, which is high for a rural area) can be expected to decrease significantly.

Table 5.3: Jasper County Commuting Patterns

Out-Commuting from Jasper County		Commuting to and within Jasper County	
County residents who work in other SC counties	3,785	Residents of other SC counties who work in Jasper County	1,190
County residents who work inside county	3,702	County residents who work inside county	3,702
County residents who work in other states	944	Residents of other states who work in Jasper County	464
Total	8,431		5,356

It is likely, in fact, that the out-commuting rates have already decreased because of the job growth in the County between 2001 and 2004, during which period Jasper's rate of increase has been by far the highest in the region.

Table 5.4: Private Sector Jobs

	2001	2002	2003	2004	% Change 2001-2004
Beaufort	45,591	46,788	48,399	50,188	10.08%
Colleton	8,286	8,361	8,124	8,355	0.83%
Hampton	4,382	4,238	3,826	3,780	-13.74%
Jasper	3,470	3,861	4,033	4,295	23.78%

At the same time, average weekly wages increased at a more significant rate in Jasper County than in the other three counties and in South Carolina as a whole.

Table 5.5 Average Weekly Wage (Private Sector)

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2nd Quarter 2006	3rd Quarter 2006	Change 1995-2006
Beaufort County	\$440	\$460	\$480	\$493	\$516	\$505	\$525	\$560	\$564	\$567	\$565	39.85%
Colleton County	\$382	\$404	\$427	\$445	\$458	\$445	\$457	\$491	\$511	\$518	\$523	43.68%
Hampton County	\$434	\$460	\$468	\$497	\$536	\$524	\$531	\$570	\$581	\$539	\$560	42.49%
Jasper County	\$339	\$361	\$390	\$428	\$447	\$441	\$474	\$531	\$568	\$622	\$623	101.62%
South Carolina	\$481	\$501	\$523	\$541	\$562	\$567	\$582	\$602	\$623	\$631	\$627	39.96%

Since the present out-commuting is to mainly low-paying service industry (especially hospitality and retail) jobs in southern Beaufort County, economic diversification will strengthen this trend of improved wages for Jasper County residents.

As well, unemployment rates continue to be lower than in two of the three other counties in the Region and the state average.

Table 5.6: Regional Unemployment Rates

	Dec. 2004	January 2005	February 2005	March 2005	April 2005	May 2005	June 2005	July 2005	August 2005	Sept. 2005	Oct. 2005
Beaufort County	4.9	5.3	5.5	4.7	4.0	3.9	4.8	4.5	4.6	5.0	5.3
Colleton County	8.1	8.5	8.4	7.6	6.9	6.3	7	6.8	6.8	7.3	7.4
Hampton County	9.5	10.0	10.1	8.7	7.9	7.5	8.3	8.1	7.6	8.3	8.5
Jasper County	5.3	5.6	5.9	5.4	4.8	4.6	5.1	5	5	5.6	5.4
South Carolina	6.9	7.0	7.1	6.7	6.5	6.3	6.3	6.1	6.2	6.6	6.9
US	5.4	5.2	5.4	5.2	5.2	5.1	5	5	4.9	5.1	5

☞ **Education and Training.** The labor force most attractive to potential industry is the one which is highly educated and/or highly-trained. Jasper County's level of educational attainment is very low. To improve the economic base and performance of Jasper County, improvement of the facilities and performance of the schools is a paramount need. It is imperative that Jasper County develop a good working relationship with the School District.

Both Lowcountry local governments and the State of South Carolina have come to realize that a workforce educated and trained for both existing and prospective jobs will be a major marketing advantage in attracting new businesses and institutions. In the four counties of this region educational attainment levels have increased over the past decade and new initiatives are in place or under way in local secondary and post-secondary educational institutions to ensure that the Lowcountry is able to train, nurture and retain a labor force relevant to economic diversification in the twenty-first century.

- **Secondary/Career Education.** Jasper County offers both public and private secondary schooling options, including Beaufort-Jasper Academy of Career Excellence, located along the Beaufort/Jasper County line. The programs offered there prepare students in the two counties for careers in:

Automotive/Electronic Technologies, Information Technology, Health and Human Services, Pre-Engineering, Tourism and Recreation, Culinary Arts, Golf Course Technology

- **Post Secondary Education.** The public and private colleges and universities available to Jasper residents provide a diverse spectrum of programs that provide the student with either certificate, diploma, undergraduate or graduate degrees.
- **Continuing Education.** TCL offers continuing educational programs geared towards those already in the work force or those that have been out of school for some time. Currently the Lowcountry has geared much of its continuing education towards the health sector. Other continuing education courses available in the region are: Building Construction, Computer Training, Culinary Arts, Insurance, Massage Therapy, Occupational Upgrade, Real Estate - Appraisal and Continuing Ed., English/Spanish as a Second Language.

The Lowcountry Workforce Investment Area (WIA) department at LCOG is also involved in the training of prospective job seekers and the area's youth. WIA staff work with the area's educational institutions to help direct those looking for work force education and training and to determine current and future employment trends. Not only does the WIA provide job specific training for prospective employees but it also provides workshops and programs pertaining to work ethics and appearance in order to increase the likelihood of an employee performing to the level expected by employers.

5.2 ECONOMIC DEVELOPMENT

While the deepwater port will provide the largest single economic development project other efforts such as the Strategy for Economic Diversification are important. During the fall of 2004, LCOG and the four counties of the Lowcountry embarked on the development of a strategy for economic diversification. The Department of Defense, through its Advance Planning Grant initiative provided 90 percent of the funding, with each of the four counties providing an equal share of the remaining 10 percent.

The objectives, as stated in the final report (Appendix xii), were "to assist the four-county region to attract new businesses and target industries to aid in community growth, tax base diversification and quality of life enhancement, and lessen dependency on the three military installations in the region. This plan was formulated taking into consideration the region's economic development goals and objectives while being sensitive to resident concerns about the impact of these initiatives on the overall quality of life and community culture and identity."

The core of the process was to determine what industries should be in the area. A cluster analysis identified groups of industries linked by common product markets, labor pools, knowledge base, similar technologies, supplier chains, specialized services, networks, and research and development and/or other economic ties. Clusters were pinpointed with the use of local labor and market information, anecdotal information employer feedback and natural resource analyses. Clustering helps establish industry networks that lead to the dissemination of best practices, process innovations, and joint market or product initiatives.

Based on the research and analysis by LCOG and the consultants, and combined with previous work on such issues as freight transportation advantages, existing manufacturers and natural resources in the Lowcountry, a preliminary listing of possible linkages was developed. Linkages within each of these clusters were identified in order to identify targeted companies.

The Lowcountry economic diversification plan focused on the following specific industry clusters:

- Logistics/Distribution centers (emerging industry)
- Health Care/Medical
- Construction
- Wholesale Trade
- Manufacturing

The prospective businesses in these industries can be attracted to the Lowcountry due to a combination of concentrated product markets, supply chains and other demonstrated resources. In addition, these industries present an opportunity to develop jobs with above average incomes in growing industries.

After assessing the region and factoring in the target candidate industries, infrastructure, transportation-logistics, and the region's strengths and opportunities, four economic diversification zones were recommended along I-95. Each zone contains two or more I-95 interchanges. Jasper County has two zones (see Map 6 on following page).

The specific recommendations for development of Jasper County's two zones follow.

Zone 1: Jasper County -- I-95 Exit 5 and Exit 8 (Also proposed Exit 3).

- ◇ Exit 5 is the last exit before Savannah, Georgia. The exit, the closest exit to the new proposed deepwater port, offers several mid-scale and economy hotels, gas stations, fast food restaurants, auto parts and mini-mart type establishments.
- ◇ Exit 8 offers the same types of accommodations as Exit 5 in addition to the new Coastal Carolina Medical Center, Beaufort Jasper Academy of Career Excellence, Technical College of the Low Country, University of South Carolina at Beaufort and the City of Hardeeville.

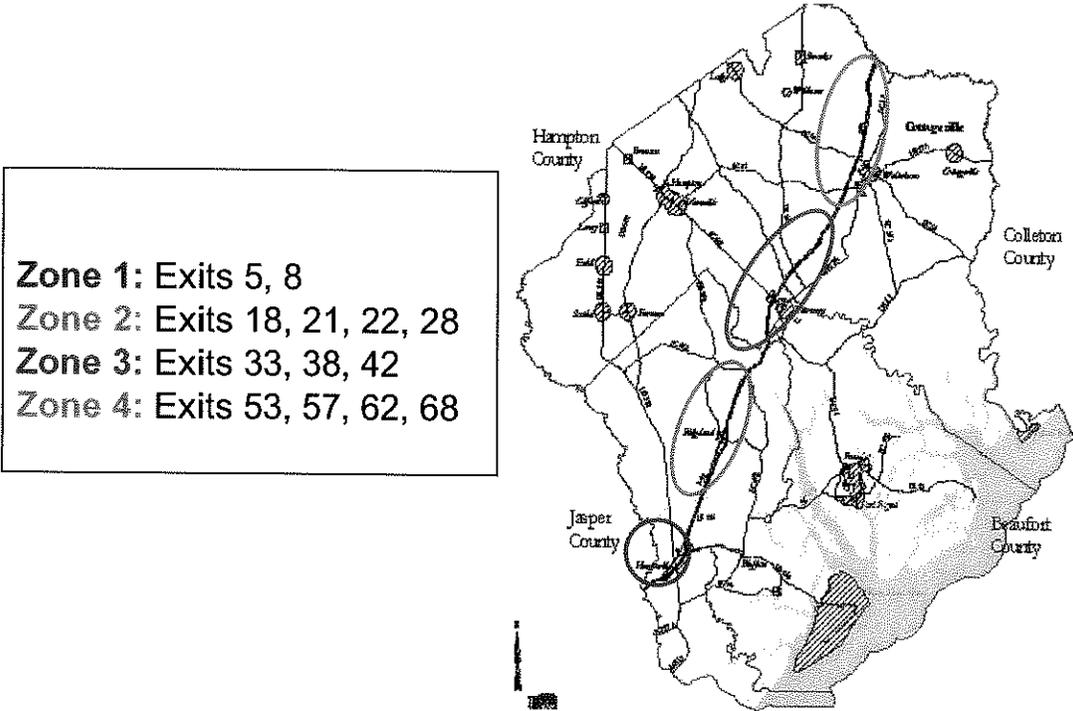
Zone 1 is an ideal location for target industries that depend on the proposed deepwater port as well as the existing Savannah port and would be interested in utilizing the proposed deepwater port. Utilities are present near both exits. US-17 also provides access to the Savannah River while US-278 leads to Hilton Head Island (Beaufort County) with access to the small, publicly-operated, Hilton Head Island Airport (HXD). This Zone also allows easy access to the Savannah International Airport (SAV) via I-95.

These public airports could possibly allow air transport service of goods and supplies for the targeted businesses in Zone 1. Importantly a new airport for Jasper County is under consideration.

Jasper County and the City of Hardeeville, in conjunction with LCOG and Beaufort County, should market Zone 1 and the South Hardeeville Business Park to those construction/manufacturing, distribution/logistics and wholesale trade targeted North American Industrial Classification System (NAICS) companies (identified below and in *Appendix O*) that could benefit logistically from air, port and interstate highway access with a location off of Exits 5 and 8. The CSX line also runs parallel to I-95 and a CSX spur is available at Exit 8 and US-278. Additional spurs could also be developed in order to aid target companies that may also require rail access for their operations.

Map 6

I-95 Economic Development Zones



Jasper County should target the following North American Industrial Classification System (NAICS) industries to locate in Zone 1 in addition to the proposed deepwater port:

- ◇ 42, 44-45 - Distribution/Logistics
 - Target company distribution/logistics major emphasis to include:
 - Machinery
 - Electrical equipment
 - Appliances
 - Transportation equipment
- ◇ 3219 - Wood product manufacturing (wood windows and doors, millwork, etc.)
- ◇ 3212 - Veneer, plywood and engineered wood product manufacturing (hardwood veneer, truss manufacturing, OSB, MDF, etc.)
- ◇ 3323 - Architectural and structural metals manufacturing (metal windows and doors, ornamental and architectural metal work, prefab metal building and components, etc.)

Zone 2: Jasper County --- I-95 Exit 18, Exit 21, Exit 22 and Exit 28

- ◇ Exit 18 is not currently developed.
- ◇ Exit 21 has direct access to Ridgeland's main street business district, several mid-scale and economy hotels, fast food establishments, strip shopping malls, gas stations, a grocery store and access to the Blue Heron Nature Trail. Cypress Ridge Business Park is accessed by Exit 21.
- ◇ Ridgeland's Business Park, a Mexican restaurant and gas stations are directly accessed off of Exit 22.
- ◇ Exit 28 has very little development with a small food store and gas stations.

