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EXECUTIVE SUMMARY

The purpose of the Horry County Comprehensive Plan update is to ensure a vehicle for citizen participation in vital local decision-making, establish a framework for the ongoing management for the county's human, economic, physical, natural, and cultural resources through the year 2020, and comply with the requirements of South Carolina's 1994 Comprehensive Planning Enabling Act.

The plan update synthesizes material from a broad range of sources, including Horry County's 1995 Comprehensive Plan, individual studies produced by state and local agencies, interviews with key community stakeholders, and the input generated from public workshops. As required by state law, the Comprehensive Plan update contains seven elements:

- Population Element
- Economic Element
- Natural Resources Element
- Cultural Resources Element
- Community Facilities Element
- Housing Element
- Land Use Element

The rapid growth of Horry County is the central issue emerging throughout the statistical analyses and public participation process. The guiding principle of the update is to foster and manage present and future development, while striking a balance between the county's social, physical, and natural environments. To accomplish this purpose, the plan integrates the many individual factors identified in the figure on the next page into an overarching vision of sustainable growth.

Enhance Horry County's social and economic vibrancy
and provide for the adequate and fiscally-sound delivery of desired public services,
while preserving the community's distinctive natural, cultural, and aesthetic character.

The following sections summarize the key findings, goals, and strategies developed within each of the seven plan elements.

Balanced Approach to Growth Management Figure

Population Vision

Promote in Horry County a high quality of life that attracts a diverse community of well-educated families, young adults and retirees that comprises a balance of age groups, income groups and lifestyles.

Key Findings:

- Horry County ranks sixth in the state for population size and third for population growth.
- Horry County's growth rate is increasing in unincorporated rural areas.
- All age groups 25 and older had a higher population growth rate over the past three decades; perhaps most conspicuous is the tremendous in-migration of age groups 65 and older.
- Though income indicators are rising, Horry County incomes have historically been lower than South Carolina. In addition, there has been a widening per capita income disparity between Horry County residents and the state average over the past three decades.

Needs and Goals:

- Strengthen the educational system to retain and attract families.
- Provide adequate open space for a growing population.
- Provide/expand public services to meet the needs of a more diverse and growing population.
- Minimize development impacts on existing communities.

Implementation Strategies:

- Continue to improve the county's technological capacity, such as GIS, to monitor the spatial impacts of population growth and development activity.
- Identify emerging needs within growing population segments of the county.
- Promote technology-based educational opportunities in conjunction with the county's economic development efforts.

Economic Development Vision

To establish and implement strategies that support a sustainable economy through the creation of public-private partnerships, the diversification of markets, and the creation of higher wage jobs, while ensuring an attractive community and the protection of the natural resources of the county.

Key Findings:

- During 1980 and 1990, Horry County had a slightly larger percentage of the labor force in Service occupations when compared to South Carolina.
- Horry County's average annual unemployment rate has been consistently higher than South Carolina's.
- Manufacturing sector in Horry County is significantly less prevalent than in the state as a whole.
- Tourism is the most important economic driver in creating a disproportionately high number of jobs in general merchandise stores, apparel stores, eating and drinking places, and miscellaneous retail.

Needs and Goals:

- Encourage quality development of tourist-oriented facilities and residential communities to reduce the adverse effects of visual clutter and strip commercial development.
- Increase the availability of the service and retail labor supply through affordable housing opportunities and transportation alternatives.
- Strengthen the economy by improving the job readiness of the existing workforce and the attracting "clean" technology- and information-based industries to Horry County.
- Expand and diversify the tourist season and expand the convention market in Horry County.

Implementation Strategies:

- Strengthen county linkages with the economic development community.
- Promote nature-based, historic, and cultural tourist activities.
- Develop a database of economic development sites as a tool for business retention and attraction.
- Cooperate with local governments, educational institutions, and private employers in linking educational opportunities to economic development planning and job training programs.
- Identify targeted industries and encourage their location in Horry County.

Natural Resources Vision

Promote the management of Horry County's natural environment in a manner that ensures balanced and sustainable growth and the preservation of environmental resources and open spaces for future generations.

Key Findings:

- Approximately 88 percent of soils within Horry County have severe septic tank limitations.
- Horry County has over 300 Carolina bays, with 200 under State protection.
- Horry County's coastal waters and associated habitat provide an extremely valuable natural resource.
- Currently 4 SC Heritage Preserves protect more than 21,640 acres of important natural and cultural resources throughout Horry County.
- The SC Natural Heritage Preserve Program identified 3 plants and 4 animal species as either endangered or threatened and 44 plants and animal species of concern in Horry County.

Needs and Goals:

- Develop land management strategies that minimize the effects of rapid growth and development on the county's natural systems.
- Promote the conservation of natural resources through educational efforts and increased coordination among agencies and local organizations.
- Maintain the quality of Horry County's surface waters and preserve the ecological value of the coastal waterways and associated habitats.

Implementation Strategies:

- Use mapping technologies, environmental reviews, buffers, and scenic vista programs to protect environmentally sensitive areas.
- Coordinate with local governments, non-profit organizations, and State Department of Health and Environmental Control to establish conservation areas and promote public awareness and education of Horry County natural resources.

Cultural Resources Vision

Horry County will promote its diverse cultural resources through the preservation of historic sites, landmarks, and historic traditions for the enjoyment and education of residents and visitors.

Key Findings:

- A 1988 State Historic Preservation Office (SHPO) Survey identified approximately 429 historic properties eligible for the National Register of Historic Places.
- Horry County has 21 National Register of Historic Places: 17 buildings, 1 structure, 1 site, and 2 districts. Most of these are located in the incorporated limits of the City of Conway.
- In 1997, Horry County Council enacted a property tax incentive program for certified rehabilitation of significant historic structures, landmarks, sites, and districts for the unincorporated portions of Horry County.

Needs and Goals:

- Promote the preservation and stewardship of Horry County's historic resources.
- Expand education efforts and improve linkages with local governments and with HCAC's art constituencies to promote awareness and understanding of Horry County's historic resources.

Implementation Strategies:

- Develop an official historic preservation policy for adoption by the County Council.
- Adopt the preservation strategy using the more promising planning tools, such as acquisition, Transfer of Development Rights (TDR), Performance-Based Development Permitting Systems, and local tax policies.

Because of the large number and importance of the facilities and infrastructure contained in the Community Facilities Element, separate visions have been developed for each of these. The key findings and implementation strategies for the entire Community Facilities element follow the complete set of visions.

Overall Community Facilities Vision

Provide for an adequate, sustainable, attractive, and efficiently managed network of facilities and infrastructure that will accommodate the present population, support continued growth, preserve the county's natural environment and promote desired patterns of development.

Transportation

Promote development of a balanced transportation system with integrated highway, transit, bicycle, and pedestrian linkages that can facilitate the efficient, economical, and sustainable movement of all people and goods throughout the county and support continued growth.

Effective mobility planning involves three inter-related dimensions - land use management, travel demand management, and transportation capacity management. A balanced transportation plan requires a full and equal treatment of land use management and travel demand management in equilibrium with the management of supply-side planning performed when highway and transit system capacity is increased.

Water Supply, Treatment and Distribution

Where economically and environmentally feasible, provide a safe and adequate public supply of drinking water and water flow sufficient for fire protection purposes throughout the county.

Wastewater Treatment

To provide for the treatment and disposal of wastewater discharge in a manner which protects public health, enhances the efficiency of treatment provision, and the preserves the county's natural environment.

Stormwater Management

Provide for the management of stormwater which maintains adequate drainage throughout the county, minimizes flood damage to property, and protects the water quality standards of Horry.

Solid Waste Management

Minimize the amount of solid waste generated within the county and dispose of all solid wastes in a manner which maintains public health, reduces management costs, and protects the county's natural environment.

Parks and Recreation

Provide quality open space and a wide range of recreational opportunities meeting the diverse needs of the county's growing residential population.

Public Safety

Protect the health, safety, and welfare of county residents and visitors through the provision of responsive, adequately equipped and staffed, and highly trained public safety services.

Emergency Preparedness

Provide for disaster management that is consistent with recommended federal and state practices and minimizes the threat to life and property.

General Government Facilities

Provide for administrative facilities of sufficient space, functionality, and design to maintain the efficient delivery of government operations, ensure convenient access to services for county residents, and promote the aesthetic character of the county.

Educational Facilities

Well-managed schools facilities of adequate size and quality to promote a positive learning environment for Horry County students.

Library and Cultural Facilities

Maintain a library system with facilities, resources, and technological capabilities sufficient to provide for the cultural enrichment of county residents and to ensure convenient and equitable access to available information.

Key Findings:

- A singular emphasis on expansion of the road network will not alleviate future traffic congestion.
- By 2020, the county will require a potable water supply capable of delivering 46 million gallons per day.
- Low oxygen levels in Horry County surface waters may require reductions in treated wastewater discharge allocations.
- Flooding, soil erosion, and water quality issues require a comprehensive stormwater management program.
- Currently, Horry County falls below the recommended national standard for acres of local park space per 1,000 people.
- The county's public safety departments – Fire, Police, and EMS – are experiencing increasing call volumes.
- School capacity is limited and additional space for approximately 12,000 students will be required by 2020.
- The Horry County library system falls below recommended national standards in square footage, number of volumes, and circulation activity.

Needs and Goals:

- Ensure that all new development is adequately supported by necessary infrastructure, particularly roads, schools, public safety protection, and a safe water supply.
- Promote intergovernmental coordination of community facilities expansion and development.
- Link facility planning to stable, adequate, and equitable funding schemes and integrate community facility implementation strategies into a systematic Capital Improvements Program (CIP) process.
- An emphasis on multi-modal transportation planning to reduce automobile dependence.

Implementation Strategies:

- Establish design and location guidelines for the development of new community facilities to preserve the natural environment and enhance the aesthetic appeal of county neighborhoods.
- Coordinate the timing, location, and capacity of community facility expansion with desirable patterns of growth.
- Examine funding alternatives to traditional property tax assessments.
- Examine the potential for clustering county facilities in "satellite" centers located throughout the county.

Housing Vision

Ensure a safe, affordable, balanced and attractive supply of housing that accommodates the diverse preferences of the county's present population, including urban, suburban, and rural lifestyle; supports continued residential growth; and reinforces the aesthetic appeal and quality of county neighborhoods.

Key Findings:

- In 1990, Horry County contained 89,960 housing units, an increase of 63.6 percent from 1980.
- In 1990, the county contained a higher proportion of multi-family units and manufactured homes, and a lower percentage of single-family dwellings than the state.
- The county's overall vacancy rate of 38 percent ranked highest in the state. High vacancy is also a direct function of seasonal housing.
- The eastern portion of the county suffers a shortage of emergency housing and long-term affordable housing.
- As the population ages, demand for single-family housing will increase.

Needs and Goals:

- Increase the supply of modestly priced residential dwellings, especially in areas near major employment nodes.
- Promote the continuity and cohesiveness of neighborhoods and encourage the development of complementary housing styles.
- Provide for a balanced, diverse housing mix with a variety of unit types, ranging from condo/high density to low density rural to senior-friendly housing.
- Promote the development of traditional neighborhoods.

Implementation Strategies:

- Establish guidelines for the use of incentives to promote the development of specialized housing, such as assisted care facilities or small lot single-family homes, that accommodate the needs of the county's growing older adult population.
- Examine the creation of an affordable housing task force or umbrella organization that coordinates the activities of both public and private housing advocates in the county.
- Promote mixed-use development, combining residential and retail components, in urban portions of the county and near major transportation nodes as a means of reducing traffic congestion and fostering neighborhood identity.

Land Use Vision

Horry County will provide for a high quality of life by planning for population growth, public and private development, and redevelopment and by planning the proper distribution, location, and intensity of land uses with adequate levels of services while maintaining and protecting the natural resources, residential neighborhoods, and local character of the county.

Needs and Goals:

- Promote more compact development patterns, focusing on principles related to walkable communities.
- Promote farmland protection as an investment in rural infrastructure and an element of local economic development.
- Restrict land disturbance in the most environmentally sensitive areas to protect them from the negative impacts of development.

Implementation Strategies:

- Manage and guide the intensity, location, and timing of growth by determining the availability and suitability of land and future land use needs.
- Establish set Performance Standards to guide the location, timing, and intensity of development and direct growth to established Character Districts.
- Carry out a fiscal impact analysis of land use patterns.
- Establish county-wide zoning.
- Establish Open Space Conservation Subdivision design in zoning ordinance.

INTRODUCTION

The Comprehensive Plan Update for Horry County is the end product of a process designed to identify underlying planning issues and in turn assist the community in the development of strategies that effectively manage the change that is occurring throughout the county. While the plan does not serve as a development ordinance, it should be viewed as the framework to facilitate and encourage sustainable growth and development in the county.

The purpose of the Comprehensive Plan Update for Horry County, South Carolina is:

- To update the long range Comprehensive Plan for the future of Horry County. This plan is a reflection of the county's desire to maintain a sustainable economy, protect the natural and cultural resources, and provide for the efficient delivery of public services in a fiscally responsible manner;
- To comply with the South Carolina Local Government Comprehensive Planning Enabling Act of 1994; and
- To develop an integrated Comprehensive Plan that presents a consensus vision and direction for the future of Horry County.