Utilities are present at Exits 21 and 22, which make these exits the ideal location for additional development. The Town of Ridgeland recently zoned a large parcel of serviced land at Exit 22 for industrial use including light manufacturing and distribution uses. Exits 18 and 28 also provide promising opportunities as target business locations as utilities are made available.

All of the Zones provide access to three small public airports, and the site of the proposed new airport in Jasper County, including Beaufort County Airport (73J), Ridgeland Airport (3J1) and Hilton Head Island Airport (HXD) in addition to Savannah International Airport (SAV). These public airports may permit the transport of necessary supplies and materials necessary for any planned development in Zone 2.

With its close proximity to the new Carolina Coastal Medical Center off of Exit 8 and Beaufort Memorial Hospital, which is in association with the Keyserling Cancer Center, Zone 2 is well positioned to attract medical/health care target industries. In addition to this ideal location between key medical/health related organizations a majority of the aging population is located in Beaufort and Jasper Counties making it advantageous for additional healthcare-oriented companies, including testing laboratories, to locate there. Jasper County in conjunction with Beaufort County, Carolina Coastal Medical Center and Beaufort Memorial Hospital should work together to market Zone 2 to those targeted medical and logistics companies identified below that could reap benefits from this ideal Lowcountry location.

Zone 2 would also be a prime location for a logistics institute (as previously recommended in Section A of the plan) with its proximity to local air, highway, rail lines, the proposed deepwater port and the Savannah and Charleston ports. Two major newly located educational institutions, University of South Carolina Beaufort and the Technical College of the Low Country, also provide significant opportunities for all of Jasper County.

Jasper and Beaufort Counties in conjunction with LCOG and University of South Carolina-Beaufort (USC-B) should market Zone 2, the Cypress Ridge Business Park and other business-industrial parks in Jasper County to targeted transportation-logistics companies identified below that could benefit from this central location offering air, rail, port, interstate and educational access.

Zone 2 would be an ideal location to market to the following North American Industrial Classification System industries:

- ◇ 42, 44-45 - Distribution/Logistics
 - Target company distribution/logistics emphasis to include:
 - Machinery
 - Electrical equipment
 - Appliances
 - Transportation equipment
- ◇ 3369 - Other transportation equipment manufacturing (motorcycle, bicycle and related parts, military armored vehicles/components, golf carts, personal watercraft, etc.)
- ◇ 6215 - Medical and diagnostic laboratories (diagnostic imaging centers, home health care services, medical testing laboratories, etc.)
- ◇ 5121 - Motion picture and video industries (motion picture and video production, post production services, etc.)

Zones 3 and 4 are expected to grow in the future.

Tourism and Economic Development.

Jasper County is located between two major tourism destinations of Savannah and Hilton Head. Highways 170 & 278 runs through Jasper County and is the direct connection between these two tourism centers. This large volume of tourists, and thru travelers on I-95, represent an exciting tourist market to be developed.

GOAL & IMPLEMENTATION STRATEGIES FOR THE ECONOMY

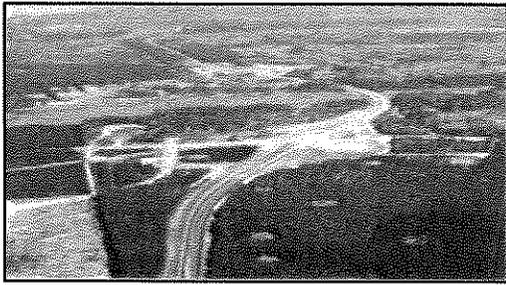
Because both the economic development climate and local and regional attitudes have changed considerably in the past few years, and the strategic advantages of Jasper County's location and the opportunities accruing are now recognized. The *Lowcountry Economic Diversification Plan*, which was completed in September of 2005 and of which Jasper County was an equal and participating partner outlines an economic role and provides directions for future economic development here.

GOAL: Construct the deepwater port along the Savannah River

GOAL: Develop a diversified economic base for Jasper County that will provide jobs that pay at least the state average wage.

This can be accomplished by implementing the many relevant recommendations of the "Lowcountry Economic Diversification Plan" that deal with both attracting new businesses to Jasper County and also growing the businesses that are already here. Those that can be impacted by planning and land use regulations include, but are not limited to:

1. Support a Regional Economic Development Alliance.
2. Maintain policies necessary to attract the identified candidate businesses to Jasper County. This includes the designation and servicing of land for distribution centers and other specific industrial purposes at I-95 interchanges (per the "Diversification Zones" map).
3. The county and its municipalities should maintain current working relationships and stress countywide economic development.
4. Undertake a County-wide Tourism Development Plan.



Chapter 6: Land Use

Jasper County is faced with the challenge of accommodating phenomenal new growth while preserving the quality of its environment. The County's strategic location relative to the growing communities of Beaufort County and Savannah, Georgia, has opened up the potential for numerous development opportunities. Now is the time for Jasper County to identify specific development goals to establish a solid foundation for properly planned, long-range growth without destroying the lifestyle that current residents enjoy and seek to preserve.

This chapter outlines a basic framework for a balanced and orderly pattern of development for Jasper County. The concepts included in this chapter are designed specifically to guide future development in ways that make more efficient use of existing and planned public facilities and services, while preserving the rural and small town character of much of the County. The framework is a guide for making development policies and decisions for the public and private sectors.

To be in the best position to benefit the most from this inevitable development the County has adopted these **Three Universal Development Principles**:

- 1. Keep Jasper Rural**
- 2. Develop the Municipalities**
- 3. Development pays its own way.**

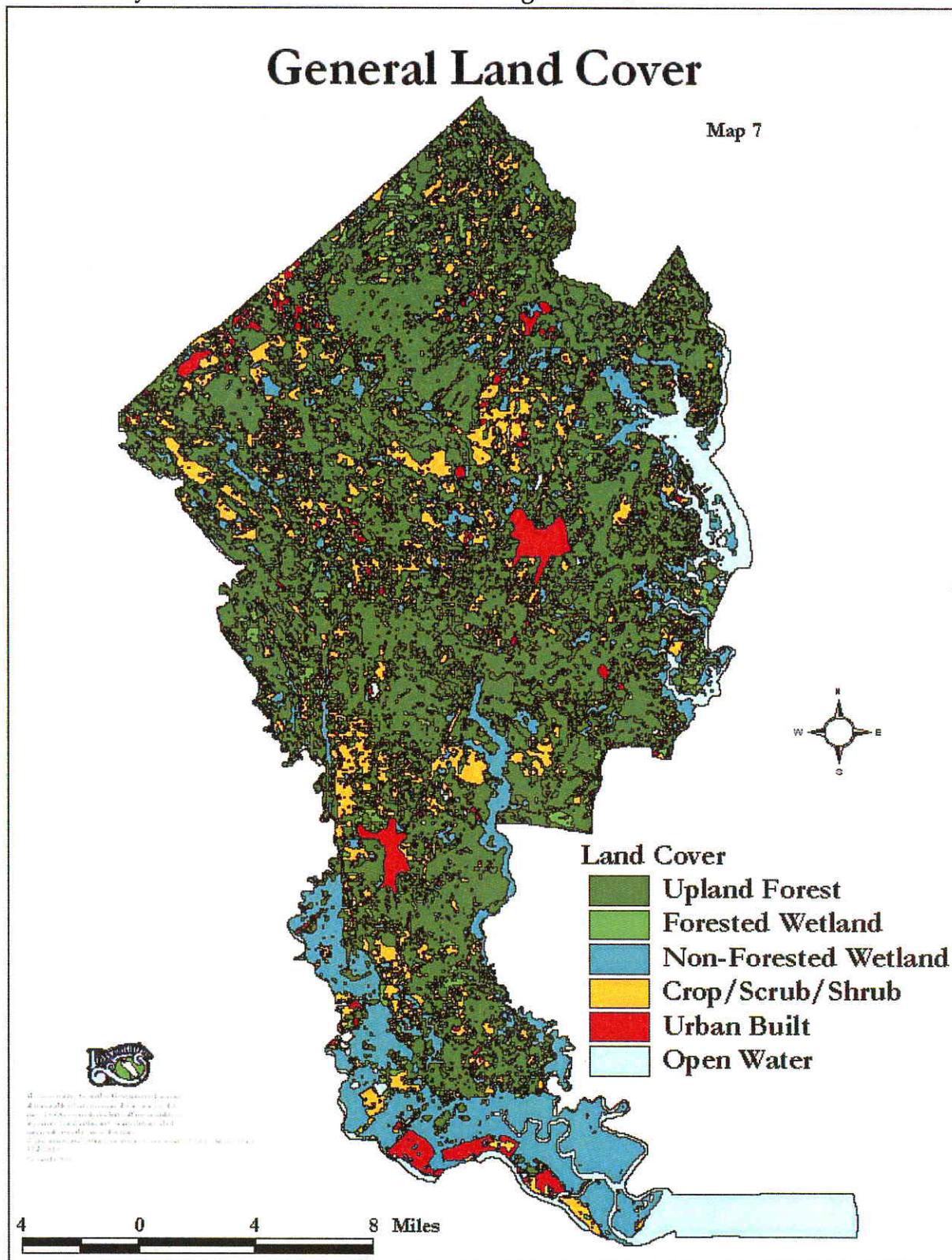
A key implementation component of the **Three Universal Development Principles** is zoning strategy of low density classification unless and until the area is annexed. This strategy also reinforces the County as a provider of public services at a rural level.

6.1 EXISTING LAND USE *EXISTING LAND USE PATTERNS* *EXISTING LAND USE PATTERNS*

Existing land use patterns will play a large role in determining where future growth will likely occur in Jasper County. A general land cover map of the County, which shows existing land uses, is shown in Map 7.

As discussed in the Natural Resources Chapter, almost 22 percent of the County's land area is comprised of wetlands, including coastal marshes, estuaries, and tidal waters.

Because of their development constraints, these environmentally sensitive areas have had significant influence on the patterns of development in Jasper County and will continue to impact where future growth occurs. The land cover map shows those areas of the County that are in forest or are used for agriculture.



As shown in Map 7, the built-up areas of the County are concentrated around the two municipalities of Hardeeville and Ridgeland. Other developed areas are scattered throughout the County's numerous small villages and "crossroads" settlements, with commercial uses, oriented primarily to the traveler, located at the interstate interchanges. Major commercial development activities are now spreading along the US 278 corridor from the Beaufort County line to I-95.

The primary undeveloped areas without major environmental constraints include the extreme northern portion of the County, the area east and south of Ridgeland, and the area surrounding Hardeeville. Based on other factors, such as transportation access, availability of utilities, land ownership patterns, and proximity to current growth centers, those portions of the County are now preparing for significant development during the time-frame of this plan: Levy Limehouse, Hardeeville, Ridgeland, and Point South.

6.2 DEVELOPMENT TRENDS

Development trends affecting land use in Jasper County are new development, future development demands, and local and regional land use issues.

☞ *New Development.* Developments planned or recently completed for Jasper County and neighboring Beaufort County in the last several years are expected to change the character of Jasper County forever. They include:

- The large-scale residential developments planned for the Hardeeville area
- Industrial and related development along I-95
- Commercial development along US 278 in both counties, and the related traffic and other problems that are resulting
- Mixed use growth in and around Ridgeland
- The new USC-B and TCL campuses on the Jasper-Beaufort County boundary
- Sun City Hilton Head (growing faster than ever as it nears build-out) now beginning to build on the land it owns in Jasper County
- The proposed deepwater port
- The rapid development of the "Buckwalter" area of Bluffton

The impact of some of these projects has already been felt; the rest are expected to have substantial impacts in the foreseeable future, especially in the southern portion of the County. The Hardeeville-centered and Ridgeland-centered development areas are presently the subject of planning and development control initiatives which are expected to result in the orderly community expansion of those municipalities and the

surrounding lands for which they now have planning responsibility (as a result of recent structural changes in Jasper County's planning functions).

Until recently, there were only four areas in Jasper County which were served by public water and sewer systems: the Town of Ridgeland, the City of Hardeeville, the Palm Key/Knowles Island residential development on the Euhaw Creek, and the largely commercial Point South area in the northern part of the County at I-95's Exit 33. In addition, the Levy vicinity, which lies south of Hardeeville, is served by a water system only. The Beaufort-Jasper Water and Sewer Authority, in response to the projected water and sewer needs in the Cherry Point vicinity, recently made major expansions to provide water and wastewater services in that area. As is the case in most locales, intensive growth in Jasper County is expected to follow water and sewer lines.

☞ *Future Development Demands.* The recent residential development trends in Jasper County will result in a significant increase in the demand for retail and service uses. New population centers will create a demand for new retail development.

The Economy Chapter predicts significant increases in the need for such uses as distribution centers and other light industrial development to diversify the County's economic base. These types of uses depend on the availability of sufficiently large parcels of land served by both freight transportation and utilities. Land at I-95 intersections (See Map 6 on page 72) is of particular importance to achieving economic diversification.

☞ *Land-Use Issues.* Jasper County's biggest land use challenge during the foreseeable future will be to balance the many competing demands for land throughout the county with the economic, social, housing, transportation and community services needs of present and future residents.

6.3 EXISTING REGULATORY ENVIRONMENT

Jasper County is currently operating under the *Jasper County Comprehensive Plan* dated November 1998. The plan included background data such as historical, population, and economic profiles; an overview of factors influencing development such as climate, soils, utilities, and land use; and recommendations for implementing future land use goals. During late 2005 the Planning Commission reviewed the goals and objectives contained in that Plan to determine which ones had been met and/or implemented, which were still relevant and useful to Jasper County and which needed to be deleted or replaced. Because of the large-scale changes that have already occurred or are expected both in Jasper County and the surrounding region, many of those recommendations were found to be of limited or no value in guiding County decision-

making at this time. The County's development regulations contained in the zoning ordinance needs to be comprehensively revised to effectively guide new development in the County.

6.4 FUTURE DEVELOPMENT PLAN FRAMEWORK

This section provides a basic growth management framework for a balanced and orderly pattern of development for Jasper County. The concepts included within this framework are specifically designed to reinforce the **Three Universal Development Principles**:

- Provide for areas to accommodate market demands for new development projected for the County, including residential, commercial and industrial activities.
- Make more efficient use of existing and planned public facilities and services.
- Preserve the rural and small-town character of the remainder of the county to accommodate low-density development, provide for continued agricultural activities, and to protect environmentally sensitive areas.

Growth management ensures that all projected growth can take place, but in a way that conserves natural resources and best utilizes infrastructure. This is already occurring by the planned concentration of new development within or around the existing population centers of Ridgeland and Hardeeville.

Development Areas. Rather than allowing unplanned sprawl to occur throughout the County, the recommended framework uses a "development area" concept to manage future growth by encouraging and enhancing the growth patterns that have naturally occurred within the County. The general purpose for designating development areas is to provide a logical and organized basis for making cost-effective public service and facility investments.

Development areas serve to:

- Reinforce the **Three Universal Development Principles**.
- Designate appropriate areas for various types and densities of land use.
- Minimize conflicts between neighboring properties.
- Assist in setting priorities for public investment in infrastructure.

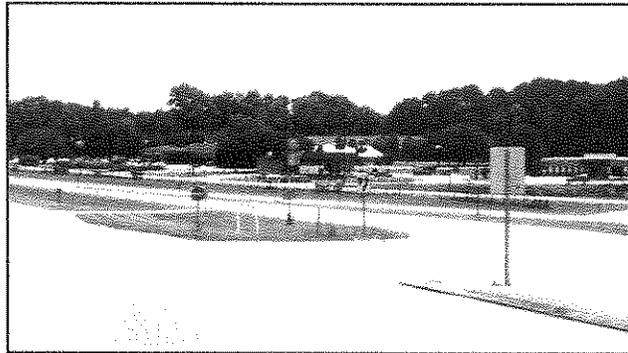
Development areas are not zoning districts in that they do not establish boundaries within which certain specific uses are permitted and from which others are excluded. Instead, the recommended development characteristics for the various districts are

intended to guide the establishment of future development regulations, as part of the County's Zoning Ordinance, that will be most suitable for each development area's purpose. In addition, the development area boundaries shown are intentionally flexible to allow modification as new growth demands and infrastructure requirements change over time.

Development areas include the following districts, which are shown on Map 7 and described below:

- Development Districts
- Community Village Districts
- Rural Resource District.

➤ **Development Districts.** Development Districts are defined as those areas in which existing development is concentrated, and/or which contain adequate amounts of developable land necessary to support relatively substantial amounts of new development. These areas are the most appropriate locations for a full range of land uses of a more urban character, including a wide range of commercial, residential, and business activities. They include key geographic locations with good transportation access to major roadways in the County. They are also currently served by central public water and sewer systems, or are located where existing services can be most efficiently expanded to support new development.



The designated Development Districts include:

- Hardeeville
- Levy Limehouse
- Ridgeland
- Point South

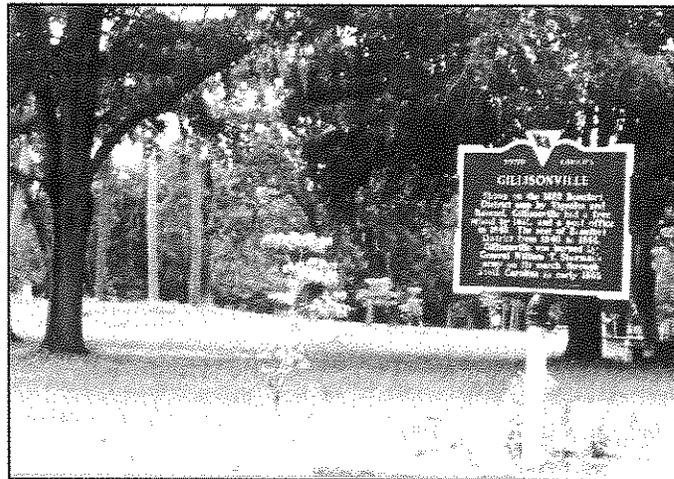
Recommended development characteristics for Development Districts include:

- Low- to medium-density mixed uses that may include retail centers, business parks and other uses related to tourism services.
- A variety of housing types and densities.
- Regional public facilities such as schools, cultural facilities, and hospitals.

➤ **Community Village Districts.** Community Villages are those local communities that have a distinct identity and that serve as focal points for the surrounding rural population. These communities contain a concentration of residential dwellings, and most contain stores, churches, or other uses that serve the immediate area. Public utilities are typically limited or non-existent. Many of the villages contain historic sites that attest to their traditional significance as social, religious, and trade centers. These areas are ideal locations for infill development that promotes the “small-town” or neighborhood-oriented character of these communities.

The designated Community Village Districts are:

- Coosawhatchie
- Gillisonville
- Grahamville
- Grays
- Old House
- Pineland
- Robertville
- Tarboro
- Tillman
- Grahamville



Recommended development characteristics for Community Village Districts include:

- A mixture of low- to moderate-density, neighborhood-oriented land uses, primarily residential.
- Public facilities and services necessary to adequately serve residents, such as community centers, parks, and churches.
- Preservation of historic sites and structures.
- Development that is compatible with the character of these communities.

➤ **Rural Resource District.** The Rural Resource District encompasses those areas of the County that typically contain very low-density rural development, agriculture and forestry activities, and wildlife conservation areas. They generally have no public utilities. These areas are priority locations for incremental rural development, usually on individual wells and septic systems, as well as promoting a full range of agricultural, forestry, and natural resource activities. While some planned residential or other types

of development may be appropriate in a few locations, the Rural Resource District is not recommended to be a priority for public investment in infrastructure and services.

Recommended development characteristics for Rural Resource Districts include:

- Very low-density development, primarily on individual wells and septic tanks.
- Agriculture, forestry, and conservation activities.



☞ *Highway Corridor Overlay District.* Development along public highways and roads, especially in areas that are undergoing growth pressures, often results in the degradation of our visual environment and causes traffic safety hazards. Poorly designed development, and unattractive signs and billboards have subtracted from, rather than added to, our scenic views. Too many driveway cuts and turning points also take away from the capacity of our roadways.

The third element of the future development plan framework is the Highway Corridor Overlay District, a designation for key roadway corridors and intersections throughout the County. These overlays do not establish land uses, but, instead, require that projects located adjacent to critical highway corridors meet specific safety and aesthetic design standards in addition to other applicable regulations. What these specific standards will be for a given corridor should be decided as part of the DSO update, but should, at a minimum, address the following:

- Spacing of access driveways to enhance safe traffic flow;
- Landscaped buffers along highways and parking lots to enhance the visual quality of new development;
- Sign requirements to prevent unattractive and excessive advertising displays;
- Architectural guidelines to encourage natural blending of colors and materials;
- Other design and development guidelines in coordination with neighboring Beaufort County.

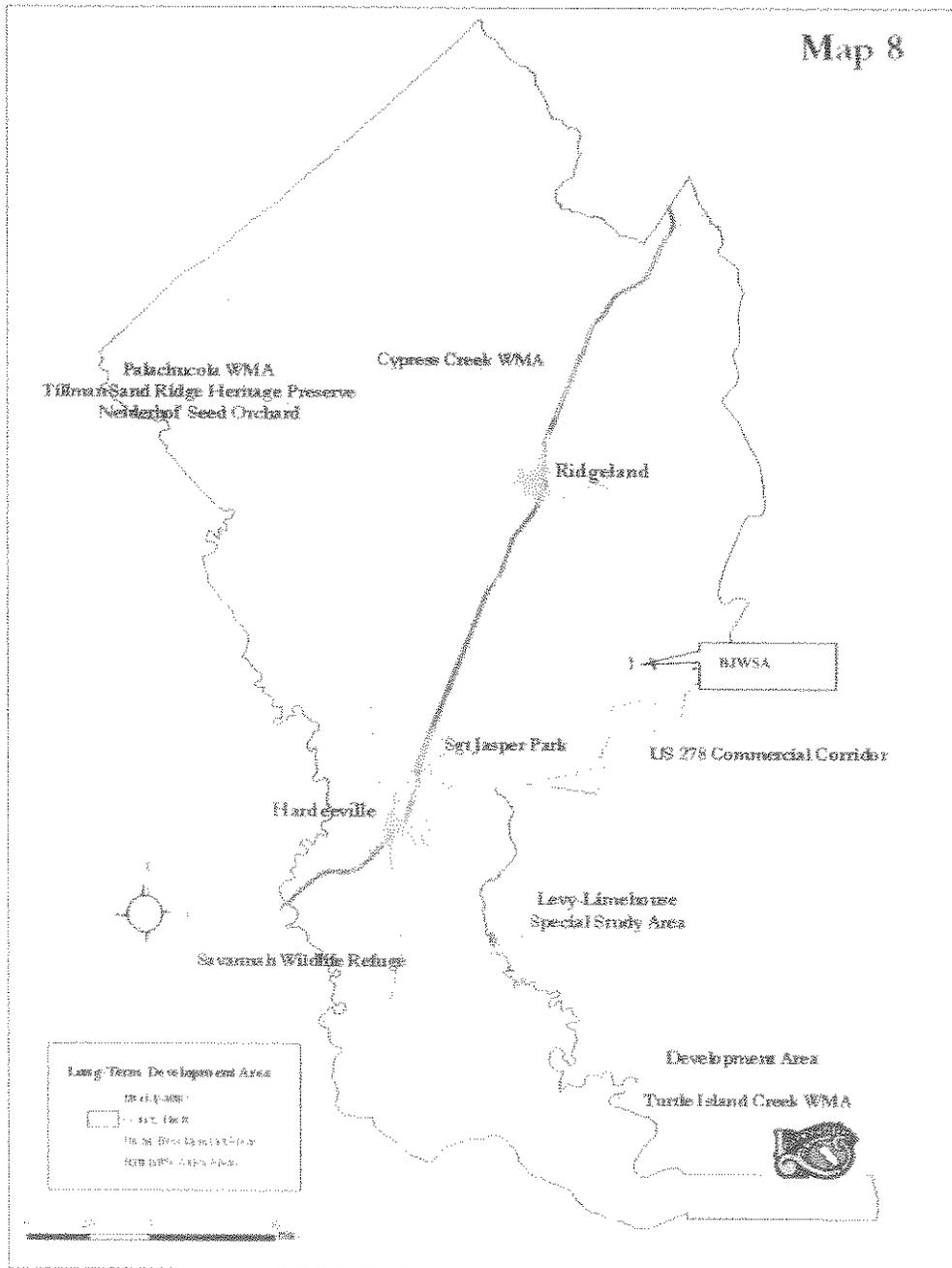
Jasper County has two existing Highway Corridor Overlay Districts: US 278, and SC 170. For these facilities, the overlay district standards apply to development within 500 feet of the roadway. The following are proposed new Highway Corridor Overlay Districts:



- Interstate 95 (entire corridor)
- SC Highway 462 (Career Education Center to I-95)
- SC Highway 336 (Old House to Ridgeland)
- US Highway 17 (Hardeeville to the Savannah River)
- SC Highway 170 (US 17 to the Savannah River)

The Planning Commission may also identify other highly visible, scenic, or critical corridors that should have overlay district designations.