Comprehensive Plan Elements

The Comprehensive Plan is a reflection of the aspirations and priorities of the citizens of Horry County. The Plan is also designed to meet the standards of the South Carolina Comprehensive Planning Enabling Act of 1994. In accordance with the State planning law, the Comprehensive Plan for Horry County includes the following Plan Elements:

- The Population Element includes information related to historic trends and projections for size and characteristics of households; educational levels; income characteristics; race; sex; age and permanent/seasonal population.

- The Economic Element presents an analysis of the local economy, including historic trends and projections of the numbers and occupational characteristics of the labor force; where people who live in the community work; where people who work in the community reside; wages; major employers; and short- and long-term market trends.

- The Natural Resources Element identifies and assesses critical plant and animal habitats; coastal resources; unique scenic views; wetlands; floodplains; and soils, air, and water quality.

- The Cultural Resources Element addresses historic landmarks; important archaeological sites; and other unique features, areas, and facilities that relate to the history, culture, or architecture of Horry County.

- The Housing Element includes an analysis of existing housing by age and condition; owner and renter occupancy; location; type; affordability; market absorption and vacancy rates. Housing construction trends and projections about housing needs to accommodate existing and future populations are also examined in this element.

- The Community Facilities Element includes an analysis of existing water and wastewater facilities; solid waste collection and disposal; the roadway network; pedestrian, bicycle and transit facilities; parks and recreational facilities; stormwater management; fire protection; emergency medical services; public safety; government facilities; educational facilities; and libraries, museums, and other cultural facilities. Special attention is given to needs and services that are governed by agencies other than the county.

- The Land Use Element represents a synthesis of all plan elements; it examines existing land use by categories, including residential, commercial, industrial, institutional, parks/recreation, and open space. The land use plan also includes a conceptualized future land use map showing the most appropriate arrangement of land uses and overlay districts based on environmental constraints, existing development patterns, and resident preferences identified through the planning process.

Each element includes five sections:

- Introduction
- Inventory and Analysis
- Statement of Needs and Goals
- Implementation Strategies
- Benchmarks for Sustainable Quality of Life

The Introduction Section of each element establishes the scope and general planning purpose. The Inventory and Analysis Section assesses the county's existing conditions in each area and recognizes any critical gaps in the current planning process. The Statement of Needs and Goals blends inventory findings with public input to craft a vision for the county and set priorities for strengthening community resources. The Implementation Strategies Section that follows presents specific actions to support these desired improvements. Lastly, the Benchmarks for Sustainable Quality of Life provide quantifiable performance indicators that enable the county to measure its actual progress toward stated goals and direct future planning efforts.

The Planning Process

The planning process for Horry County involved participants from throughout the community. Public participation was designed as a continuous process that involved citizens, county staff, members of the Planning Commission, and County Council members, as well as planning representatives from local municipalities and utility service providers.

Strategic planning was the first step in the process of defining the quality of life issues in Horry County. Stakeholders – individuals with special knowledge or interests in the community – identified emerging issues and concerns that were not reflected in the statistical data. A kick-off

meeting was held with over 60 stakeholders in the community. Stakeholders responded to the following questions to identify community issues:

1. In the past 20 years, what has changed most about Horry County?
2. What major changes will Horry County face in the next 20 years?
3. What will be the big decisions Horry County will face in the next 20 years?
4. How will growth and change affect quality of life in Horry County?
5. What should Horry County do to improve its quality of life?

This early dialog with stakeholders helped identify the planning context and issues that would be addressed in more detail in the public planning sessions with county residents and business owners.

Intergovernmental coordination for the development of the Comprehensive Plan was facilitated through regular meetings held with local and regional planning agencies and utility service providers. The coordination meetings provided agency representatives the opportunity to update their respective planning efforts and provide input on the inventory and analysis developed for each plan element.

Broader community input was gathered during the planning process through eight public workshops where community members were invited to share their views on related plan elements. In each workshop, participants were provided an overview of existing conditions and were asked to identify planning issues related to the element. The different perspectives and common interests that emerged from the public involvement process guided the development of the goals and vision statements presented in this update of the Comprehensive Plan.

I. POPULATION ELEMENT

A. Introduction

Population size and composition influence a community's overall character. Reliable demographic information is essential in evaluating potential solutions to growth problems, establishing realistic goals, and effectively implementing planning strategies. Observing population growth trends also enables community planners to make projections about the opportunities and limitations of future development in terms of physical, social, and economic development.

B. Inventory and Analysis

The following provides an inventory and analysis of demographic information for Horry County. Population trends and projections and population characteristics, such as age, gender, race, household composition, educational attainment, and income levels, are presented. The information provided will form the basis for several planning decisions concerning the Economic Development, Community Facilities, Housing, and Land Use Elements of the Comprehensive Plan.

1. Population Trends

a. Resident Population Trends

Population trends indicate that Horry County has experienced population growth over the past three decades (Figure I-1). The 1997 South Carolina Statistical Abstract ranks Horry County sixth in the state for population size and third for population growth. Horry County also ranks 13th for population density, which is one indication of Horry County's shift from a rural to a more urban composition.

Between 1980 and 1990, Horry County's population increased by 42,634 persons, approximately 42 percent or 4.2 percent each year. Net migration accounted for approximately 75 percent of the growth (32,080 persons), while natural increase accounted for the remaining 25 percent (10,554 persons). It is expected that this trend of immigration will continue to contribute to the population growth of Horry County.

Between 1990 and 1995, Horry County's population was estimated to increase by 31,047 persons, approximately 21.5 percent or 4.3 percent each year. Additionally, State and County comparisons indicate that Horry County's growth rate has historically exceeded that of South Carolina's. If growth trends continue as they have in the recent past, Horry County should experience a greater rate of growth from 1990 to 2000 than was true from 1980 to 1990.

Population trends indicate greater population fluctuations and growth rates for individual municipalities within Horry County (Figure I-2). Coastal communities such as Atlantic Beach, Briarcliffe Acres, Myrtle Beach, North Myrtle Beach, and Surfside Beach have experienced the

greatest population growth since 1980. Comparatively, North Myrtle Beach experienced the most significant population growth over the past three decades. The distribution of the total resident population living within incorporated areas (30 to 40 percent) verses unincorporated areas (60 to 70 percent) has remained relatively constant over the past three decades (Figure I-3). However, population trends indicate that the growth rate is decreasing in incorporated areas and increasing in unincorporated areas.

Figure I-1: Horry County Trends in Population

Year	Horry County			South Carolina		
	Number	Increase	% Increase	Number	% Increase	% Change
1970	69,992	***	***	2,590,713	***	***
1980	101,419	31,427	44.9	3,121,833	531,120	20.5
1990	144,053	42,634	42.0	3,486,703	364,870	11.7
*1995	157,900	13,847	9.6	3,684,000	197,297	5.7

*Estimates based on Waccamaw Regional Planning and Development Council.
Source: Waccamaw Regional Planning and Development Council, 1997

Figure I-2: Horry County Trends in Population for Municipal Areas

Municipalities	Year				% Change		
	1970	1980	1990	1995	1970-1980	1980-1990	1990-1995
Aynor	536	643	470	522	20.0	-26.9	11.1
Conway	8,150	10,240	9,819	11,053	25.6	-4.1	12.6
Atlantic Beach	215	289	446	471	34.4	54.3	5.6
Briarcliff Acres	152	338	552	541	122.4	63.3	-2.0
North Myrtle Beach	1,955	3,960	8,636	9,012	102.6	118.1	4.4
Loris	1,741	2,193	2,067	3,399	26.0	-5.7	64.4
Myrtle Beach	9,035	19,702	24,848	28,047	118.1	26.1	12.9
Surfside Beach	1,329	2,522	3,845	4,251	89.8	52.5	10.6

*Estimates based on Waccamaw Regional Planning and Development Council.
Source: Waccamaw Regional Planning and Development Council, 1997

Figure I-3: Horry County Trends in Population for Incorporated and Unincorporated Areas

	1970		1980		1990		1995	
	Number	**% of Total**	**Number**	**% of Total**	**Number**	**% of Total**	**Number**	**% of Total**
Incorporated Area	23,115	33.0%	39,887	39.3%	50,683	35.2%	57,296	32.7%
Unincorporated Area	46,877	67.0%	61,604	60.7%	93,370	64.8%	117,804	67.3%
Total	69,992	100.0%	101,419	100.0%	144,053	100.0%	175,100	100.0%

*Estimates based on Waccamaw Regional Planning and Development Council.
Source: Waccamaw Regional Planning and Development Council, 1997

b. Future Resident Population Projections

Population projections are an essential element in community planning. Typically, population projections are based on historic and current demographic trends and consideration of other internal and external forces that may influence population growth patterns. External forces include national growth trends or shifts on a statewide or regional basis, while internal forces include improved transportation accessibility, housing and employment opportunities, economic development trends, and infrastructure capacity within a community.

Population projections for Horry County were generated to represent potential population growth under several scenarios (Figure I-6). Population projections are based on historical population estimates provided by the Waccamaw Regional Planning and Development Council (WRPDC). The population projections were then compared to the WRPDC and South Carolina Office of Research and Statistic's population projections for Horry County. Both use a modified Cohort-Survival statistical model to project population.

Scenario A assumes that 7,548 new residents will be added to Horry County's population each year for the next 25 years. This increase is based on the annualized percentage change from 1990 to 1995, which represents an approximate 4.3 percent increase each year for the five-year period. The 4.3 percent increase was applied to the 1995 total population to project the 1996 population. This total (7,548 residents) was applied as a constant for the 25-year period, arriving at a total county population of 356,252 persons in 2020.

Scenario B assumes that 10,518 new residents will be added to Horry County's population each year for the next 25 years. This increase is based on the annualized percentage change from 1970 to 1995, which represents an approximate 6.0 percent increase each year for the 25-year period. The 6.0 percent increase was applied to the 1995 total population to project the 1996 population. This total (10,518 residents) was applied as a constant for the 25-year period, arriving at a total county population of 427,532 persons in 2020.