Long Term Development Concerns



GOAL & IMPLEMENTATION STRATEGIES FOR LAND USE

This is where all of the other components come together. The following map illustrates areas that are either already receiving special planning initiatives or that should be the subject of special area planning programs. This is in addition to the "Economic Diversification Zones" (Map 6, page 72).

GOAL: Promote an economically viable and quality living environment through balanced growth, compatible land-use patterns, efficient public services and facilities. As well as, the wise use the County's valuable natural resources.

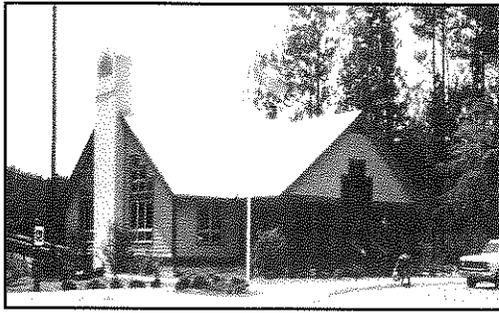
OBJECTIVE #1: Update the County's development regulations, especially the Zoning Ordinance, to implement the recommendations of this updated Comprehensive Plan. Key recommendations include the **Three Universal Development Principles** and the maintaining a rural level of services as provided by Jasper County.

1. Develop performance standards by means of the zoning ordinance to promote the appropriate distribution of land uses throughout the County with regard to compatibility and impacts to public facilities, historic resources, and the environment.
2. Evaluate all development proposals for compliance with the revised regulations.

OBJECTIVE #2: Designate and implement Corridor Overlay Districts to protect the capacity and aesthetics of high visibility, scenic, and other critical highway corridors.

1. Design standards for Corridor Overlay Districts should be in addition to any underlying district standards applicable to a property and should be coordinated, where applicable, with Beaufort County.
2. The Planning Commission should develop and prioritize a list of corridors for designation and embark upon their planning. Assistance from SCDOT is expected to be available in the foreseeable future for the planning of the US 278 and US 17 corridors.
3. Jasper County should continue its collaborative efforts in planning the SC 170 corridor with Beaufort County.

OBJECTIVE #3: Designate areas that are under development pressure as special study areas and prepare a land use plan to guide and direct new development that meets the criteria set forth in this amendment to the *Comprehensive Plan*. Two of the districts that should be considered immediately are Point South and the Levy-Limehouse districts.



Chapter 7: Community Facilities

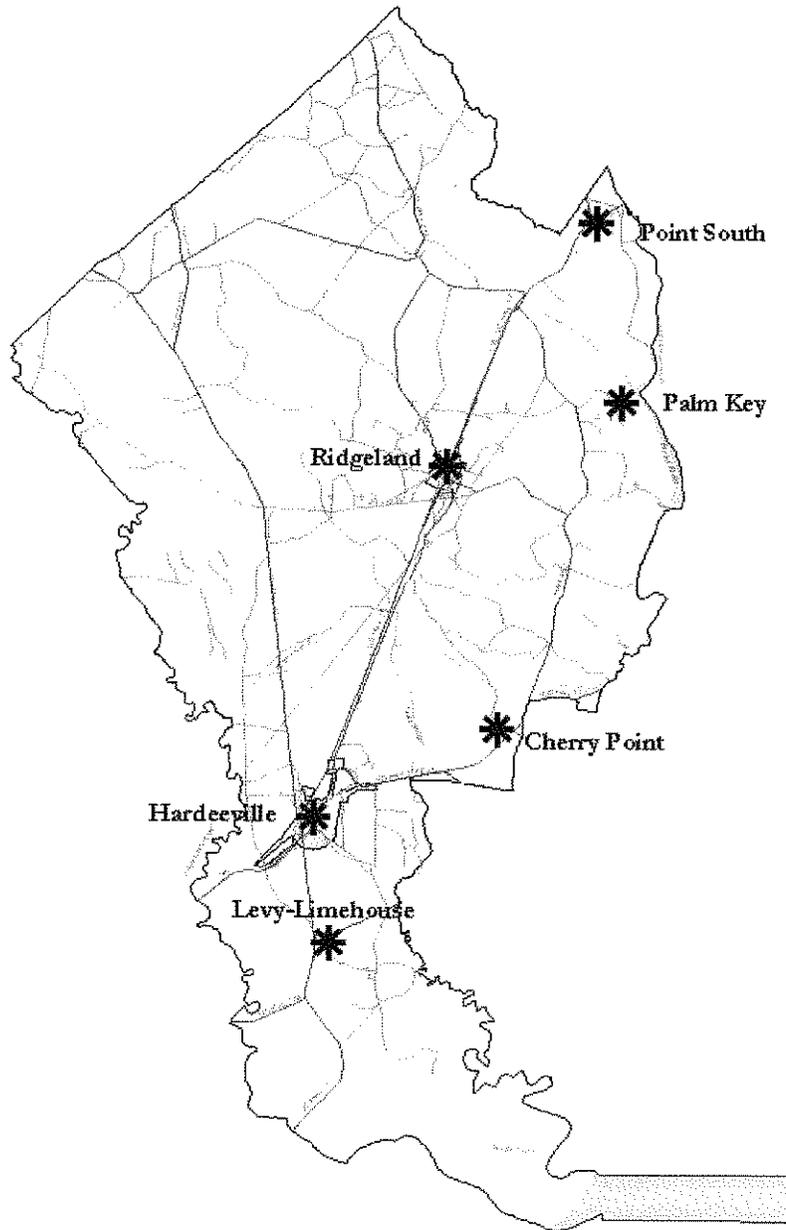
Community facilities are necessary to ensure the safety and quality of life that residents expect and deserve. These include transportation, public utilities (water and sewer), solid waste disposal, public safety, and general government facilities; schools; libraries, recreation, and other cultural facilities.

Adequate infrastructure and economic development go hand in hand. As a result, developing a local infrastructure plan must be the cornerstone for the County's future growth policy. Roads that work, an educated labor force, recreational facilities, adequate utilities, fire protection and law enforcement and reliable transportation attract businesses and new residents to an area. In return, growth produces jobs, housing, and commerce, all of which are needed to generate tax revenues to maintain roads, water and wastewater systems, schools, and other infrastructure.

7.1 WATER AND SEWER FACILITIES

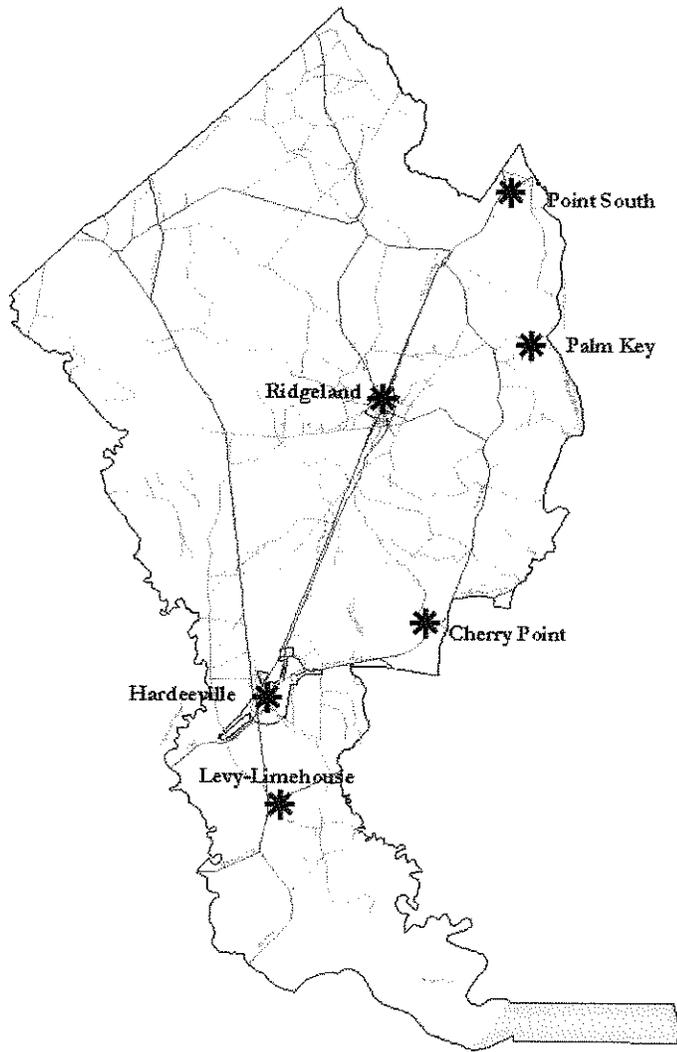
☞ *Water.* There are four public water systems within Jasper County, the only municipal system is owned by Ridgeland. The Beaufort Jasper Water and Sewer Authority (BJWSA) owns what used to be Point South Utilities. This well system serves the commercial development at Exit 33 on Interstate 95 and has been upgraded to serve expected new development in this area. BJWSA also operates the Palm Key system, which is currently operating at a fraction of its capacity because expected development in the area has not yet occurred. At the southern end of the County is the Levy-Limehouse water system. This water system is also maintained and operated by the BJWSA, although they do not own it. In addition to these facilities, BJWSA has recently constructed a new water treatment facility on the Savannah River, near Purrysburg, in Jasper County that will be able to accommodate major new growth and also operates the BJWSA intake canal, which supplies water from the Savannah River to much of Beaufort County, running across Jasper County from Purrysburg to the treatment plant at Chelsea.

Map 9. Jasper County Water Systems



- ☞ **Sewer.** Jasper County has five wastewater treatment plants (Map 10). One is owned and operated by the Town of Ridgeland. BJWSA owns and operates the remaining four plants, which serve the Cherry Point area, Point South, and Palm Key/Knowles Island Plantation. The treatment capacity of the Cherry Point plant has recently been expanded and further expansion and improvements are planned and scheduled for the near future; the Point South plant is also being expanded to accommodate planned growth.

Map 10. Wastewater Treatment Plants



There are also three Water Quality Management Agencies in Jasper County under Section 208 of the Federal Water Pollution Control Act. These entities have the responsibility to carry out the roles assigned to them in the Regional Water Quality Management Plan, administered in the region by the Lowcountry Council of Governments. The Town of Ridgeland has been designated a Level 1 Management Agency, which means that it owns, operates, and maintains a public wastewater collection system and treatment facility. Level 1 Management Agencies are responsible for enacting and enforcing local regulations to control location of wastewater treatment facilities, review facility plans, review pollution discharge (NPDES) permits, and monitor treatment facilities to ensure compliance with all applicable regulations. There are no Level 2 Management Agencies in Jasper County.

Jasper County has been designated a Level 3 Management Agency, which means it does not own, operate, or maintain a treatment facility, but has public services provided within its jurisdiction by other management or service agencies. The County's responsibilities are similar to those listed above. Jasper County's Management Agency area encompasses the unincorporated areas of the County. BJWSA is currently the designated service agency for the unincorporated areas of Point South, Palm Key, and Cherry Point.

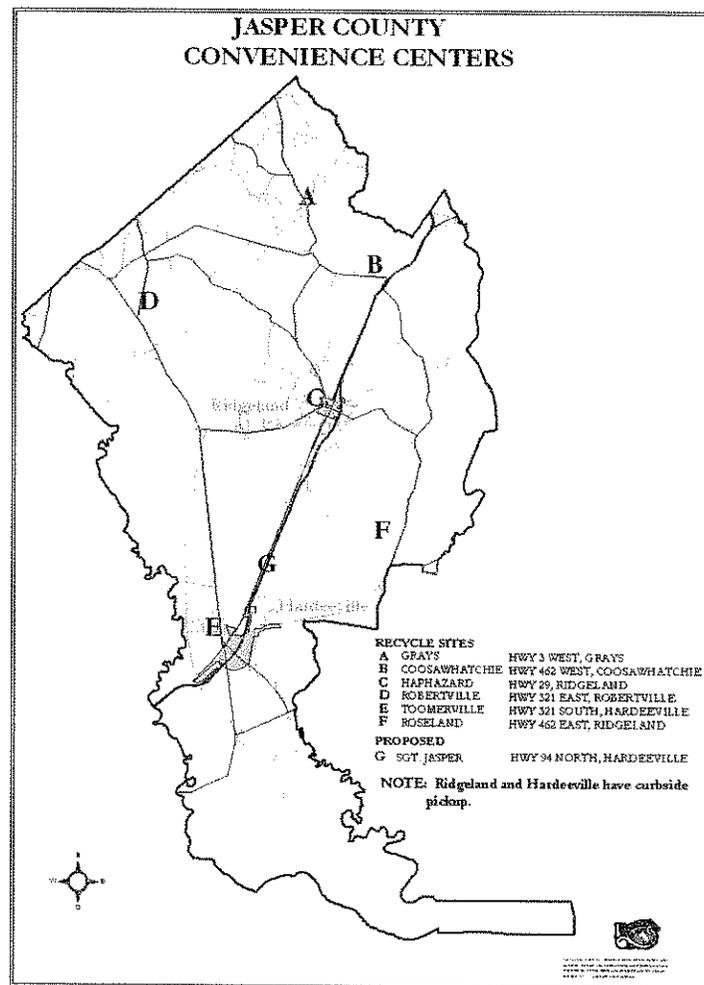
A new *Lowcountry Water Quality Management (208) Plan* has recently been prepared and is attached to this Plan as an Appendix. It provides guidelines for future development in the context of maintaining water quality by means of planned wastewater disposal.

œ ***Provision of Future Utilities.*** The extent of future development in Jasper County, outside the Town of Ridgeland, is dependent upon the ability of BJWSA to provide necessary centralized water and sewer services. BJWSA is a Special Purpose District, independent from Jasper County, created in 1954 by the State Legislature. The Authority was initially charged with the development of a long-term, reliable supply of water for Beaufort and Jasper Counties. In 1972, the legislation was amended to include the responsibility of wastewater treatment. Financing for the Authority is based on revenue bonds, as they do not have the power of taxation. BJWSA has, since 1987, used impact fees to assist in financing the construction and extension of infrastructure. These fees are charged to developers as part of any new development.

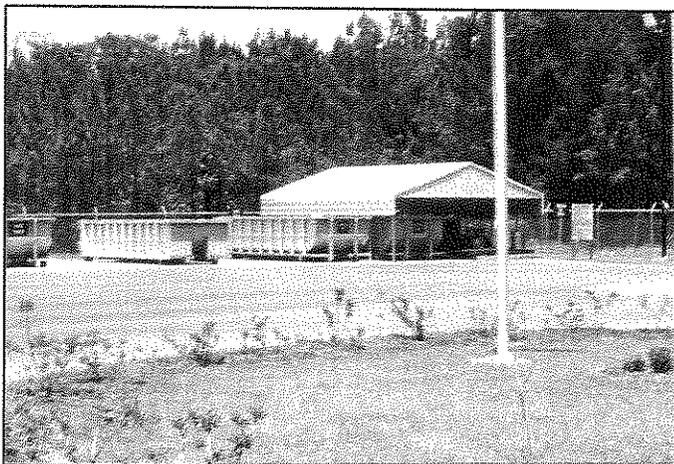
7.2 SOLID WASTE

Due to its rural nature, Jasper County has chosen a comprehensive solid waste collection system of six fully-staffed convenience centers (drop-off collection sites) across the County as shown in Map 11. These solid waste and recycling collection centers are located so that 91 percent of the residents of Jasper County are within six miles of a site. Although both Ridgeland and Hardeeville contract for curbside pick-up of solid waste, town residents are also allowed to use the County's convenience centers at no charge. No commercial waste is accepted at the convenience centers.

Map 11. Solid Waste Convenience Centers



Each center is one acre or more, entirely paved with concrete pads for bins and equipment, and is fenced and landscaped. Each site is fully staffed, with an attendant's office, well and septic system. Sites are open from 7 a.m. to 7 p.m., six days a week. The sites accept household solid waste for disposal as well as aluminum, plastic, glass, newspaper, cardboard, scrap metal, yard waste, batteries, used oil, anti-freeze, hydraulic fluid, and tires for recycling. It should be noted that the high quality of the configuration and operation of the Jasper County collection centers has resulted in them being used as a model for other counties.



The convenience centers are operated by County staff. Garbage is compacted on-site and delivered to Hickory Hill Landfill, a private sanitary landfill in Jasper County. Hickory Hill also accepts all recyclables except aluminum, scrap metal, oils, batteries, newspaper and cardboard. These materials are sold to appropriate markets for processing. The disposal of construction and demolition material is diverted to the Oakwood Landfill in

Jasper County, which is also privately owned and operated.

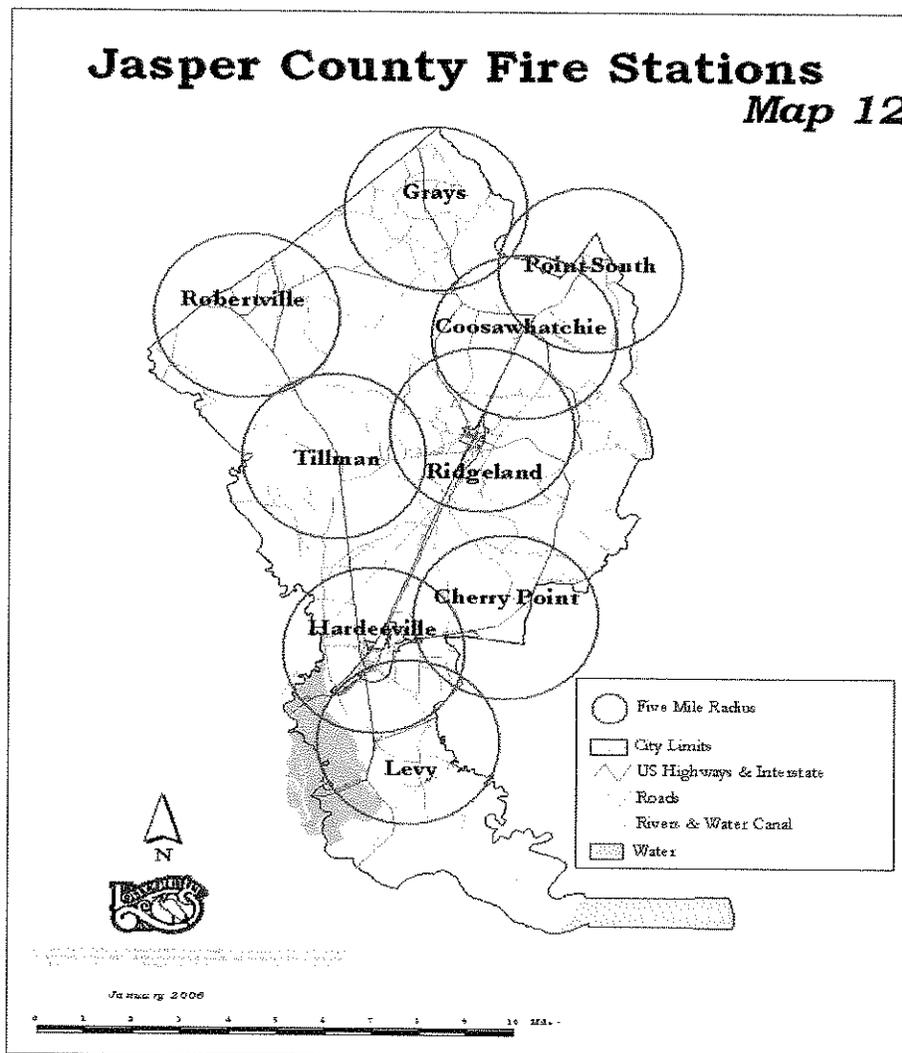
7.3 PUBLIC SAFETY

Fire Protection and Emergency Medical Services. The County has eight fire stations, which are staffed by professional firefighters. The County also has a full-time emergency management director who oversees the County fire stations and who coordinates operations with the volunteer fire chiefs. In Jasper County's development agreement with Sun City Hilton Head, provisions were included for Jasper County to build a new fire station along SR 141, which is now operational. The new station, which has full-time staffing, will be funded by the developers of Sun City Hilton Head until such time that the population in the area is sufficient to cover the station's operating and maintenance costs.

The locations of the fire stations in Jasper County are shown on Map 12. Although the County is not divided into formal fire districts, the map illustrates a five-mile radius around each station. The fire stations serving the largest populations are located within Ridgeland and Hardeeville. The smallest population resides around the Point South fire station. This map also shows those areas within the County that are more than five

miles from a fire station, most notably, the eastern portion of the County, along SC 462 including Knowles Island and Palm Key.

Five miles from a fire station is an acceptable standard that is used by the Insurance Services Organization (ISO) to help rate fire districts for their ability to provide fire protection services. The ISO ratings are then used to establish fire insurance rates for given areas. In addition to distance between structures and fire stations, rating criteria also include the composition of structures, numbers and types of fire fighting equipment and apparatus, and personnel.



In addition to fire protection, the County has three full-time (24-hour) and one part-time (8-hour) EMS units which provide emergency medical services to County residents. One full-time unit is located in Hardeeville, one in Ridgeland and the other at the new fire station at Cherry Point. In the future, the County plans to have personnel at each of its fire stations that are dual-trained and certified in both emergency medical service and fire protection.

Jasper County has a newly-enhanced 911 system, which automatically provides the dispatcher with the caller's address and other pertinent information. The County has also updated its emergency communications system to provide County-wide radio coverage.

As areas of Jasper County grow, it will be essential for new development to meet current fire safety standards and to receive adequate fire protection and emergency medical services. New fire stations, including EMS services, additional staff, and equipment will be needed. At the same time, deficiencies in the current system need to be addressed. The County should develop a master plan for fire protection and emergency medical service that identifies the improvements necessary to provide adequate protection, at appropriate costs, to both current and future residents and businesses. There is a need to review the County's development standards, including road widths, parking requirements, service alleys and lanes, turning radii and length of cul-de-sacs, and building heights, to accommodate fire fighting and emergency equipment.

☞ *Law Enforcement.* The Sheriff's Office and jail are located in the new Law Enforcement building in Ridgeland.

Increases in growth places demands on the Sheriff's Office, which may struggle to keep up with the financial cost of hiring and equipping enough officers to adequately service all areas of the County. For example, the creation of additional roads within new developments places increasing demands on the County Sheriff as the responsibility for patrolling increases. Economic, tourism and population growth in the region also increases traffic along existing roadways in the County which, in turn, leads to the need for additional law enforcement services.

7.4 GENERAL GOVERNMENT

Jasper County continues to work toward building a Jasper County Government Campus around the Courthouse. All appropriate government offices should be located within the campus. These space needs should be accommodated through the continued acquisition of land, the renovation of existing buildings and/or new construction. Acquisition, by Jasper County, of land around the perimeter of the Campus is an

ongoing effort. As property becomes available the County should acquire the real estate as an investment in future facility needs.

A secondary area of centralized facilities is along Jacob Smart Blvd. (Rt. 17) and E. Wilson St. These buildings, currently housing the Board of Education, Department of Social Services, Health Department and the Ridgeland Library, should continue to be the location of major government facilities. These buildings need to be renovated and maintained to meet the ongoing needs of the respective government agencies.

With the largest percentage of the projected growth being in the Hardeeville Municipal area a Jasper County Government Convenience Center should be established. The appropriate nature and extent of these services will vary over time. Consideration must be given to growth and flexibility of this Center.

7.5 SCHOOLS

The Jasper County Board of Education is the southernmost school district in the State. The School District presently operates four schools: Ridgeland Elementary, West Hardeeville Elementary, Ridgeland Middle, and Jasper County High School. Two new K-12 campuses will open with the start of the 2007-08 school year. Two private schools are also located in Jasper County.

Jasper County needs to develop an effective coordination process with school officials to review proposed construction and expansion projects for school facilities in Jasper County. Importantly school facilities locations need to be consistent with the **Three Universal Development Principles**. New facilities should be sited near student population centers with consideration given to the direction of growth planned for the County. Other important factors for the County to consider in the location and design of new schools include highway access, adequacy of other infrastructure and services such as utilities and fire protection, and the need for future emergency shelter space. Adjacent land uses, especially those considered potentially harmful or incompatible to the educational environment, should also be considered in the future location of schools.

New school facilities are sited in accordance with the policies set forth in the *South Carolina School Facilities Planning & Construction Guide*. This guide mandates a site selection process that should take into consideration all natural and/or man-made hazards, including any potential environmental hazard such as air, water or soil contamination. Other factors to be considered include location, shape of the facility, topography, access, noise, soil conditions, easements and electric transmission lines.