FIGURE I-4

1980-1990 HORRY COUNTY POPULATION % CHANGE BY CENSUS DIVISIONS

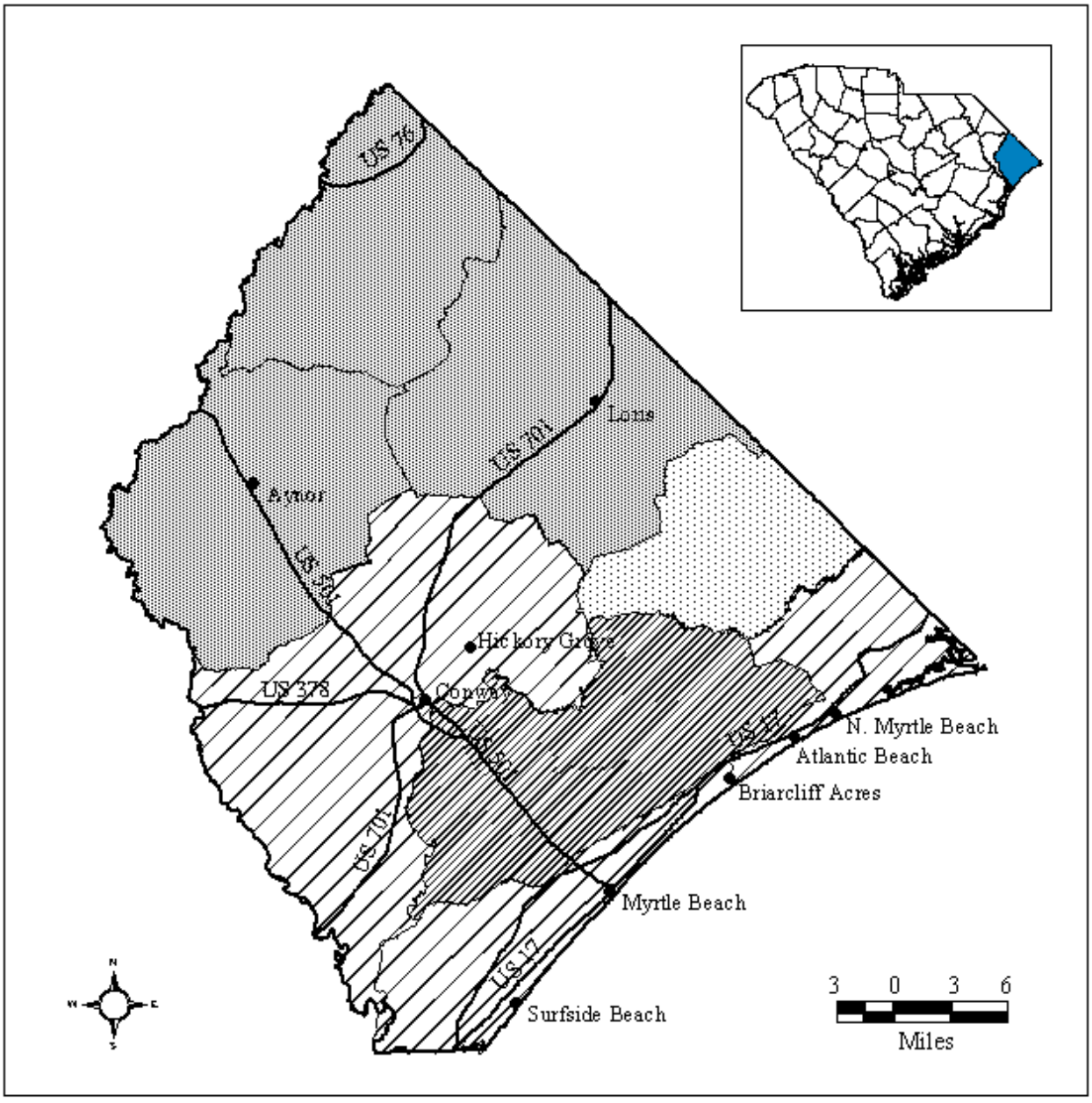
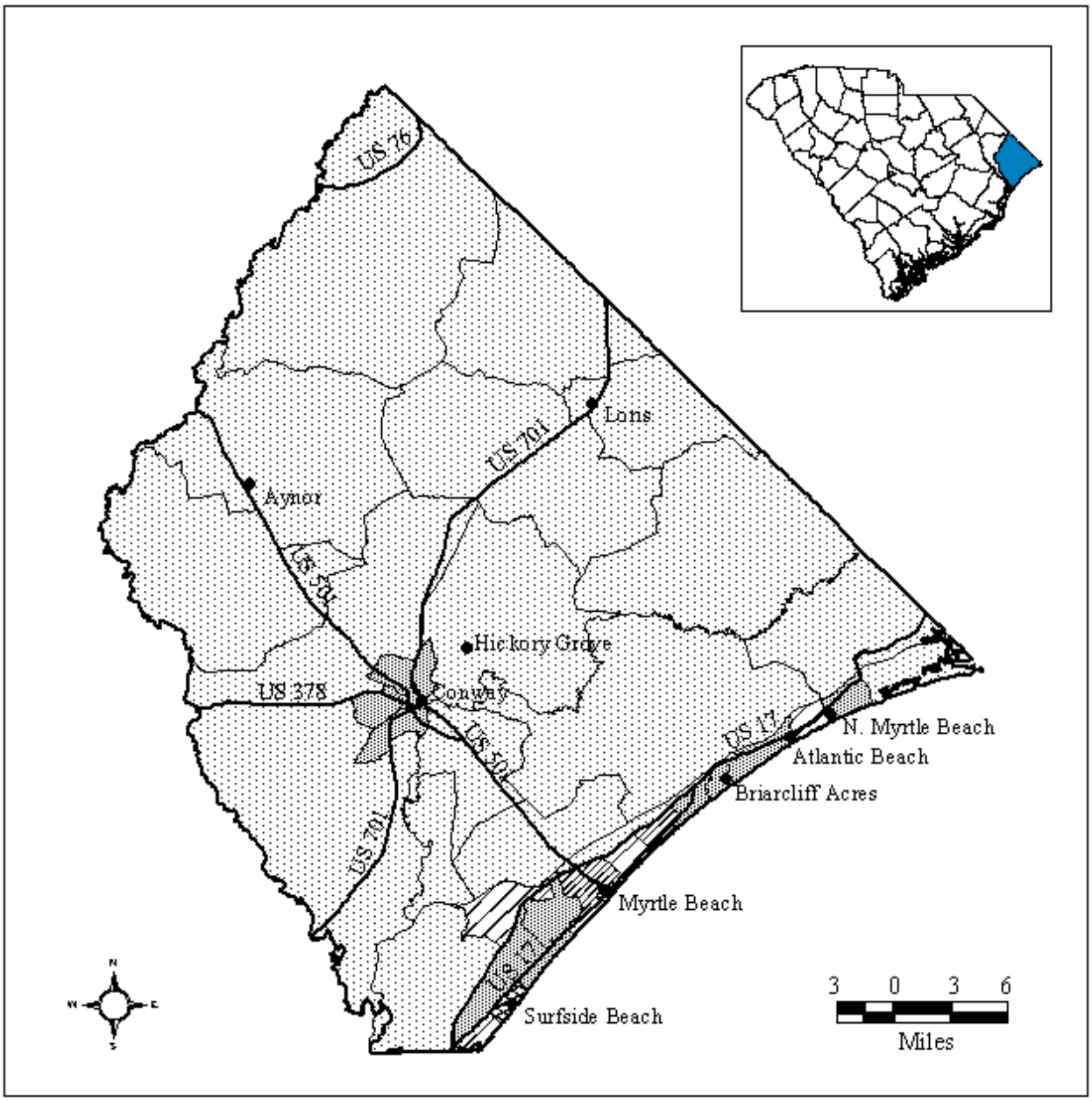


FIGURE I-5

1990 HORRY COUNTY POPULATION DENSITY BY CENSUS TRACTS



Scenario C assumes that Horry County's future population will grow as a percentage of its share of South Carolina's population residing in Horry County. A linear extrapolation of Horry County's share from 1970 to 1995 indicates that Horry County's share of South Carolina's population should grow 0.15 percent a year for the next 25 years. According to this projection, the county's share of the state's population would grow from 4.8 percent in 1995 to 8.53 percent in 2020, arriving at a total population of 398,155 persons.

Scenarios A and B assume a constant growth in Horry County based on historical population trends. Both scenarios consider Horry County historical trends and result in a steady growth for the county over the next 25 years. Scenario C assumes that growth in Horry County will continue as it historically has according to its percent share of South Carolina's total population.

Scenario B and C are considered the most reliable, because both take into account 25 years of historic growth in Horry County. Scenario A, which looks at only 5 years of historic growth, is not as reliable. The WRPDC population projections are slightly higher than Scenario A and lower than population projections for Scenarios B and C, while the South Carolina Office of Research and Statistic's population projections are significantly lower than the population projections scenarios provided. This is because the State estimated a lower population for Horry County than the WRPDC in 1995. Horry County's Planning Department views the WRPDC's 1995 estimate as a more accurate reflection of Horry County's population growth.

The majority of Horry County municipalities rely on WRPDC population projections to forecast future population (Table I-7). Typically, projections follow Census County Divisions (CCDs), which extend farther than municipal boundaries. The estimates are also fit to match South Carolina Office of Research and Statistics State Budget and Control Board projections for both Horry County and the state to maintain statewide consistency. However, in 1995, WRPDC estimated a larger resident population than the South Carolina Office of Research and Statistics. The projections indicate that the Myrtle Beach CCD should continue to lead population growth in the county, with a projected total population of 165,772 in 2020.

c. Seasonal Population Trends

Resident population trends and projections do not give a complete profile of the numbers of people that impact the physical, social, and economic development of Horry County. As a county with a large shopping, resort, and retirement component, there are a considerably higher number of persons visiting the county than census tabulations report. This visiting population fluctuates according to season and time of day, making the actual number of persons not only greater than the resident population but also inconsistent throughout the year. Finally, Horry County's labor force has the effect of increasing the daytime population of the county, as a large percentage of workers commute from outside locations. The sum of these factors makes the actual population and its impacts to Horry County difficult to estimate at any one point in time.

Figure I-6: Horry County Population Projection Scenarios

Year	Scenario A	Scenario B	Scenario C	WRPDC Estimate for Horry County	SC Estimate for Horry County
1970	69,992	69,992	69,992	69,992	69,992
1980	101,419	101,419	101,419	101,419	101,419
1990	144,053	144,053	144,053	144,053	144,053
1995	175,100	175,100	175,100	175,100	157,900
2000	212,840	227,690	217,227	209,200	180,600
2005	250,580	280,280	259,623	245,700	202,500
2010	288,320	332,870	304,621	296,000	225,800
2015	326,060	385,460	351,889	338,100	247,000
2020	356,252	427,532	398,155	362,388	NA

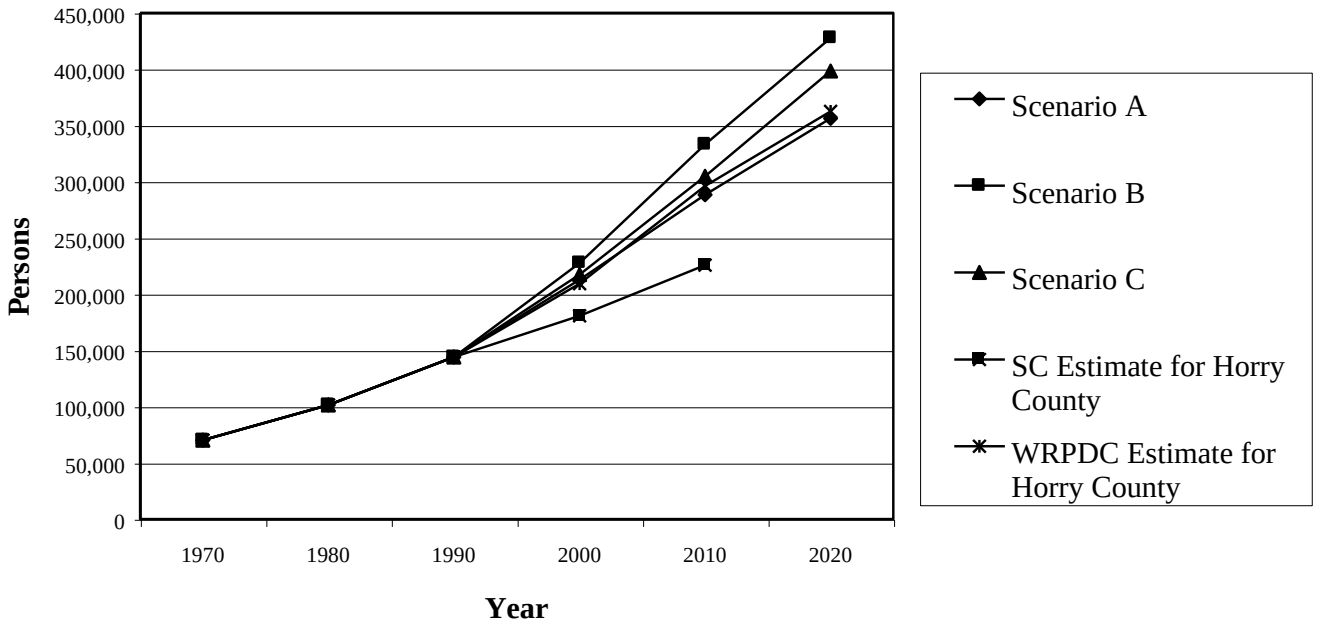
Source: Waccamaw Regional Planning and Development Council, 1997;
SC Office of Research and Statistics, Budget and Control Board, 1997

Figure I-7: Waccamaw Regional Planning and Development Council Horry County Population Projections By CCDs

CCD	1970	1980	1990	1995	2000	2005	2010	2015	2020
Aynor	5,634	7,190	6,786	7,309	7,841	8,410	9,195	9,852	10,204
Conway	18,665	23,868	26,648	30,093	33,769	37,704	43,126	47,664	50,172
Conway East	3,419	8,546	17,408	23,217	29,699	36,638	46,200	54,203	58,898
Floyds	3,420	3,771	2,943	2,773	2,555	2,321	1,999	1,730	1,614
Little River	4,960	8,781	17,833	23,167	29,094	35,438	44,180	51,497	55,761
Longs	2,788	3,299	3,338	3,592	3,844	4,114	4,486	4,798	4,965
Loris	9,895	11,137	11,189	11,812	12,409	13,048	13,928	14,665	15,053
Myrtle Beach	21,211	34,827	57,908	73,137	89,989	108,027	132,886	153,691	165,722
Total	69,992	101,419	144,053	175,100	209,200	245,700	296,000	338,100	362,389

Source: Waccamaw Regional Planning and Development Council, 1997

Figure I-8: Horry County Population Projection Scenarios



Source: Waccamaw Regional Planning and Development Council, 1997;
SC Office of Research and Statistics, Budget and Control Board, 1997

The majority of the nonresident population in Horry County visits the coastal areas, predominantly the Myrtle Beach area. Based on indicators such as local occupancy rates, local accommodations tax collections, and national inflation rates, the Myrtle Beach Area Chamber of Commerce estimated 13.42 million visitors, not including day visitors, to the Grand Strand in 1997. This estimate accounted for an increase in over 50 percent in the last ten years. In 1995, peak day population estimates for the Grand Strand totaled 572,751 persons. By the year 2005, peak day population estimates for the Grand Strand indicate a total population on the busiest tourist day of the year to be 889,869.

2. Population Characteristics

a. Age Distribution

An inventory and assessment of a community's age distribution is important for the identification of present and future community needs. Moreover, planning for capital facilities and services, such as schools, recreation facilities and programs, youth centers, and programs for the elderly, depends upon the age distribution of the community.

In 1990, residents between the ages of 25 to 34 represented the largest age group in Horry County, while residents between 35 to 44 were the second largest age group (Figure I-9). Following closely behind was the age group 65 and older. Residents in the 5 to 9 age category made up the smallest percentage in Horry County. South Carolina proportions exceeded those of

Horry County for all 0 to 24 age groups and the 35 to 44 age group, while proportions for the age group 25 to 34 and all age groups 45 or older were slightly less for the state.

All age groups 25 and older had a higher population growth rate over the past three decades; perhaps most conspicuous is the tremendous in-migration of age groups 65 and older (Figure I-10). The population represented by age groups 15 to 19 and 20 to 24 increased very little during the 1980s. Horry County has seen a population increase in age groups 5 to 9 and 10 to14, which is likely attributable to an influx of child-bearing age groups. If past trends continue, Horry County will see more in-migration from the baby boomer and retiree population.

Figure I-9: 1990 Horry County Age Distribution

Age	Horry County		South Carolina	
	Number	% of Total	Number	% of Total
0-4	9,534	6.6	256,337	7.4
5-9	9,324	6.5	256,076	7.3
10-14	9,805	6.8	253,719	7.3
15-19	9,607	6.7	277,634	8.0
20-24	11,032	7.7	282,967	8.1
25-34	25,654	17.8	591,348	17.0
35-44	21,185	14.7	523,295	15.0
45-54	14,838	10.3	355,610	10.2
55-64	14,845	10.3	292,782	8.4
65 & Older	18,229	12.7	396,935	11.4
Total	144,053	100.0	3,486,703	100.0

Source: US Bureau of Census, 1990

b. Racial Composition and Trends

The racial mix of Horry County's population has remained relatively stable (Figure I-11). Horry County's predominant racial groups have been the white and black races, accounting for 81.4 percent and 17.5 percent of the total population in 1990, respectively. These racial proportions differ from those of the state, where whites accounted for approximately 69 percent and black approximately 30 percent of the population in 1990. The proportion of the black population decreased from 24.8 percent to 17.5 percent from 1970 to 1980. Historically, persons of the other race have constituted a very small percentage of Horry County and South Carolina's total population. However, a comparative analysis for each race reveals a faster growth rate for the "other race" category, followed by the white and black racial categories. Residents of Hispanic origin have also experienced a decline in their rate of growth since 1980.

Figure I-10: Horry County Trends in Age Distribution

Age	Year			% Change	
	1970	1980	1990	1970-1980	1980-1990
0-4	6,343	8,349	9,534	31.6	14.2
5-9	7,513	7,918	9,324	5.4	17.8
10-14	7,974	8,327	9,805	4.4	17.7
15-19	7,510	9,697	9,607	29.1	-0.9
20-24	5,725	10,038	11,032	75.3	9.9
25-34	8,526	16,785	25,654	96.9	52.8
35-44	8,209	11,371	21,185	38.5	86.3
45-54	7,387	10,046	14,838	36.0	47.7
55-64	5,807	9,493	14,845	63.5	56.4
65 & Older	4,998	9,395	18,229	88.0	94.0
Total	69,992	101,419	144,053	44.9	42.0

Source: US Bureau of Census, 1970, 1980, 1990

Figure I-11: Horry County Trends in Racial Composition

Race	Year			% Change	
	1970	1980	1990	1970-1980	1980-1990
White	52,471	77,553	117,098	47.8	51.0
Black	17,398	22,075	25,160	26.9	14.0
*Other	123	653	1,795	430.9	174.9
Total	69,992	101,419	144,053	44.9	42.0
Hispanic Origin	135	1,138	1,259	743.0	10.6
Not of Hispanic Origin	69,857	100,281	142,794	43.6	42.4

* The US Bureau of the Census defines the "other race" as the total of American Indians, Eskimo and Aleutians, Asian and Pacific Islands, and all other races that are not white or black.

Source: US Bureau of Census, 1970, 1980, 1990

Figure I-12: 1990 South Carolina Racial Composition

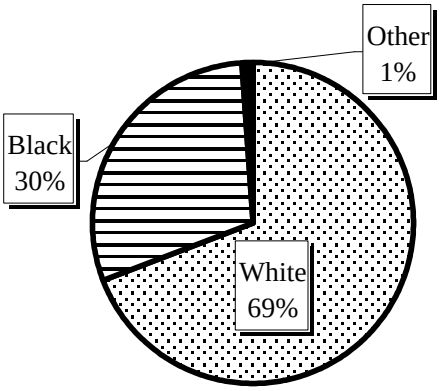
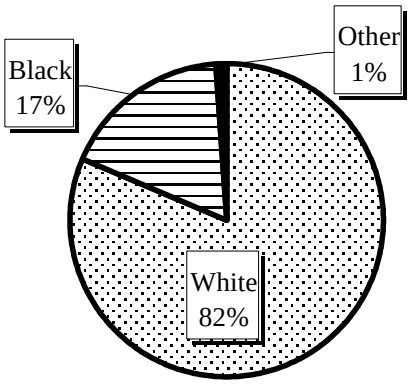


Figure I-13: 1990 Horry County Racial Composition



Source: US Bureau of Census, 1990

c. Gender Composition

In 1990, the resident population of Horry County and South Carolina had similar gender proportions, with the state having a slightly larger share of females (Figure I-14). Historical data indicate that the proportion of males and females within Horry County have remained nearly equal over the past three decades (Figure I-15). In addition, Horry County's gender growth rate has not changed significantly over the past three decades, although the male growth rate was slightly higher from 1980 to 1990.

Figure I-14: 1990 Horry County Gender Composition

Gender	Horry County		South Carolina	
	Number	% of Total	Number	% of Total
Male	70,516	49.0	1,688,510	48.4
Female	73,537	51.0	1,798,193	51.6
Total	144,053	100.0	3,486,703	100.0

Source: US Bureau of Census, 1990

Figure I-15: Horry County Trends in Gender Composition

Gender	Year			% Change	
	1970	1980	1990	1970-1980	1980-1990
Male	34,417	49,382	70,516	43.5	42.8
Female	35,575	52,037	73,537	46.3	41.3

Source: US Bureau of Census, 1970, 1980, 1990

d. Education

Educational attainment is an increasingly important factor in the socioeconomic development of a region. The nation's growing complexity and shift toward highly skilled professions require higher educational levels than years past. National statistics reveal that only 29.9 percent of the total U.S. population 25 years or older completed high school in 1990 while only 20.4 percent completed 4 years of college or more. An analysis of educational attainment for Horry County reveals that almost 32.0 percent of its resident population 25 years or older completed 4 years of high school in 1990, which is up nearly 10.0 percent from 1970 (Figure I-16). South Carolina as a whole faired slightly worse than Horry County, with only 20.6 percent of its population 25 years or older completing 4 years of high school in 1970 and 29.5 percent in 1990.

The proportion of Horry County residents 25 years or older completing 4 years of college or more was less than that proportion completing high school, with approximately 7.2 percent completing 4 years of college or more in 1970 and 16.0 percent in 1990 (Figure I-16). South Carolina exceeded Horry County in college attainment, with 9.0 percent of its population 25 years or older completing 4 years of college in 1970 and 16.6 percent in 1990 . More detailed data for Horry County in 1990 reveal that less than half of its resident population 25 years or older continued their education beyond high school (Figure I-17).

Figure I-16: Trends in Educational Attainment (Persons 25 & Older)

	Horry County				South Carolina			
	4 Years of High School		4 Years of College or More		4 Years of High School		4 Years of College or More	
	Number	% of Total	Number	% of Total	Number	% of Total	Number	% of Total
1970	7,729	22.1	2,508	7.2	264,070	20.6	115,119	9.0
1980	17,256	30.2	7,143	12.5	468,796	27.1	232,629	13.4
1990	30,078	31.7	15,174	16.0	639,358	29.5	360,833	16.6

Source: US Bureau of Census, 1970, 1980, 1990

Figure I-17: 1990 Horry County Educational Attainment

Years of School Completed	Persons 25 & Older	
	Number	% of Total
Less than 9th. Grade	8,899	9.4
9th. To 12th. Grade, no diploma	15,509	16.3
High school graduate (includes equivalency)	30,078	31.7
Some College, no degree	19,024	20.0
Associate degree	6,224	6.6
Bachelor's degree	10,610	11.2
Graduate or professional degree	4,564	4.8
Total	94,908	100.00

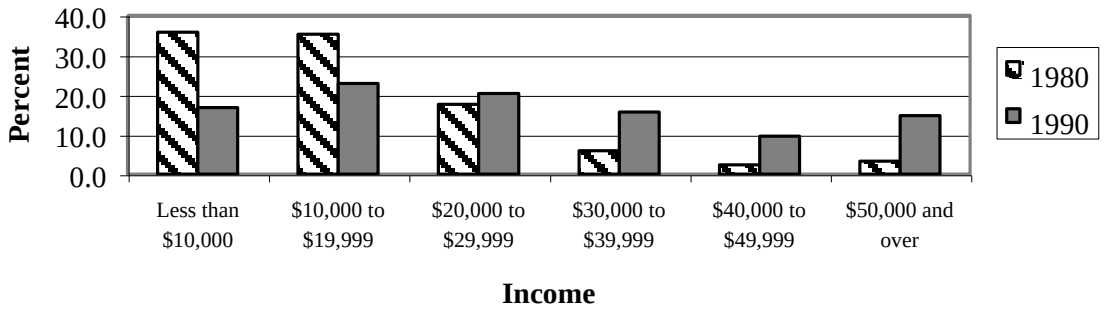
Source: US Bureau of Census, 1990

e. Income

An inventory and assessment of various income statistics forms a benchmark for the economic prosperity of a community. Characteristics such as household income distribution, per capita income, and median family income measure the economic viability of a population. Trends in household income distribution for Horry County indicate that household income is shifting to higher levels (Figure I-18). Consequently, the percentage of Horry County residents below poverty has declined over the past three decades, with its greatest decline from 1980 and 1990 (Figure I-19).

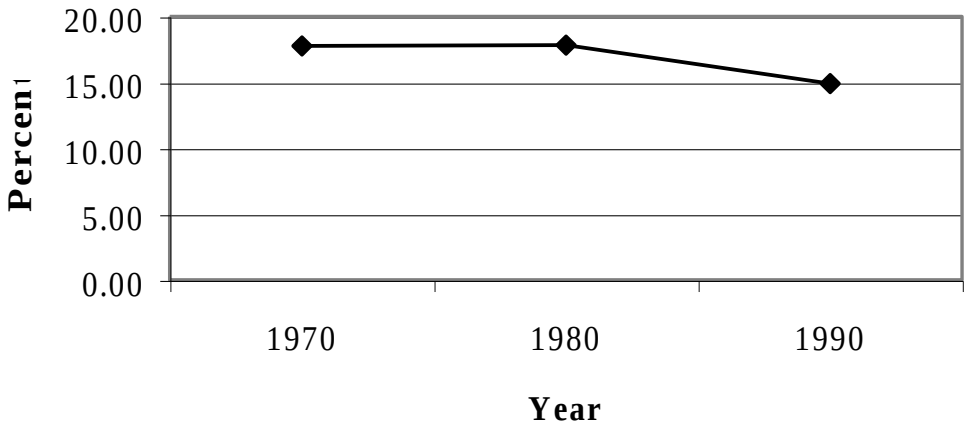
Horry County's median family income and per capita income have also increased over the past three decades (Figure I-20 and Figure I-21). A more detailed analysis of per capita income reveals that the county's rate of increase has paralleled state increases since 1970.