The Jasper County School District has developed several strategies to improve the measurable indices of education success (BSAP and MAT-7 test scores, graduation rates, etc.), and is on the State's highest priority list for technical help. However, the long-term solution to the perception of Jasper County's schools as a viable means to an educated and socially responsible citizenry rests with the community and the need for involvement and support across racial and socio-economic lines. The County should work with the School Board in its efforts to foster this support.



7.6 LIBRARIES

Two public libraries and a bookmobile currently serve Jasper County's citizens. The library needs of Hardeeville and Ridgeland are currently underserved by the existing facilities, books and related material as well as operating hours. The rapidly growing library requirements in the Hardeeville area necessitates a new facility at a new location. The Ridgeland library could be expanded at its current location or relocated along Main St.

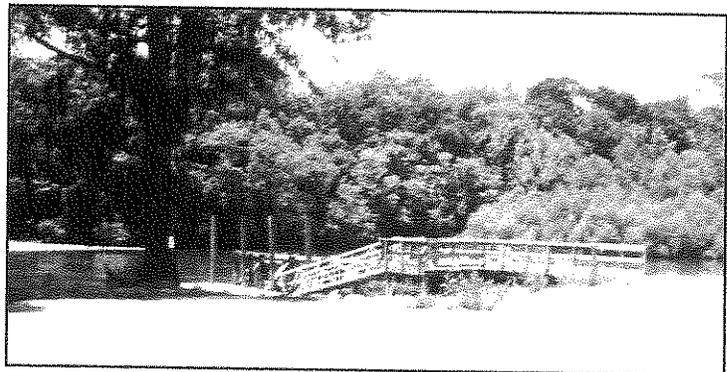
A comprehensive future facility and use plan needs to be developed to efficiently guide the growth of the library facilities, improvement of resources and hours of operation. This plan should be a closely coordinated effort between the library system and Jasper county Government.

7.7 RECREATION

There are a number of recreational facilities available in Jasper County, among which are the County-owned boat landings, community centers, and playgrounds. In addition, the County is home to a county park (that had been a state park) and two private golf courses. Recreational programs are run by the County's Recreation Department, the local schools, civic organizations, and some community centers. A partial listing of the facilities and programs available is as follows:

Boat Landings:

- B&C Boat Landing - ramp
- Beck's Ferry Landing - ramp, dock
- Bolen Hall Landing - ramp, dock
- Cook's Landing - ramp
- Corner Lake Landing - ramp, shed, dumpster
- Dawson Landing - ramp, dock, dumpster, shed, bathrooms
- Myers Lake Landing - ramp
- New River Landing - ramp, shelter
- Salzburg Landing - ramp
- Slaters Bridge Landing - ramp
- Turnbridge Landing - ramp
- Tuten's Boat Landing - ramp, shed, picnic table, and bathrooms
- Millstone Landing - community center, ramp, shed, bathrooms



Community Centers:

- Coosawhatchie Community Center (County) - building, fields, court
- Grays Community Center - community-owned building, County-owned basketball court, planned picnic shelter
- Hardeeville Recreation Complex (community lease) - school building, fields, tennis court, concession stand
- Levy-Limehouse Community Center - community-owned building, County-owned basketball court, planned ballfield
- Millstone Landing (County) - building, ramp, shed, bathrooms
- Old House/Cherryville Community Center - planned for a building, picnic shelter, playground, basketball court
- Purrysburg Recreation Center (County lease) - building, playground, basketball court
- Rivers Hill Community Center (private, public access) - building, field, picnic area
- Robertville Community Center (County) - building, playground, court, gym
- Tarboro Community Center (County lease) - building, playground
- Turpin Park (community) - gym, playground, tennis court
- Wagonbranch Community Center (County) - structure, fields, playground, court, picnic tables

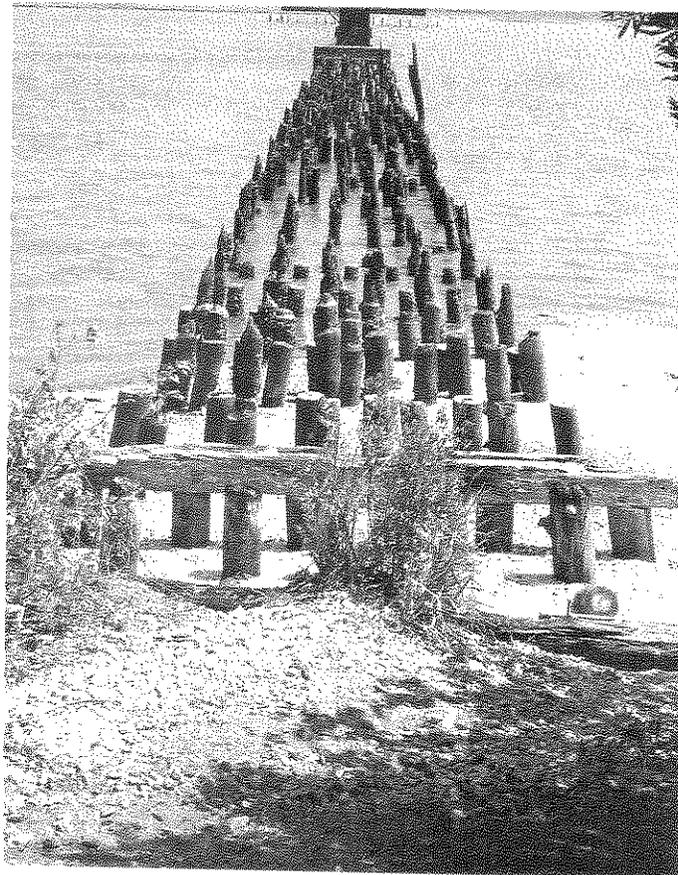
Additional outdoor playgrounds and open space includes Garvins Corner Picnic Area, Gillisonville Picnic Area, Gillisonville Recreation Park, Glasgow Landing, and the Mitchellville Basketball Court and Playground. The general locations of recreational facilities in Jasper County are shown on Map 13.

To further these efforts begun by the County, it is recommended that a long-range Parks and Recreation Master Plan be developed which identifies all current deficiencies and addresses future demands. This should be undertaken in coordination with federal, state, and local agencies that provide recreation services throughout the County. This planning effort should also identify opportunities for public-private partnerships in creating and operating recreational facilities and programs.

The overriding objectives for this plan will be to determine the parks, recreation and fitness needs of present and projected residents and to determine how best to serve them in ways that are also economically and financially feasible. It should incorporate direct involvement by citizens in the preparation, and later the realization, of the plan. Plan components would include:

- Inventory of existing public (county, municipal, federal and state) and private facilities, including capacity, usage (numbers of people and programs, and comparison over past 2-3 years), age, condition, features, etc. The public properties survey currently underway will provide part of the input for this project component.
- Assessment of Existing Recreational Programming. This will be quantitative (numbers provided by Jasper County Parks and Recreation Department) and qualitative (by means of focus groups and interviews with users and user groups).
- Determination of Present and Future Needs

In addition to recreational facilities, Jasper County should investigate the cultural facility and programming needs of residents, including libraries, community centers and fine arts programs. For the County to attract quality growth and appeal to a full range of potential businesses and new residents, it must improve its current level of these services. As the County grows, these demands will increase significantly.



Jasper County Recreational Facilities

Map 13

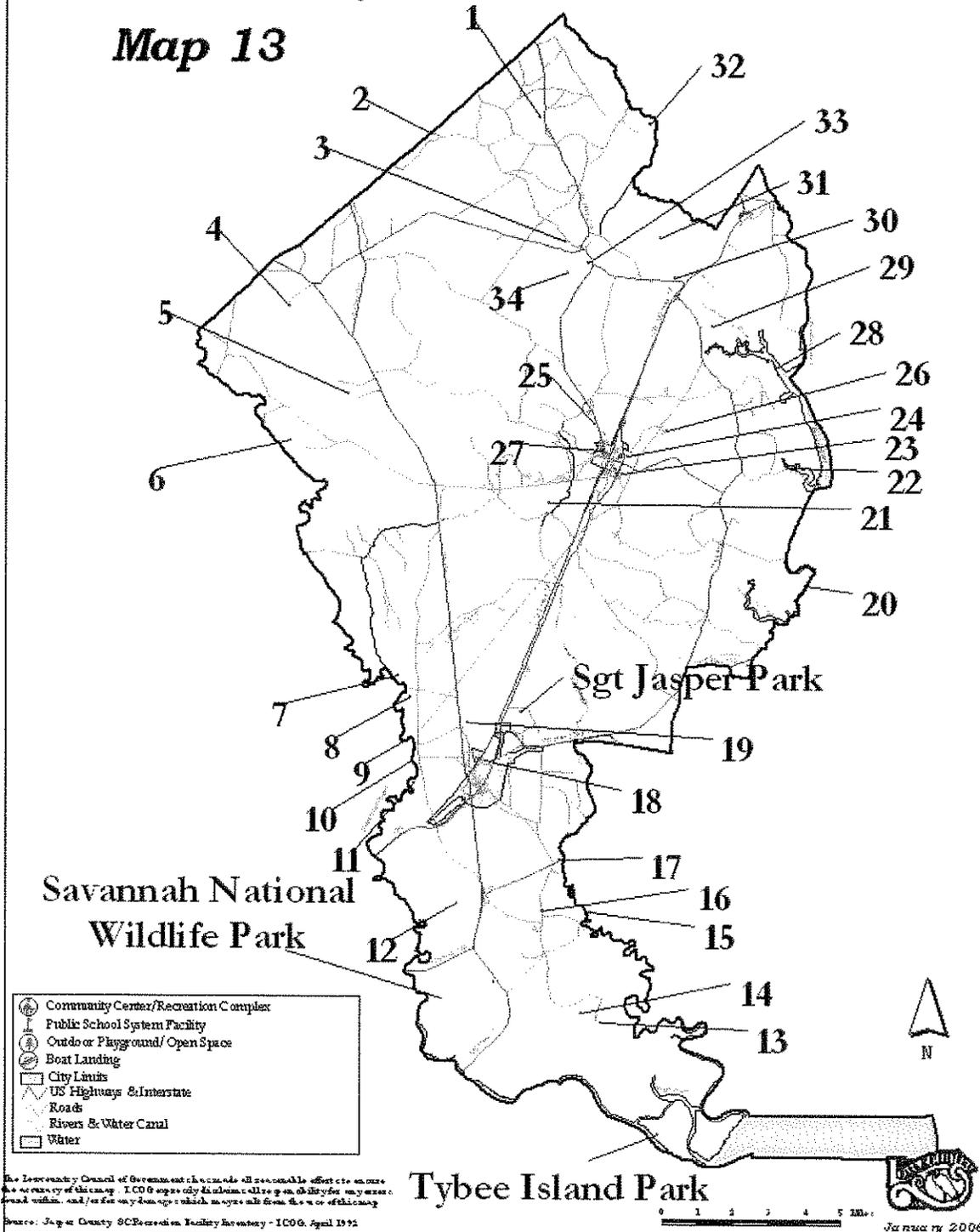


Table 7.1: Jasper County Recreational Facilities

Jasper County Recreational Facilities

1	Grays Community Center
2	Rivers Hill Community Center
3	Gillisonville Recreation Park
4	Robertville Community Center
5	Tarboro Community Center
6	B&C Landing
7	Pump Station Landing
8	Becks Ferry Landing
9	Myers Lake Landing
10	Purrysburg Landing
11	Millstone Landing
12	Union Landing
13	Glasgow Landing
14	Turnbridge Landing
15	Cooks Landing
16	Levy-Limehouse Community Center
17	New River Landing
18	Hardeeville Recreation Center
19	Purrysburg Recreation Center
20	Bolen Hall Landing
21	Wagon Branch Community Center
22	Salzburg Landing
23	Mitchellville Basketball Courts
24	Blue Heron Nature Trail
25	Jasper County High School
26	Ridgeland Elementary/Middle School
27	Turpin Park
28	Tutens Landing
29	Dawsons Landing
30	Slaters Bridge Landing
31	Garvins Corner Picnic Area
32	Mose Landing
33	Corner Lake Landing
34	Gillisonville Picnic Area

7.8 PLANNING FOR COMMUNITY FACILITIES

The reality is that without adequate facilities and services, growth cannot be sustained. The best approach in planning for community facilities lies in managing public investment in infrastructure wisely. Significant issues for the County to consider include the following:

☞ *Identification of Community Facility Needs* -- Careful infrastructure planning is a key component in implementing the goals and strategies of this Plan. As development pressures and growth opportunities increase, some short-term infrastructure solutions may be necessary, but most infrastructure decisions need to be made in the context of the County's long-range vision and future development plan framework. Through the identification and prioritization of community facility needs, Jasper County can work towards meeting both existing deficiencies and long-term demands in a timely and efficient manner. Master facility plans for water and sewer, fire protection and EMS, and parks and recreation, should be developed to fully identify current and future needs.