Figure I-18: Horry County Trends in Household Income Distribution



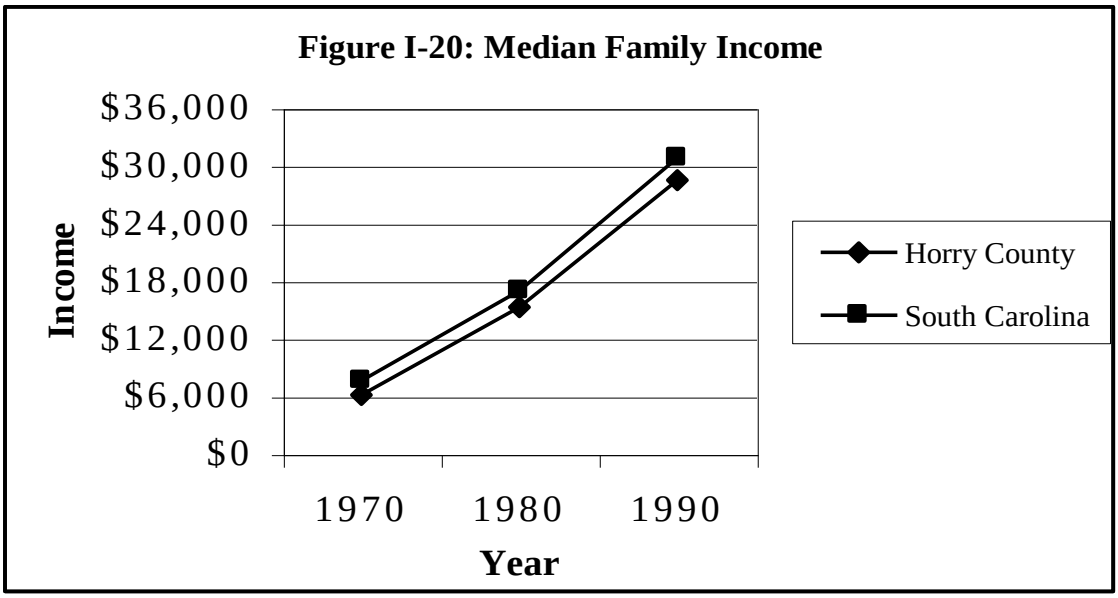
Source: US Bureau of Census, 1980, 1990

Figure I-19: Horry County Trends in Households Below Poverty

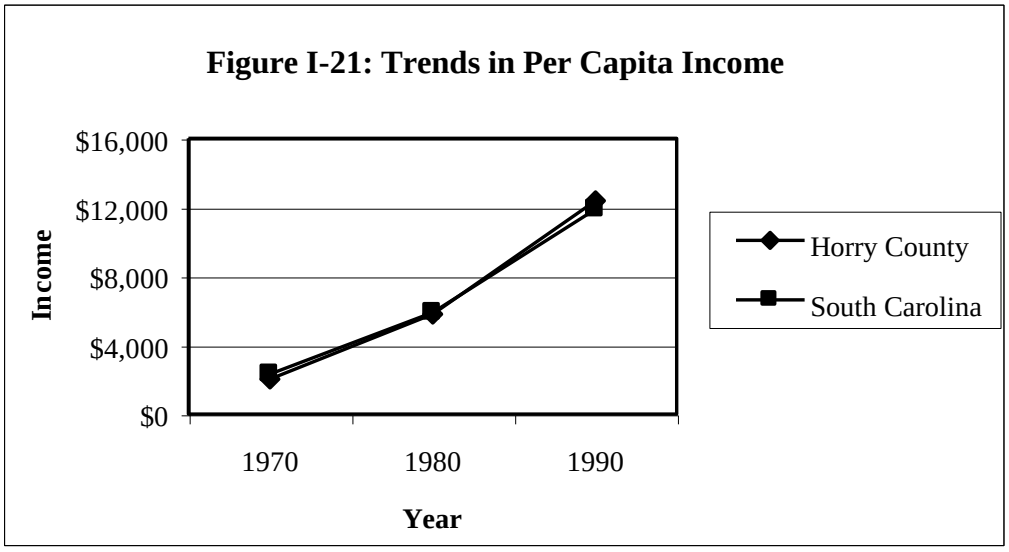


Source: US Bureau of Census, 1970, 1980, 1990

* Poverty income level is set by nationwide standards and has not been adjusted according to local cost of living standards.



Source: US Bureau of Census, 1970, 1980, 1990



Source: US Bureau of Census, 1970, 1980, 1990

f. Household Composition

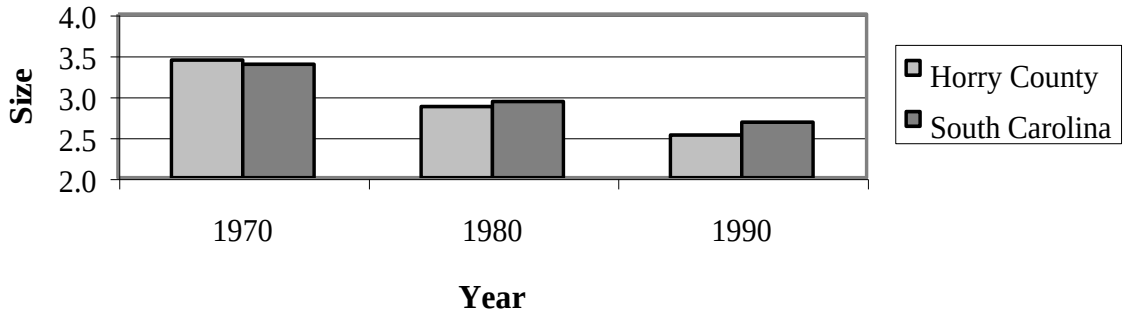
The general trend in Horry County's household composition reveals that the share of married couple households in Horry County is decreasing, while the share of non-family householders is increasing (Figure I-22). These proportions help explain Horry County's decrease in average household size over the past three decades (Figure I-23). The trends in household composition for South Carolina over the past three decades are similar to that of Horry County, with Horry County's size of family householders being slightly higher than that of the state in 1970 and 1980 and slightly lower in 1990.

Figure I-22: Horry County Trends in Household Composition

	Horry County		South Carolina	
	Number	**% of Total Households**	**Number**	**% of Total Households**
Type	**1970**			
Family Households	17,349	86.6	624,230	84.5
Married Couple Families	14,700	73.3	522,152	70.7
Married Couple Families w/ own children under 18 years	8,679	43.3	309,612	41.9
Female Householder w/ own children under 18 years	2,130	10.6	43,439	5.9
Nonfamily Households	2,692	13.4	110,143	14.9
Total Households	20,041	100.0	38,956	100.0
Type	**1980**			
Family Households	27,574	79.2	806,037	78.3
Married Couple Families	22,809	65.5	647,072	62.8
Married Couple Families w/ own children under 18 years	12,006	34.5	345,105	33.5
Female Householder w/ own children under 18 years	2,207	6.3	73,086	7.1
Nonfamily Households	7,224	20.8	223,944	21.7
Total Households	34,798	100.0	1,029,981	100.0
Type	**1990**			
Family Households	40,450	72.5	928,206	73.8
Married Couple Families	32,537	58.3	710,089	56.4
Married Couple Families w/ own children under 18 years	13,315	23.9	332,942	26.5
Female Householder w/ own children under 18 years	3,524	6.3	96,177	7.6
Nonfamily Households	15,314	27.5	329,838	26.2
Total Households	55,764	100.0	1,258,044	100.0

Source: US Bureau of Census, 1970, 1980, 1990

Figure I-23: Household Size



Source: US Bureau of Census, 1970, 1980, 1990

C. Key Findings

- Horry County ranks sixth in the state for population size and third for population growth.
- Between 1980 and 1990, net migration accounted for approximately 75 percent of the Horry County's growth (32,080 persons), while natural increase accounted for remaining 25 percent (10,554 persons).
- If growth trends continue as in the recent past, Horry County should experience a greater rate of growth from 1990 to 2000 than was true from 1980 to 1990.
- Horry County's growth rate is decreasing in incorporated areas and increasing in unincorporated areas, revealing an increased growth rate in the more rural areas of the county.
- In 1995, peak day population estimates for the Grand Strand totaled 572,751 persons. This total is approximately 3 times the estimated 1995 resident population for Horry County.
- All age groups 25 and older had a higher population growth rate over the past three decades; perhaps most conspicuous is the tremendous in-migration of age groups 65 and older.
- The racial mix of Horry County's population has remained relatively stable, with white and black racial groups comprising approximately 99 percent of the county's total population.
- Although comprising only a one percent share of the total population, the "other race" has experienced a faster growth rate than white and black racial categories over the past three decades.
- Horry County's educational attainment is comparable to state and national averages.
- Horry County trends in household income distribution indicate that the household income distribution, median family income, and per capita income are rising.
- Historically, Horry County incomes have been lower than South Carolina. In addition, there has been a widening per capita income disparity between Horry County residents and the state average over the past three decades.

- The general trend in Horry County's household composition reveals that the share of married couple households in Horry County is decreasing, while the share of non-family householders is increasing.

D. Statement of Needs and Goals

The needs and goals for population were derived in part from the analysis of existing conditions and trends, combined with the input gathered from the public. Some of the major issues identified from the workshop on population include the following.

- The need to improve the educational system to retain and attract families.
- The need to provide adequate open space for a growing population.
- The need to provide/expand services to a more diverse and growing population.
- The need to minimize development impacts on existing communities.

The development of specific needs and goals presents an opportunity to improve the accuracy and efficacy of future demographic data, that will enhance the county's ability to anticipate population changes in the future.

The general population issues facing Horry County are presented in the following section along with the vision statement for population. The vision statement represents a synthesis of the issues and needs identified in the public workshop discussions.

Population Vision

Promote in Horry County a high quality of life that attracts a diverse community of well-educated families, young adults and retirees that comprises a balance of age groups, income groups and lifestyles.

Need: Population trends indicate the majority of growth in the county is in the unincorporated areas; those areas experiencing rapid growth should be closely examined to ensure development impacts are minimized.

Goal 1: Continue to employ the county's growth management techniques to direct population growth in areas of greatest suitability.

Need: County residents have recognized quality education and educational attainment as major contributors to the quality of life in the community. It was noted in several workshops that efforts are needed to ensure the education system is supported throughout the county.

Goal 2: Work cooperatively with the Horry County School Board, local colleges, and the business community to identify and promote educational opportunities beyond high school.

Need: The county should continue to develop baseline demographic data for use in the geographic information system (GIS).

Goal 3: Coordinate with the U.S. Census Bureau and the S.C. Department of Commerce, Budget and Control Board to acquire accurate population data to develop annual local population estimates.

Need: The county has a large tourist draw; information regarding accurate counts of seasonal and daytime populations is needed for future planning efforts. The absence of these data at the county level makes planning for the county's infrastructure and facilities increasingly difficult.

Goal 4: Establish a method for tracking the county's actual daytime and seasonal populations, including the impacts of the commuting workforce and the seasonal tourist population.

Need: Recognize and address the needs of the county's growing population segments – those individuals between the ages of 35 and 44 years and the elderly population.

Goal 5: Support local efforts to provide community-wide services directed toward the needs of the growing elderly and middle-aged segments of the population.

E. Implementation Strategies

The following implementation strategies are presented as a means for Horry County to address the goals established in the Population Element.

1. Continue to support the development of the GIS and fund future efforts to establish the most current and accurate digital demographic database for Horry County.

- Coordinate with local governments, Chamber of Commerce, and State Department of Commerce – Division of Parks, Recreation, and Tourism to develop a methodology to track the daytime population in Horry County on a countywide basis.
  As noted earlier, peak day population estimate for the Grand Strand in 1995 was three times the estimated resident population for Horry County. This example illustrates the importance of accounting for the tourist population in the county's infrastructure and service planning efforts. By coordinating a system to monitor commuting traffic within Horry County with estimates of the tourist population and current permanent resident population estimates, the county can maintain a useful and accurate estimate of the actual county population at any point in time.

- Prepare for the 2000 Census count to ensure the provision of accurate data that are useful to the county's planning processes by actively participating in technical work sessions by the Census Bureau and the development of baseline data for the census which includes an accurate address file and accurate base maps.

2. Identify emerging needs within growing population segments of the county.

- The county, in recognizing its tremendous growth, should ensure that future special area studies of the unincorporated area identify community needs related to the elderly and disabled residents.

- Support community and recreational activities involving children, adults, and seniors as a means toward preserving a sense of community.

- Work cooperatively with the Chamber of Commerce to promote further growth of the family and young adult resident population, while continuing to promote Horry County as a desirable destination for retirees and vacationers.

3. Promote technology-based educational opportunities in conjunction with the county's economic development efforts.

- The county, as part of its economic development effort, should expand linkages to the economic community to include county educational institutions through the establishment of a technology jobs forum.

F. Benchmarks for a Sustainable Quality of Life

Benchmarks are quantitative indicators; when monitored on an annual basis, they can assist the county in determining its level of progress toward achieving the goals identified in the elements of the Comprehensive Plan. Positive trends can be promoted and reinforced, while emerging negative trends can be identified and proper steps taken to address the issue.

The benchmarks presented below reflect public input gathered during the public workshops:

- Increase the number of annual high school graduates by a set amount each year.

  The total number of high school graduates in Horry County has steadily increased between 1970 and 1990; however, the majority of the increase occurred between 1970 and 1980.

- Increase the ratio between permanent residents to the tourist population over the next 20 years. In public workshops, the issue of stabilizing growth in the county was presented. As referenced earlier in the element, the peak tourist population estimate in 1995 was three times that of the Horry County permanent population. Efforts to create a more balanced permanent population include developing strategies that will attract more families to Horry County.

II. ECONOMIC ELEMENT

A. Introduction

Understanding Horry County's local economic structure is essential for designing a long-term economic development program. The Economic Element assesses the economic climate of Horry County by examining past labor and economic trends in the community, and then projecting these trends into the future. It is important to note, however, that several factors other than economic come into play in assessing the economic climate of the county. Some of these include: local population characteristics, local community assets, and local physical conditions and resources. All of these factors, which are considered in greater detail in other sections of the plan, are brought together in this element to give a accurate assessment of Horry County's economic climate:

Major Characteristics of the Local Population
- Particular assets of the population
- Critical issues drawn from the population profile

Community Factors
- Strongest community assets
- Assets requiring attention
- Cohesiveness of community leadership

Physical/Location Conditions
- Major physical resource assets
- Strengths of geographic situation and locational conditions
- Weak aspects of local physical conditions

B. Inventory and Analysis

For the sake of simplicity, the economic analysis of economic trends considers the Horry County economy in terms of *demand* and *supply*. *Demand*, in this case, comprises all those factors that influence the growth of existing enterprises, the development of new enterprises, the creation of jobs, and the demand for labor in Horry County. *Supply* comprises the supply of labor required to fill the jobs that have been created, and all factors that hinder or help that supply.

There is a complex and dynamic interrelationship between demand and supply. A new job created will provide its occupant with a wage that, if expended in the local economy, will create further demand for goods and services and, eventually, more jobs. Rarely are the components of demand and supply in balance.

This analysis recognizes that the community is affected at many levels by the imbalance between the demand for and the supply of labor in the local economy. It therefore focuses on the constraints to future growth and the opportunities that will arise as a result of the changing economy and the potential impact of both on the local labor market.

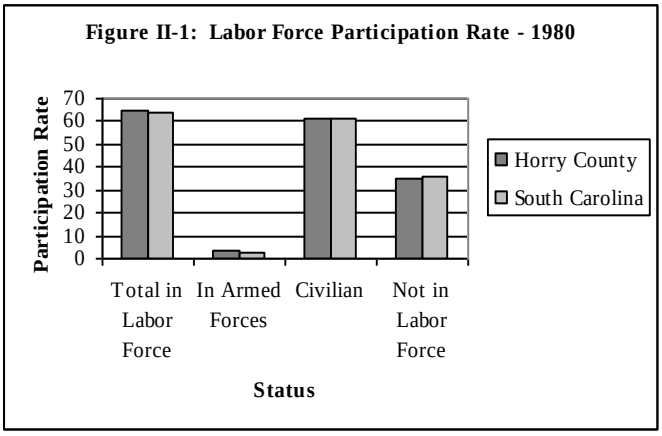
This analysis also recognizes patterns and trends of the Horry County economy, as well as any weak sectors in the economy. These patterns and trends are used to identify economic diversification opportunities and requirements and economic growth areas for the county.

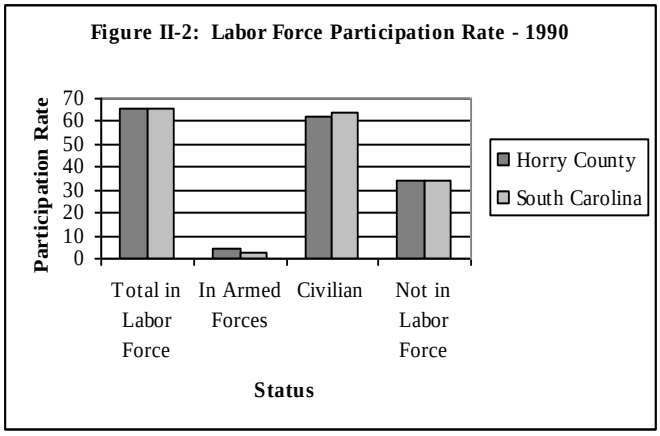
1. Labor Force

This portion of the report focuses on Horry County's labor force trends and characteristics. Labor force characteristics described include participation rates, occupations, and unemployment rates. Labor force patterns in the community help identify the strengths and weaknesses of the labor force, employment requirements of the labor force and speculation of future trends, and perhaps any special groups requiring employment attention. The U.S. Census Bureau defines Horry County's total labor force as all persons age 16 and over who are residents of Horry County.

a. Participation Rates

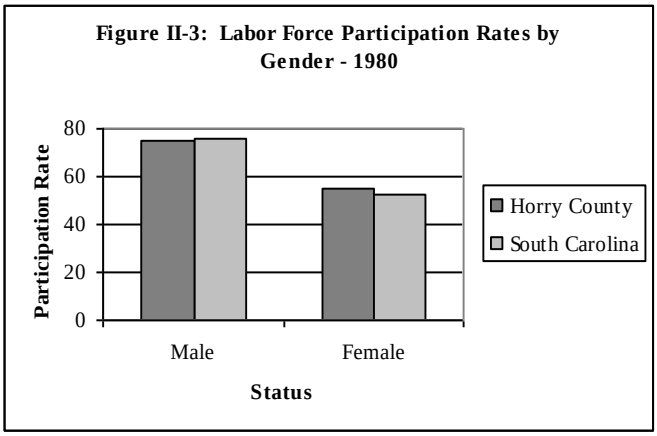
A key measure used to describe a population's labor force status is the percent of population in the labor force (labor force participation rate). Figures II-1 and II-2 show the labor force participation rates for Horry County and South Carolina for the decennial census years 1980 and 1990. In 1980 and 1990, Horry County had a slightly higher or equal percentage of persons in the total labor force, respectively, than the State of South Carolina. Labor force participation rates for Horry County and South Carolina remained relatively unchanged between 1980 and 1990. For Horry County, the participation rate for civilians in the labor force was up by about one percent, while there was a slight decrease in those not in the labor force, also one percent. This follows the average annual unemployment rate, which decreased between 1980 and 1990.

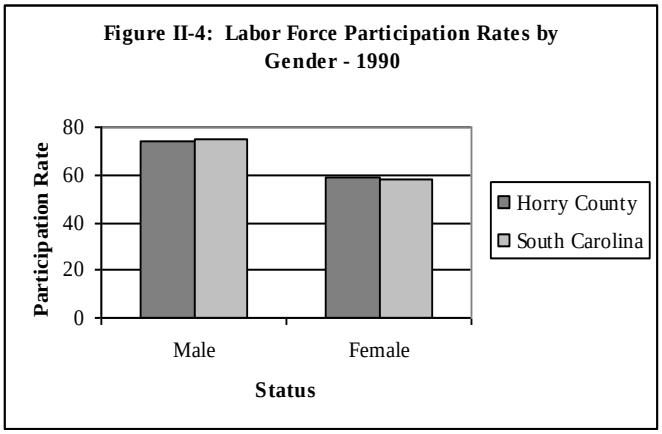




Source: U.S. Census Bureau, 1980 & 1990

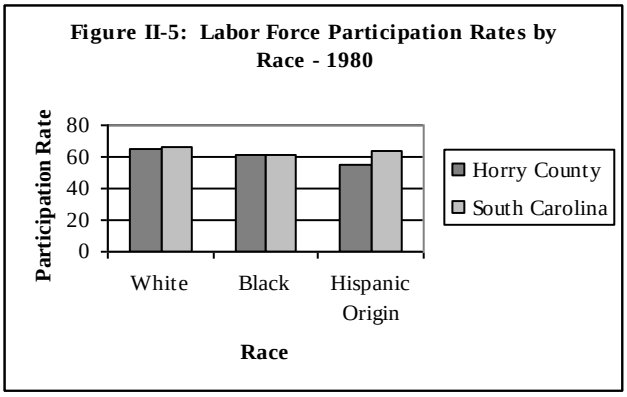
Describing labor force participation rate composition provides detailed information about the labor force characteristics. Labor force participation rates by gender (Figures II-3 and II-4) indicate that out of all the male population eligible to be in the Horry County labor force, 74 percent were actually in the labor force in 1990. This is one percent less than the State participation rate. Females, who make up a smaller portion of the total labor force, show a similar pattern of being nearly equal with the state pattern. Females participated at a rate of 59 percent, versus 58 percent for the state as a whole.

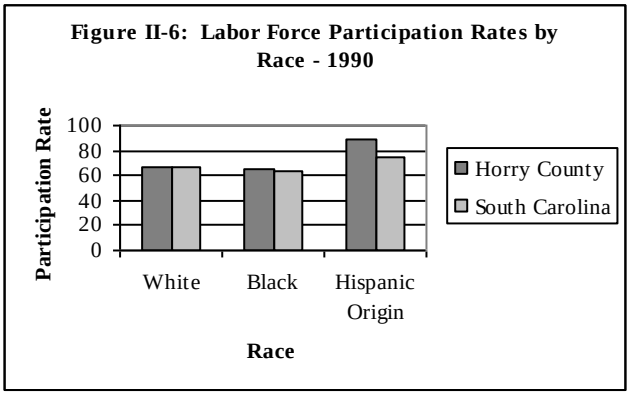




Source: U.S. Census Bureau, 1980 & 1990

Labor force participation rates by race (Figure II-5 and II-6) indicate that in 1980 and 1990 whites eligible to be working were slightly less likely to be in the labor force in Horry County when compared to South Carolina. Blacks eligible to be working, however, were slightly more or equally likely to be in the labor force in Horry County when compared to South Carolina. In 1990, a black person residing in Horry County was only one percent less likely to participate in the labor force than a white person. Those of Hispanic Origin may include persons of any race, which accounts for that group's higher participation rates. However, those of Hispanic Origin showed the greatest rate of increase in labor force participation between 1980 and 1990, while white and black labor force participation showed only a slight increase.

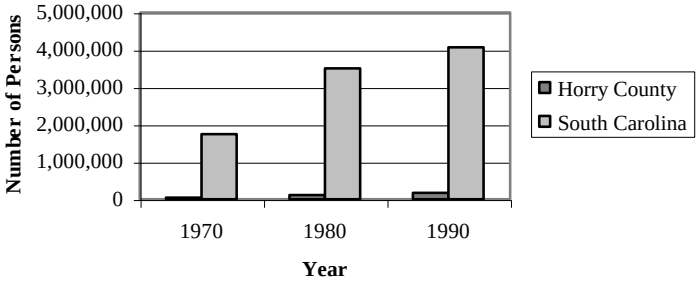




Source: U.S. Census Bureau, 1980 & 1990

Figure II-7 graphs labor force population data for 1970, 1980, and 1990. The data show an increase in Horry County labor force for the past three decades. Over 125,000 Horry County residents have joined the labor force since 1970. This parallels the statewide increase in the labor force population during the 1970 to 1990 period. However, while the state labor force population more than doubled between 1970 and 1980, the increase between 1980 and 1990 was only about one-third of that total. Horry County shows a similar trend with a greater increase between 1970 and 1980 than between 1980 and 1990.

Figure II-7: Labor Force Population 1970-1990



Source: U.S. Census Bureau, 1970-1990

b. Occupations

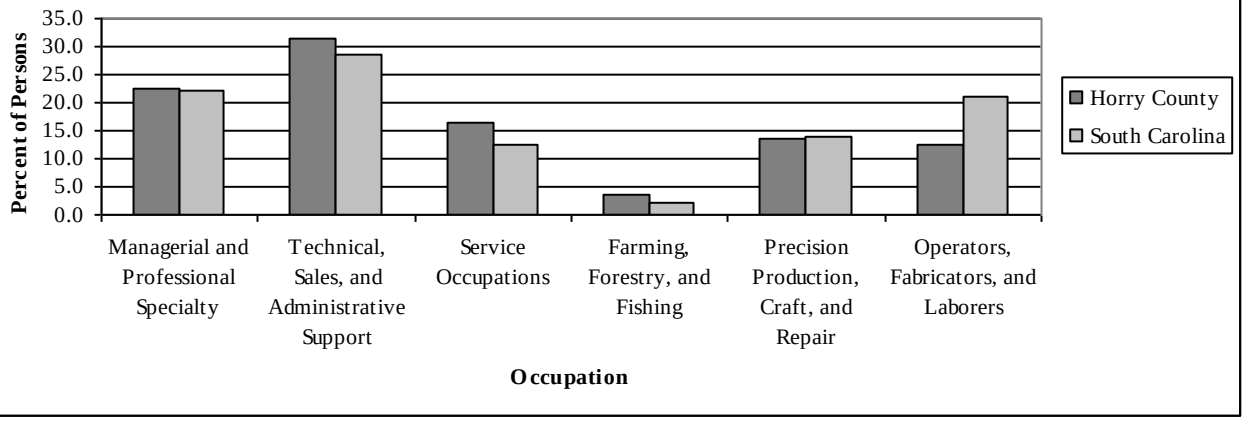
The occupation of the labor force is also helpful in describing the employment requirements and future trends of a labor force. Employment patterns in the community show what human resources are available or required for economic development and what portion of the existing labor force requires assistance. The U.S. Census Bureau defines occupation as the job worked during the census reference week, or the most recent job worked in the last five years. Persons with more than one job were asked to report on the job where they spent the most hours during the reference week.

Figures II-8 and II-9 depict the percentages of total employment by occupational classification for Horry County and South Carolina for 1980 and 1990. In 1980 and 1990, approximately half of all Horry County's labor force were in either Technical, Sales, and Administrative Support Occupations or Managerial and Professional Specialty occupations (typically, these two occupations require an education level beyond high school). The total number of these two occupations increased by about six percent during this time period. Blue collar employment comprised the other half of the remaining occupations in Horry County from 1980 to 1990. Farming, Forestry, and Fishing, as well as Operators, Fabricators, and Laborers decreased between 1980 and 1990, while Precision Production, Craft, and Repair occupations increased slightly. Service occupations increased slightly as well for the same time period.

Similar to Horry County, South Carolina had approximately half of its residents working in either Technical, Sales, and Administrative Support occupations or Managerial and Professional Specialty occupations in 1980 and 1990, although at a lower percentage. Horry County had about three to four percent more persons employed in these occupations. In 1990, Service occupations were the third largest employer in Horry County, while Operators, Fabricators, and Laborers were the third largest employer in South Carolina. During 1980 and 1990, Horry County had a slightly larger percentage of the labor force in Service occupations when compared to South Carolina.