☞ *Costs and Benefits of Public Services* -- While many of the County's current residents welcome economic growth, they are not willing to bear the full burden of paying for all of the improvements necessary to accommodate this growth, nor are the current residents willing to forgo improvements to the level or availability of existing services throughout the County. To ensure that the overall needs of the County remain a priority, Jasper County should develop a five-year infrastructure investment plan (also called a Capital Improvements Program) that establishes realistic goals for infrastructure development. At the same time, the County should consider ways to require future development to pay its proportionate share of the costs of community facilities necessary to service that development.

☞ *Coordination Efforts* -- Jasper County's municipalities, state and regional agencies, surrounding counties, and the private sector will play significant roles in the County's future when it comes to providing community facilities. These entities all provide existing infrastructure capabilities that need to be coordinated in an effort to maximize economies of scale, minimize duplication of services, and help achieve the County's long-range goals.

GOAL & IMPLEMENTATION STRATEGIES FOR COMMUNITY FACILITIES

With the growth that has already occurred, combined with expected growth, more and different facilities will be needed both in the short-term and the long-term. Their provision must be the result of conscious planning instead of reaction to an immediate need.

Goal: Ensure that adequate community facilities are provide in a manner which is responsive to community needs, consistent with future development goals, environmentally sound, financially feasible, and which promotes economic opportunity for County residents.

STRATEGY #1: Identify and prioritize community facility needs that are necessary to maintain maximum long-term service efficiency and help achieve the County's future land use and development goals.

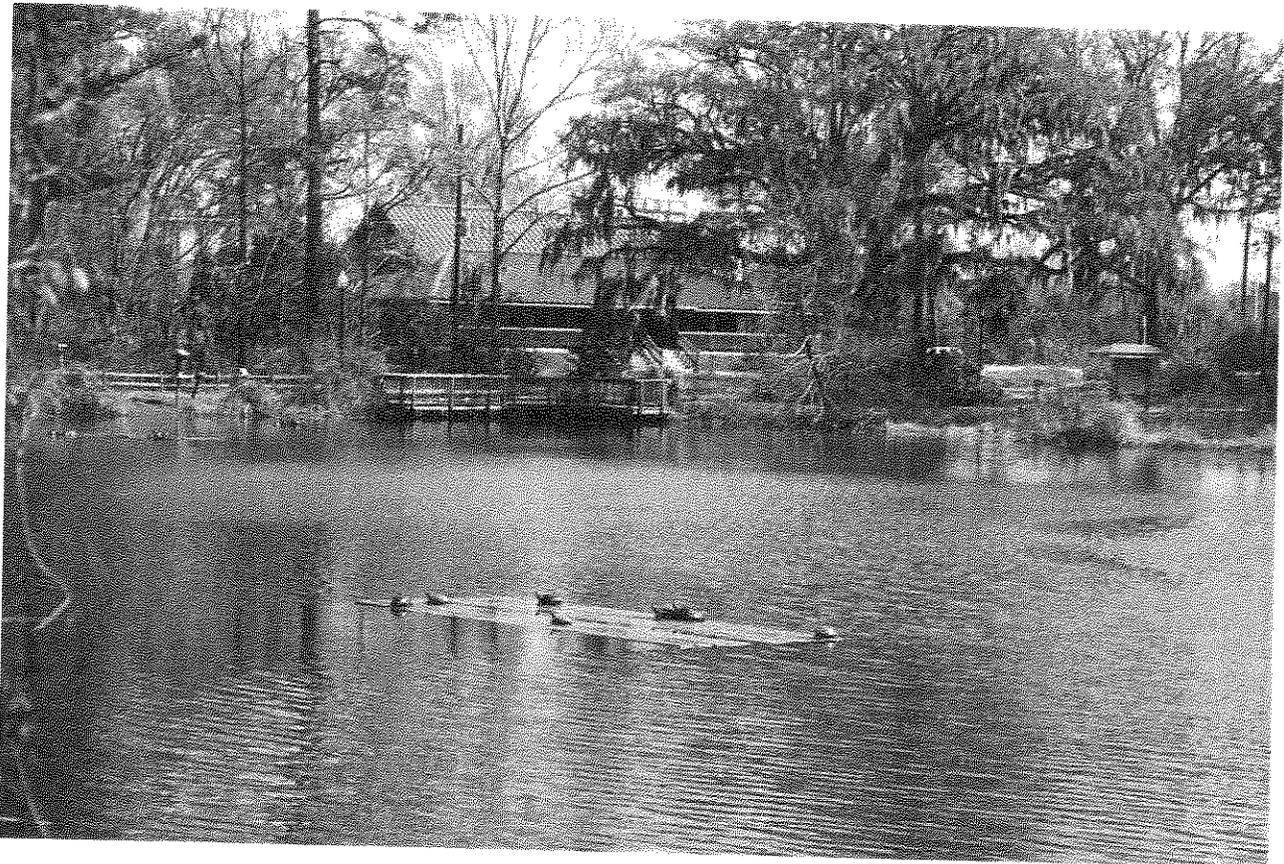
1. Participate in BJWSA's long-range service planning process to ensure that adequate service is available before development takes places; coordinate with the Town of Ridgeland regarding expansion into the planning area beyond the town boundaries.
2. Develop and regularly update, as new residential, commercial and industrial development is planned and implemented, a Fire Protection and EMS Master Plan. The Plan should become an ordinance and be enforced for all new development and redevelopment. Continue to identify pre-disaster mitigation projects and document projects in the mitigation plan. Work with Beaufort County EMS on shelter needs and planning to accommodate southern Beaufort county evacuees.
3. Develop a Parks and Recreation Master Plan for Jasper County that identifies improvements--type, size and location -- necessary to correct current deficiencies and meet future demands, per community planning standards and the results of community surveys and/or focus groups. Coordinate with community facilities inventory and planning (below).
4. Conduct an inventory and map current community facilities; assess the condition of facilities for determining if repair or replacement is required. Identify current community facilities deficiencies and future needs, utilizing accepted planning standards and the results of community surveys and/or focus groups.
5. Incorporate Community Facilities into the annual Capital Budgeting process.

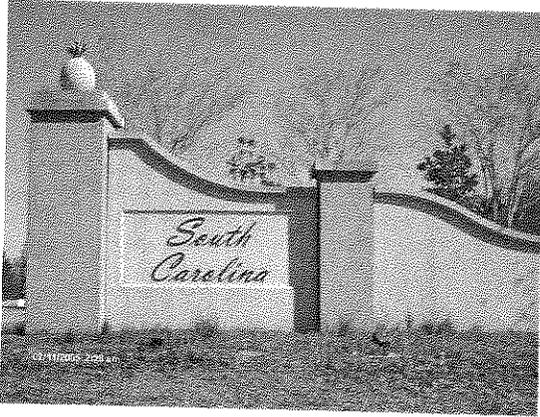
STRATEGY#2: In coordination with the Jasper County School District, establish and pursue long-range goals for facility and program development as necessary to improve public education in Jasper County. A representative of the school district should serve in an *ex officio* capacity on the Jasper County Planning Commission.

STRATEGY #3: Identify and plan for other community needs, including solid waste management and criminal justice administration.

1. Continue the working relationship between the Jasper County Public Works and the Lowcountry Council of Governments to apply for annual recycling grants and to regularly update the "Solid Waste Management Plan."

2. Monitor and update the changing needs for detention and other criminal justice administration facilities.





Chapter 8: Transportation

With the beginning of Jasper County's phenomenal growth advance transportation planning is essential if the increase of automobile trips per day, several fold increase, is to be accommodated without significant traffic congestion.

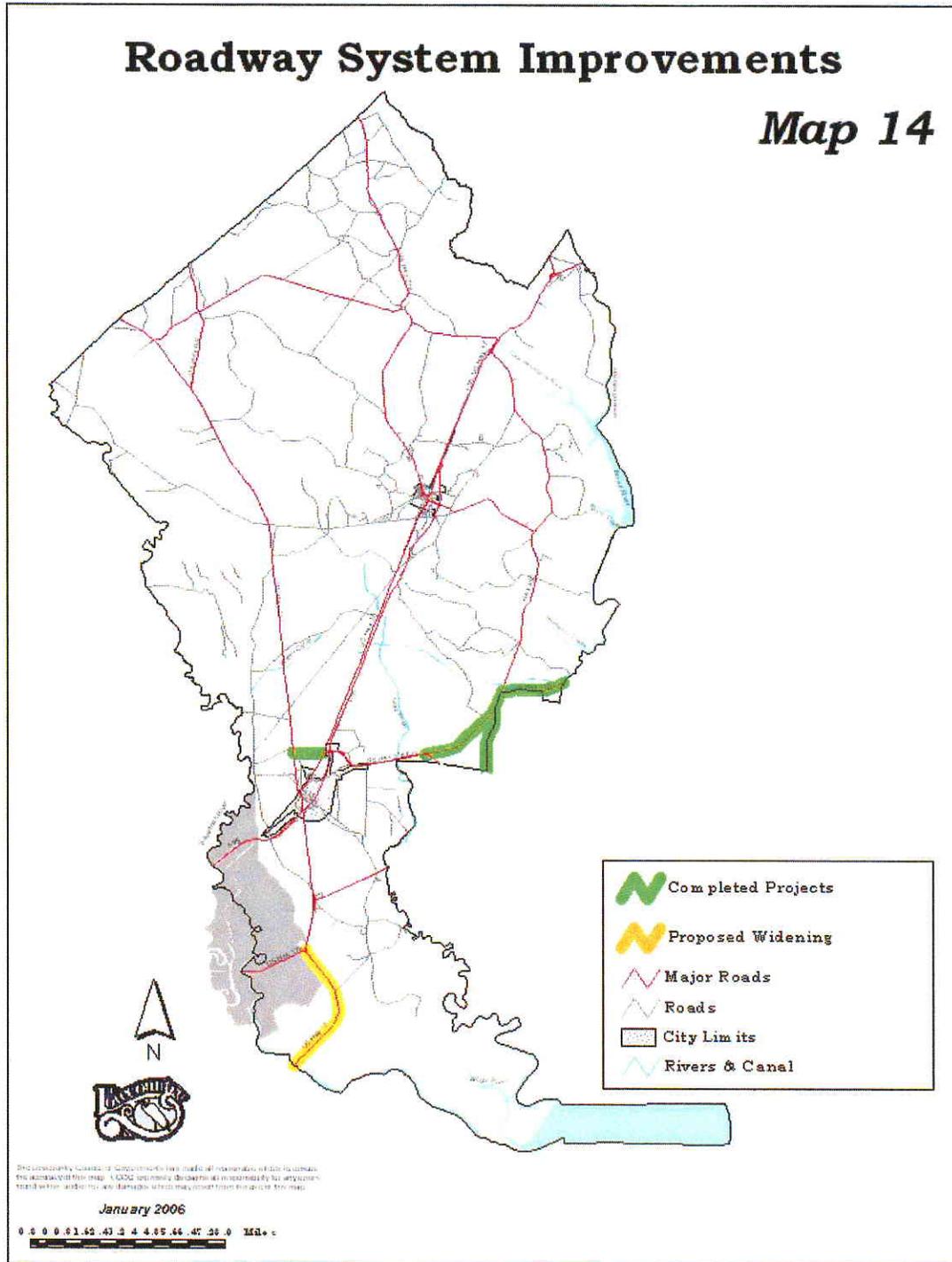
Future transportation planning in and for Jasper County should continue to include increasing cooperation with Beaufort County; major growth along and near the US 278 and SC 170 corridors in both counties affect the two jurisdictions together. The third of the **Three Universal Development Principles**, Development Pays for Itself, will save the taxpayers hundreds of millions of dollars over the next two decades.

Another major transportation consideration is US Hwy. 17 in southern Jasper County. As the southern Beaufort and Jasper County region attracts more economic and population growth, the link to Savannah will become even more important. This highway is a major regional link to the Savannah area and a four-lane widening project to the state line is necessary to improve access and provide adequate safety for users. The Talmadge Bridge over the Savannah River was constructed to accommodate a four-lane highway on the South Carolina side. This project is currently in the SCDOT five-year Statewide Transportation Improvement Program (STIP); however, no construction funding has been allocated.