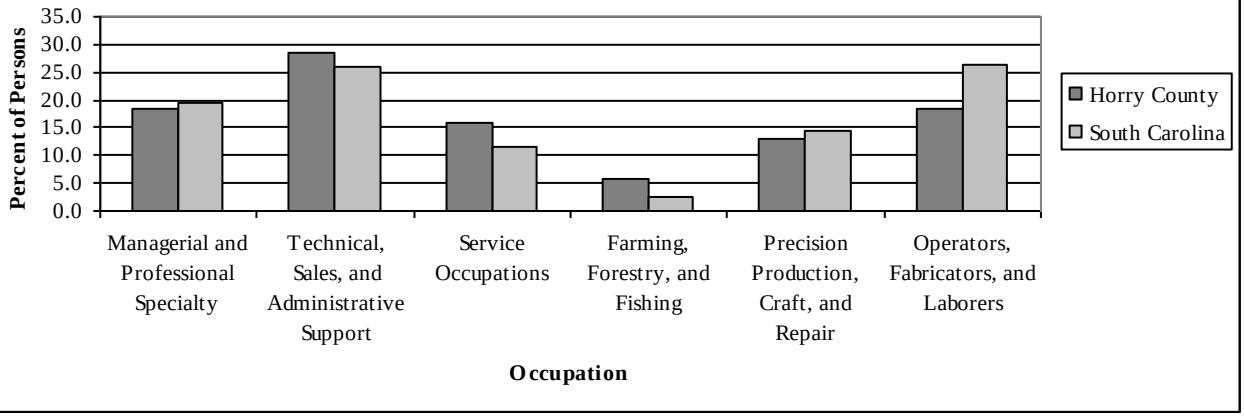
Some of the blue collar employment occupation categories showed Horry County having a smaller proportion of participation than the state, especially in the Operators, Fabricators, and Laborers category. The other categories were similar between Horry County and the state; however, the Farming, Fishing, and Forestry category was higher in Horry County.

Figure II-8: Total Employment by Occupational Classification - 1980



Source: U.S. Census Bureau, 1980

Figure II-9: Total Employment by Occupational Classification - 1990

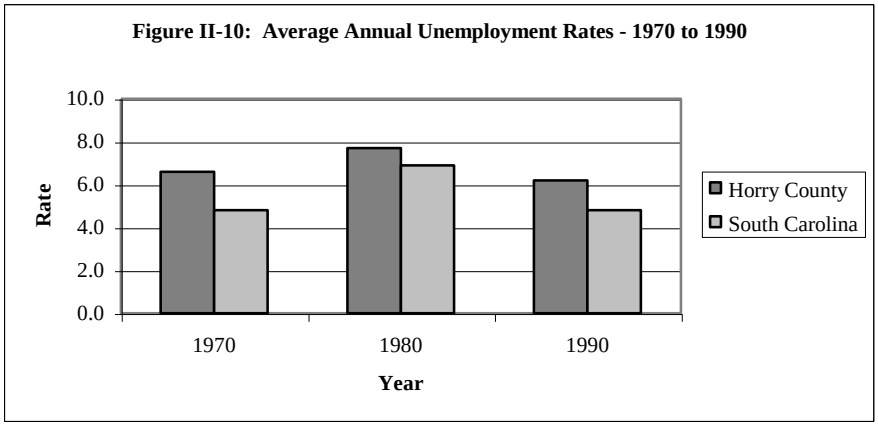


Source: U.S. Census Bureau, 1990

c. Unemployment Rates

The unemployment rate is calculated as the proportion of the civilian labor force that is currently unemployed. Persons not employed and not looking for work are not counted as in the labor force and are not counted as unemployed.

Figure II-10 illustrates how Horry County unemployment rates have compared with those of South Carolina since 1970, according to the South Carolina Employment Security Commission. Horry County's average annual unemployment rate has been consistently higher than South Carolina's. However, Horry County rates have generally paralleled state rates, with the highest unemployment rates occurring during the same time periods.



SC Employment Security Commission, Labor Market Information Division, 1970-1990

2. Employment In Horry County

This portion of the report focuses on the trends and characteristics of Horry County employees. This is different than the county's labor force described in the section above, as the employees of Horry County do not necessarily reside in the county. Moreover, the census data described above are a residence-based survey and does not visit workplaces.

a. Types of Employment

According to the data presented in Figure II-11, total non-government employment in Horry County was 56,850 in 1990, with the Trade Industry representing the largest percent (36 percent). The Services employment sector was the second largest at 27 percent.

Since 1970, non-government employment in Horry County has increased more than threefold. While the employment makeup of Horry County experienced little or no change from 1970 to 1980, more significant changes happened during the 1980 to 1990 period. The Trade sector and the Manufacturing sector showed the most change during this time, with the Trade Sector increasing by 8 percent and the Manufacturing Sector decreasing by 10 percent. Overall, from 1970 to 1990, job losses in the Manufacturing and Government sectors were replaced by jobs in the Trade and Services sector. While the Trade, Services, and Manufacturing sectors have either gained or lost jobs dramatically, the Government Sector has shown a steady decline in job numbers from 1970 to 1990. Figures II-12, II-13, and II-14 graphically depict employment change by sector for 1970, 1980, and 1990.

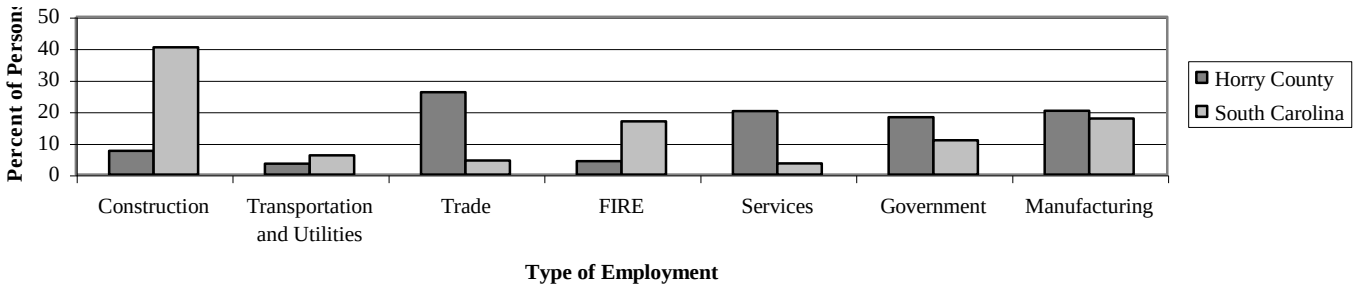
Figure II-11: Non-Agricultural Employment in Horry County and South Carolina, 1970-1990

Type of Employment	1970				1980			
	Horry County		South Carolina		Horry County		South Carolina	
	Number	%	Number	%	Number	%	Number	%
Construction	1,320	7.5	51,500	6.1	2,390	6.2	73,400	6.2
Transp. and Utilities	600	3.4	37,500	4.5	1,150	3.0	53,000	4.5
Trade	4,610	26.2	141,800	16.8	10,780	28.1	225,100	18.9
FIRE	760	4.3	29,700	3.5	1,720	4.5	47,700	4.0
Services	3,550	20.1	91,600	10.9	8,910	23.2	161,200	13.6
Government	3,210	18.2	149,900	17.8	6,140	16.0	236,400	19.9
Manufact.	3,570	20.3	340,000	40.4	7,300	19.0	391,900	33.0
Total	17,620	100.0	842,000	100.0	38,390	100.0	1,188,800	100.0

Source: SC Employment Security Commission, Labor Market Information Division

Type of Employment	1990			
	Horry County		South Carolina	
	Number	%	Number	%
Construction	3,700	5.7	103,800	6.7
Transp. and Utilities	1,800	2.8	66,900	4.3
Trade	23,090	35.6	348,500	22.6
FIRE	4,710	7.3	66,600	4.3
Services	17,750	27.4	293,800	19.0
Government	7,930	12.2	282,200	18.3
Manufact.	5,810	9.0	383,300	24.8
Total	64,780	100.0	1,545,000	100.0

Figure II-12: Non-Agricultural Employment by Sector - 1970

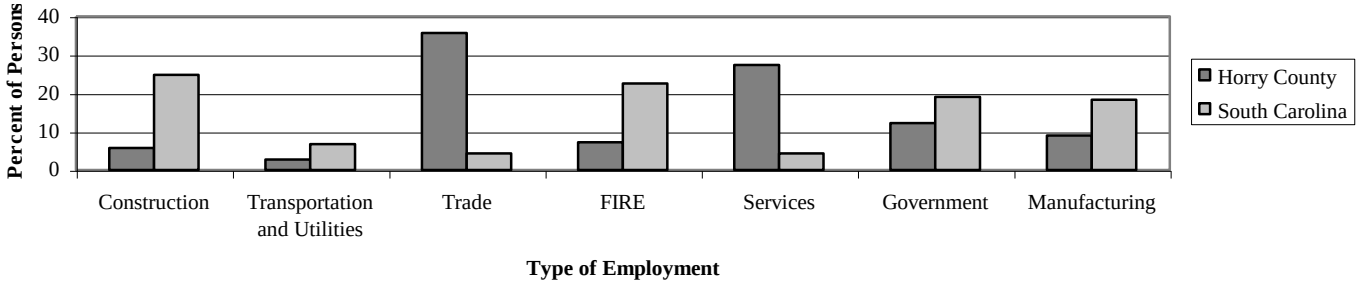


Source: U.S. Census Bureau, 1970

Figure II-13: Non-Agricultural Employment by Sector - 1980

Source: U.S. Census Bureau, 1980

Figure II-14: Non-Agricultural Employment by Sector - 1990



Source: U.S. Census Bureau, 1990

Figure II-15: Employment in Horry County and South Carolina, 1993 and 1995

	1993			1995		
	Horry County		**South Carolina**	**Horry County**		**South Carolina**
	Number	**%**	**%**	**Number**	**%**	**%**
Construction	3,223	5.5	6.9	4,772	7.0	6.9
Manufacturing	6,305	10.8	28.3	6,340	9.2	26.9
Transport & Utilities	1,813	3.1	4.7	1,978	2.9	4.7
Wholesale	1,782	3.0	4.6	2,160	3.2	4.9
Retail	20,894	35.7	21.4	24,821	36.3	21.9
FIRE	4,635	7.9	5.1	5,703	8.4	4.9
Services	19,532	33.3	28.1	21,994	32.2	28.9
Others	79	0.1		150	0.2	
TOTAL	**58,583**	**100**		**68,314**	**100**	

Source: County and State Business Patterns for 1993 and 1995 **(**http://www.gov/epcd/cbp**)**

Employment figures for Horry County and South Carolina for 1993 and 1995 reveal that the Manufacturing sector in Horry County is significantly less prevalent than in the state as a whole. On the other hand, the Retail sector accounts for a much greater proportion of jobs in Horry County than in South Carolina. The data also show significant differences occurring in the Finance Insurance and Real Estate (FIRE) sector and, to a lesser extent, the service sector.

Figure II-16: Job Growth in Horry County - 1993 and 1995

Sector	**Job Growth**	**Percentage of Total Job Growth**
Agricultural Services	76	0.8
Construction	1,549	16.0
Manufacturing	35	0.4
Transport and Utlitities	165	1.7
Wholesale	378	3.9
Retail	3,927	40.7
FIRE	1,068	11.0
Services	2,462	25.5
Total Job Growth	**9,660 Jobs**	**100 %**

Source: **(**http://www.gov/epcd/cbp**)**

Figure II-16 shows that five sectors accounted for over 97 percent of all job growth in Horry County: Construction, Wholesale, Retail, and Financial, Insurance, and Real Estate. The Retail and Services Sectors alone accounted for over 65 percent of all job growth. Horry County generated almost 5,000 net new jobs per year between 1993 and 1995.

Figure II –17 shows location quotients (LQs) for Horry County and South Carolina for non-agricultural sectors of the private economy. LQs highlight how the balance of employment in a local economy compares to the balance in employment in the wider region as a whole. The proportion of jobs in each local industrial sector is measured, as a ratio, against its equivalent sector at the regional level. If the local economy is similar to its regional economy, each sector's ratio should equal 1, plus or minus 0.15. Therefore, LQs of 0.85 or less, and LQs of 1.15 or more suggest disproportionately low or high job numbers within their respective sectors.