Since the *Comprehensive Plan* was prepared, SCDOT has been both requiring and partially funding a regional approach to transportation. At the present time Lowcountry Council of Governments is completing the first draft of a new multi-model regional transportation plan in which representatives of Jasper County have participated.

Roadway System Improvements

Map 14



☞ *Transit.* The Lowcountry Regional Transportation Authority (LRTA) provides commuter bus service which links residents of Allendale, Beaufort, Colleton, Hampton and Jasper Counties with employment opportunities on Hilton Head Island. The LRTA has recently developed a comprehensive ten-year transit plan designed to assess overall transit needs in the region and to determine the most appropriate mix of services to meet those needs.

The LRTA fleet is comprised of full-sized buses that are used twice daily to take workers to and from Hilton Head Island. There is only a single transfer facility at Bluffton, although a new transportation center is planned off the US 278 extension in Jasper County. All LRTA routes run at or near full occupancy. Nevertheless, service limitations, such as the lack of off-peak service for non-work trips, virtually no provision for work trips which do not match the traditional 8 a.m. to 5 p.m. schedule, and long route distances and travel times, make the LRTA service inconvenient for most residents.

To deal with these issues, LRTA and LCOG are currently engaged in Planning public transportation improvements that will include regular fixed-route service on US 278 from the I-95 interchange to approximately the middle of Hilton Head Island. They are also beginning to plan a similar service on SC 170 from SC 46 into Beaufort. A feature of both will be the provision of "Park and Ride" lots to encourage a wide variety of riders and both commuter and off-peak service.

Jasper County does not have the population base to support its own transit system, nor is it expected to. Therefore, it is vital that the County cooperate with and support the LRTA in its efforts to provide additional transit options in Jasper County.

☞ *Airport Facilities.* A new airport for Jasper County is in the early stages of study. The provisional location is west of Ridgeland a few miles from the current Ridgeland Airport.

Currently Jasper County has one airport, the Ridgeland Airport, which is located just northwest of the Town of Ridgeland. The airport operates as a publicly owned, public-use facility serving general aviation users. The airport accommodates primarily single-engine and glider aircraft. The number of based aircraft has increased at the airport over recent years to more than 30 in 1995. An estimated 22,800 total aircraft operations are accommodated annually at this airport.

The airport currently has one runway, which is oriented in a northeast-southwest configuration. This runway is 3,100 feet long and 70 feet wide and is equipped with low-intensity runway lighting for night operations.

The Airport Commission proposes to construct a new 3,700-foot by 75-foot runway to replace the existing facility. Federal assistance has been sought to complete this project, which is estimated to cost approximately \$5 million. Jasper County should support the Airport Commission's efforts to replace the existing runway at the Ridgeland Airport because a modern airport facility is important to the overall economic development of the County. The County Council has already adopted an ordinance limiting the height of structures in the vicinity of this (or any) airport, but should also work with the Commission to ensure that future development around the airport does not conflict with the airport's existing and proposed new facilities.

Commercial airline service is available at Savannah-Hilton Head International Airport, on I-95, an approximately 30-minute drive from most of Jasper County's businesses and residents.

GOAL & IMPLEMENTATION STRATEGIES FOR TRANSPORTATION

Goal: Recognize the importance of transportation, both passenger and freight to the safety and development of Jasper County and its residents. Improve and enhance the County's transportation system while protecting and limiting the disruption to the natural resources of Jasper County and the Lowcountry.

Roads and Highways

1. Transportation improvement needs should be identified through the continued use of the sophisticated traffic modeling pioneered by Jasper County and CHA. Important service level upgrades should be planed and implemented in a timely fashion
2. We are continuing to work with Beaufort County and the City of Hardeeville on planning and improvements to the Rt. 170 and Rt. 278 highway corridor.
3. Endorse and implement the Jasper County related recommendations and projects contained in the current Lowcountry Regional Long-Range Transportation Plan and successor documents. Participate in all ongoing highway and road planning activities.
4. Unless superseded by County or Municipal ordinance, the adopted level-of-service (LOS) standard for state roadways shall be "C" on SCDOT adopted capacities.
5. Work with Beaufort County EMS to plan Disaster Evacuation routes through Jasper County, taking into account growth and development in southern Beaufort and Jasper counties.

Public Transportation

Endorse and implement the Jasper County-related recommendations and projects contained in the Lowcountry Public Transportation Strategy (2003) and successor documents. Projects planned include:

- Regional rideshare and vanpool program;
- Main line service along the US 278 and SC 170 corridors;
- Connector service in main travel corridors linking to the US 278 main line service;
- Distributor service into key areas;
- Coordinated demand response service throughout the region.
- Out of region service to Savannah and surrounding areas.

Freight Transportation

1. Coordinate freight transportation planning efforts with Economic Development planning in Jasper County, the Lowcountry and in the Savannah area to ensure that future internal and externally -generated demands for transportation networks and facilities are identified and taken into account.
2. Plan highway, rail and other improvement projects that will improve the flow of freight into, out of and within Jasper County.
3. Focus port development activities on providing or enhancing intermodal connections (that is, ship to rail and truck and vice-versa).

Airports

Cooperate with the FAA in the effort to locate a new airport in Jasper County. Maintain the present level of service at existing airport until it is replaced by the new airport.

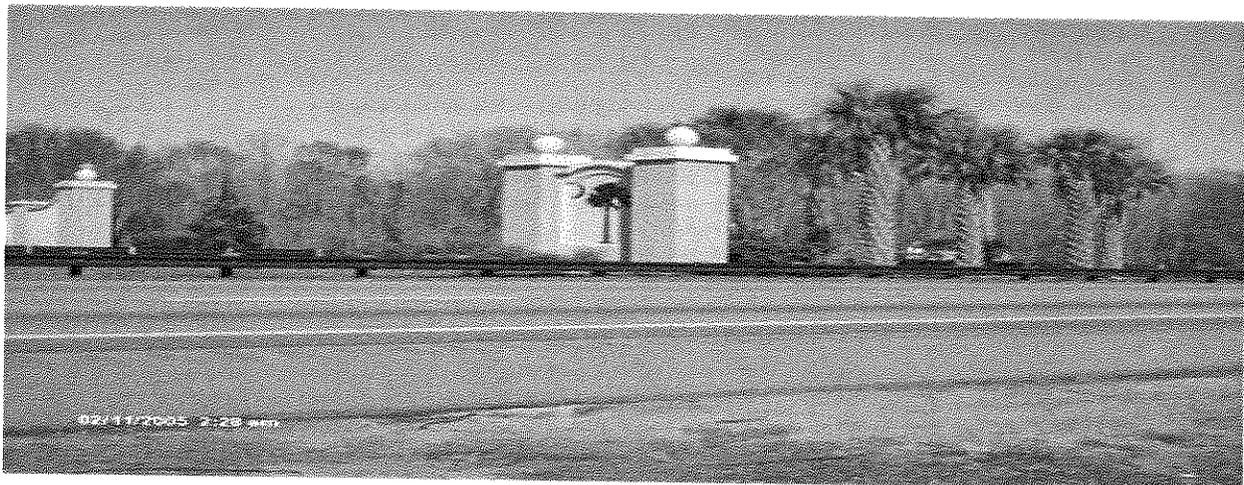
Bicycle and Pedestrian

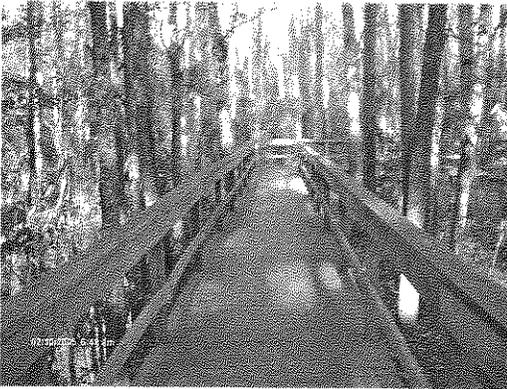
GOAL: To provide the residents of and visitors to Jasper County with:

- The opportunity to reduce reliance on the automobile;
- safe and efficient pedestrian and bicycle facilities;
- a less congested road system;
- a reduction of ground level ozone and reduction of dependence on fossil fuels;
- more livable and walkable communities.

OBJECTIVES: Link trails and facilities for a more integrated bicycle and pedestrian system.

1. Linkages between residential areas, community facilities, cultural and natural resources are recommended and should be incorporated into the zoning ordinance as regulations or by means of incentives.
2. Developers of commercial and residential developments should be encouraged by means of zoning ordinance incentives to include lanes and sidewalks for bicyclists and pedestrians, bicycling parking and links among residential and commercial nodes.





Chapter 9: Implementing the Comprehensive Plan

Once adopted, the Comprehensive Plan can be implemented through a number of techniques including projects, programs, administrative procedures, and legislative actions taken by the Jasper County Council. The **Three Universal Development Principles** are to be instilled through out these efforts. The listing of strategies presented in the preceding chapters can be used as a checklist to assist Jasper County with its annual review of its progress in implementing the Comprehensive Plan. Many of the implementation strategies can be grouped into projects or programs. Included here are the major projects which should be initiated soon after approval of the Comprehensive Plan. A suggested starting time, stated as "within three (six, etc.) months from Plan adoption," is also provided, as is a suggested completion goal.

1. **Update the County's Zoning Ordinance, Land Development Regulations and related ordinances to reflect the recommendations in the Comprehensive Plan.**
(Completion within one year)

A number of implementation strategies involve revision of the County's ordinances to ensure they reflect the policies stated within this document. Some of the actions recommended include: new highway corridor overlay districts, development review for compatibility with historic preservation and environmental considerations, revised subdivision regulations, design standards to implement Development Area districts, and compliance with the South Carolina Model Floodplain Ordinance, among others. The DSO also needs to be updated to comply with the 1994 *South Carolina Local Government Comprehensive Planning Enabling Act* with regard to the roles and responsibilities of the County's planning and development boards and commissions.

2. Prepare a 5-year Capital Improvements Program (CIP).
(Completion within two year)

A CIP is necessary to identify and project infrastructure requirements including water, sewer, parks, roads, public safety facilities, and other capital projects. The CIP is a useful tool in prioritizing facility needs, and identifying costs and funding options for those facilities. The CIP should be updated on an annual basis in conjunction with the County's overall budgeting process.

3. Undertake the development of an all new Comprehensive Plan to supplant this updated Comprehensive Plan.
(Begin within one year and complete within three years).

In order to best guide Jasper County for the impacts of rapid development, the Planning Commission should lead the effort for an entirely new Comprehensive Plan which should be developed with significant help of professional planners combined with the ideas and vision derived from substantial community involvement.

4. Establish a Graphic Information System (GIS) program.

GIS capabilities are an essential part of contemporary planning and development agencies. With the beginning of phenomenal growth GIS capabilities are essential to efficient planning and development review.

5. Implement an impact review and permit tracking system for new development.

After adoption of a revised Zoning Ordinance implementation of an updated development review system will enable the County to review new developments more efficiently for compliance with regulations, and for cumulative impacts on natural resources and community facilities. A computerized permit tracking system, designed to work in conjunction with a county-wide GIS system, also would allow Jasper County to easily identify development trends for future planning purposes.

6. Support a Region-wide Economic Development Alliance.

This is detailed in the *Lowcountry Economic Diversification Strategy* and summarized in Chapter 5, Section 2 of this Plan.

- 7. Enhance working relationships with local, state and federal agencies, surrounding counties, municipalities, and special interest groups.**
(Begin within six months of Plan adoption, with regular updating)

The County continues to strengthen relationships with the following organizations: Jasper County School District, Beaufort County, state and federal regulatory authorities (Corps of Engineers, US Fish & Wildlife, SCDHEC, SCDNR, OCRM, FEMA, USEPA, the National Parks Service, and others), environmental groups (Soil & Water Conservation Service, Clemson Extension Service, State Forestry Commission, conservancy groups, large land owners and foresters), active County and regional economic development groups, local historic preservation groups, and others as identified in the list of recommended strategies.



APPENDICES

Plans and Reports incorporated into this Comprehensive Plan by reference:

- i. Deepwater Port Development Plan
- ii. CHA Transportation Projections
- iii. Jasper County Natural Resources Conservation Plan
- iv. Clemson Report
- v. Urban Services Boundary Brief
- vi. Joint Planning Agreement
- vii. Emergency Service Agreements (JPA)
- viii. Hardeeville Comprehensive Plan
- ix. Ridgeland Comprehensive Plan
- x. Water Quality Management Plan
- xi. Historic Resources Survey
- xii. Strategy for Economic Diversification