Figure II-17: Horry County Location Quotients and Average Annual Wages

SIC code	Sector	1993 Location Quotient	1995 Location Quotient	1996 Avg. Annual Wage
52	Retail	1.66	1.66	$13,520
5300	General merchandise stores	1.53	1.52	$13,052
5400	Food stores	1.17	1.18	$12,428
5600	Apparel and accessory stores	2.28	2.57	$13,416
5700	Furniture and furnishing stores	1.42	1.54	$20,384
5800	Eating and drinking places	2.21	2.12	$10,660
5900	Miscellaneous retail	1.42	1.32	$14,456
60	Finance, insurance and real estate	1.53	1.69	$21,268
70	Services	1.18	1.11	$17,888
7000	Hotels and other lodging	5.47	5.27	$14,716
7200	Personal services	1.07	0.79	$14,560
7300	Business services	0.64	0.56	$14,768
7800	Motion pictures	1.5	1.65	$10,296
7900	Amusement and rec. services	4.53	4.28	$13,728
8000	Health services	0.77	0.8	$30,576

NOTE: Does not include agriculture, forestry, or fishing.
Source: County and State Business patterns for 1993 and 1995 **(**http://www.gov/epcd/cbp**)**
South Carolina Employment Security Commission, Labor Market Information, 1996

For example, if a local industrial sector has an LQ lower than 0.85, it implies that the goods or services of that sector are being "imported" into the locale from somewhere else within the region. If, on the other hand, the LQ is greater than 1.15, the local economy is generating more than its share of regional jobs in that sector and is either "exporting" goods and services or is meeting very specific local market demands.

Horry County exhibits LQs greater than 1.15 mainly in the Retail, FIRE and Service sectors. In other words, it generates more than its expected share of South Carolina-based jobs in those sectors. Tourism is the most important economic driver in creating a disproportionately high number of jobs in general merchandise stores, apparel stores, eating and drinking places, and miscellaneous retail. Tourism also creates a substantial and disproportionately high number of jobs in the hotel and amusement sectors. The growth in residential and tourist-related real estate development has helped create a disproportionately high number of jobs in the construction, furniture, and furnishing stores and real estate and associated service sectors. Within the broader Services category, personal, business, and health service jobs appear to be underrepresented in Horry County.

Figure II-17 does not include the portion of Horry County's economy that relates to agriculture and forestry. However, it is important to note that agriculture accounted for approximately 396 of Horry County's 68,164 employees in 1995. Agriculture is a noted contributor to the economic base, as Horry County ranked first among South Carolina Counties in terms of market value of crops sold in 1997. The value of Horry County's tobacco ranked fourth among the 580 U.S. counties that produce tobacco.

Figure II-18 shows a more detailed look at Retail Trade and Services in Horry County. The Service and Retail Trades sectors accounted for almost 70 percent of the jobs in Horry County, in 1995. In Horry County, the City of Myrtle Beach is a major economic contributor, particularly in these two sectors. Myrtle Beach accounted for 49 percent of the retail establishments in Horry County in 1992, 54 percent of the County's retail employees, and 48 percent of its retail sales.

Figure II-18: Retail Trade and Services in Horry County and Myrtle Beach – 1992

	Establishments	Employees	Sales ($1,000)	Annual Payroll ($1,000)
Retail Trade				
Horry County	1,893	20,354	1,748,511	226,168
Myrtle Beach	934	11,119	844,784	117,776
Services				
Horry County	1,573	15,389	832,040	248,887
Myrtle Beach	800	9,548	515,226	148,171

Source: 1992 Economic Census

The importance of Myrtle Beach's economy is further emphasized when the Retail Trade and Service industries are analyzed (Figures II-6 and II-7). Myrtle Beach accounts for 50 percent of Horry County's Service establishments, 61 percent of its sales and 62 percent of its employees.

Particular sectors of Retail Trade provide the greatest number of jobs and turnover. The importance of the City of Myrtle Beach, however, varies from sector to sector. The contrast is greatest between food stores (SIC 54), and apparel and accessory stores (SIC 56). Myrtle Beach accounts for 71 percent of sales generated in Horry County's apparel and accessory stores, while providing about 36 percent of sales originating from food stores.

This apparent imbalance in the contribution of Myrtle Beach to the retail sector is a result of its preeminence as a resort town, where the need for convenience shopping is outweighed by the attractions of shopping for clothing and associated goods.

Figure II-19: Retail Trade Sectors in Horry County and Myrtle Beach – 1992

RETAIL TRADES	Establishments	Employees	Sales ($1,000)	Annual Payroll ($1,000)
General merchandise stores				
Horry County	46	2,011	215,342	21,863
Myrtle Beach	20	1,280	139,173	14,080
Food stores				
Horry County	152	2,410	305,354	29,050
Myrtle Beach	55	949	111,136	11,226
Apparel and accessory stores				
Horry County	317	1,999	203,826	23,107
Myrtle Beach	212	1,441	146,482	16,428
Eating & drinking places				
Horry County	614	9,617	329,787	84,134
Myrtle Beach	320	5,680	194,768	49,527

Source: 1992 Economic Census

Figure II-20: Service Sectors in Horry County and Myrtle Beach – 1992

SERVICE INDUSTRIES	Establishments	Employees	Sales ($1,000)	Annual Payroll ($1,000)
Hotels, houses and camps				
Horry County	308	5,509	293,466	65,273
Myrtle Beach	223	4,674	237,237	53,808
Personal services				
Horry County	136	667	20,514	7,251
Myrtle Beach	61	300	10,421	3,488
Business services				
Horry County	195	1,863	57,841	22,116
Myrtle Beach	101	1,065	37,188	14,028
Amusement services				
Horry County	222	2,525	151,335	35,005
Myrtle Beach	88	921	55,692	11,904
Health Services				
Horry County	231	2,449	170,614	70,564
Myrtle Beach	111	1,402	108,274	41,464

Source: 1992 Economic Census

In 1992, Myrtle Beach contributed substantially to Horry County's Service base. The city provided about 80 percent of the revenue generated by hotels and associated services (SIC 70) in Horry County, while 72 percent of those employed in that sector worked in Myrtle Beach. In contrast, the City of Myrtle Beach appears underrepresented in the Amusement services sector (SICs 78,79,84).

Figure II-21: Retail Trade and Services Comparison
Horry County, Myrtle Beach, South Carolina, and the United States

		$ Receipts per business establishment	$ Receipts per employee	$ Wages per employee
Retail Trades	Horry County	$923,672	$89,905	$11,112
	Myrtle Beach	$904,480	$75,977	$10,592
	South Carolina	$1,083,517	$93,744	$10,778
	United States	$1,241,555	$102,941	$12,107
Service Industries	Horry County	$528,951	$54,067	$16,172
	Myrtle Beach	$644,033	$53,962	$15,519
	South Carolina	$508,254	$46,919	$18,666
	United States	$658,809	$62,343	$23,468

Source: 1992 Economic Census

The business ratios in Figure II-21 focus on the two sectors that contributed the most jobs to Horry County. The higher receipts per retail trade establishment returned by South Carolina and the United States in 1992, reflected the increased influence of major urban areas, when compared with Horry County. The lowest receipts per retail establishment, returned by Myrtle Beach, may have reflected a greater proportion of seasonal trading and the more limited range of retailing, than would be experienced in a major urban area.

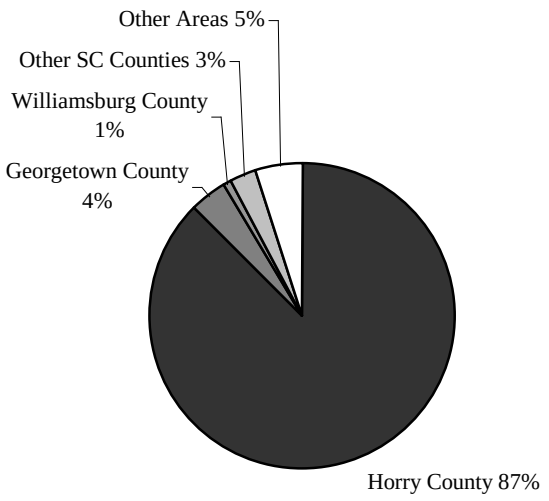
Lower-than-regional receipts per employee, as seen in the case of Myrtle Beach, would normally have inferred low sectoral productivity. It is more likely to have been the result of a wider range of smaller and more labor intensive retailing, as well as a prevalence of part-time employment. This latter factor appears to be supported by Myrtle Beach's low wage per employee.

In contrast to the retail trade ratios, the City of Myrtle Beach displayed a superior ratio of earnings per establishment when compared to Horry County. This was because hotels and other lodging, which returned higher-than-average receipts, dominated the service sector in Myrtle Beach. The greater reliance by hotels and lodging on part-time employment reduced the receipts and wages per employee to below-county ratios in Myrtle Beach.

c. Place of Residence of Employees

Figure II-22 presents the place of residence for employees of Horry County in 1990. The data indicates that the majority of the employees working in Horry County (87%), live in the county. Together, with Horry County, Georgetown and Williamsburg Counties comprise the Waccamaw Region. While Williamsburg County is not adjacent to Horry County, Georgetown County is, which may explain its larger percentage of persons working in Horry County.

Figure II-22: Place of Residence of Employees



Source: U.S. Census Bureau, 1990

3. Key Labor Force Observations

The Waccamaw Regional Planning and Development Council 1997 Population and Economy Study highlights the importance of the tourism industry to Horry County. The expansion in tourism in Horry County over the last ten years has resulted in a significant growth in net taxable retail sales, and a concentration of employees in the retail trade sector. Service industries have benefited, particularly the hotel and lodging sector, as well as the amusement industry sector. The construction industry has also grown in significance in Horry County, boosted by the underlying increased investment in tourism-related construction and the rebuilding necessary due to hurricane damage.

Horry County has a well-developed and established infrastructure of tourist facilities and services along the coast, that attracts visitors primarily from the Carolinas and Georgia. Recent promotional efforts of other coastal resorts by the State Department of Parks and Recreation, however, have reduced Horry County's share of the albeit larger number of state visitors.

Visitor numbers for Horry County have continued to rise in recent years, despite a falling share of the state tourism market and recent hurricane activity that resulted in some damage. The region appeals to a balanced demographic mix of individuals, couples, and families, mostly in the middle to upper income brackets. Attempts to lengthen the tourist season have centered on an expansion of non-beach attractions such a golf courses and the promotion of Myrtle Beach as a convention city.

Although retail and service industries dominate employment in Horry County, manufacturing industries produced $682.8 million of shipments in 1992, employed 6,300 people, and generated a payroll of $135.6 million. Thus, the future economic prospects for Horry County will depend to some extent on how effectively Myrtle Beach and its surrounding coastal communities respond to changing tourist demands, as well as the demographic changes of the U.S. population.

In addition, the attempts by Myrtle Beach to lengthen the tourist season by providing wider recreational diversity and convention targeting are important in creating a more sustainable local economy.

The graying of America will generate further demands on Horry County – as well as new opportunities. The post-World War II population boom created a demographic wave that has led to different demands on the national economy throughout the last 50 years. A subsequent decline in the birth rate has further strengthened the relative economic influence of the baby-boomers who have reached retirement and, as a group, have accumulated substantial financial spending power. Several political and economic trends have been associated with the baby boom phenomenon. The trend for seeking homes in coastal areas is one, and several popular coastal resorts have begun to experience an accelerating growth in their senior population, mostly through in-migration.

Horry County, like the majority of coastal counties, is likely to experience an increase in the demand for real estate from relatively affluent older single people and couples. Their demands on the local economy will vary from those of the younger residents and visitors to the coastal areas. Typically, an older more residentially settled population would lead to an increase in demand for food and convenience retailing, as well as personal and financial services, including health services.

As the demographics of coastal regions change as a result of in-migration by the baby boomer generation, it would be expected that because of increased age and wealth, workforce participation rates would begin to decline. This trend, in turn, could lead to the younger, more active, population from non-coastal communities becoming an increasingly important source of labor for the coastal areas.

This trend may affect Horry County, although its current population is more demographically balanced than other coastal communities. Furthermore, an influx of wealthier, older residents with demands for a new range of products and services, may attract current members of the population into the labor market by bidding up wage rates.

4. Employment Base

a. The Current Horry County Economy

Figure II –23 shows the ten largest employers in Horry County. These ten employers account for over 83 percent of all jobs among Horry County's major employers.

Figure II-23: Horry County's Ten Largest Employers

Employer	Number of Jobs
Horry County School District	3,312
AVX Corporation	2,223
Horry County Government	1,508
Ocean Dunes Resort	935[1]
Conway Hospital	825
Grand Strand Medical Center	820[1]
City of Myrtle Beach	700
Loris Hospital	608[1]
Kingston Plantation	600[1]
Uni-Blens Spinners	424
Total	**11,955**

Source: Horry County Finance Department, July 1998

NOTE:
(1) Peak Seasonal Employees

b. The Horry County Economy in the Future

The following job projections in Figures II-23 and II-24 draw on county and state business patterns (produced by the Census Bureau), South Carolina job projections issued by the Bureau of Economic Analysis (BEA), and the 1997 Population and Economy Study, prepared by the Regional Planning and Development Council of Waccamaw County.

The starting point for projecting jobs in Horry County was an analysis of new non-government jobs created in the county between 1993 and 1995. About 15 percent of South Carolina's new non-government jobs were created in Horry County during that period. It was assumed that between 1998 and 2020, Horry County would create a similar proportion of South Carolina's new jobs. BEA job projections highlight the different rates that each industrial sector within the state economy is expected to grow.

Manufacturing, for instance, has a significantly lower growth rate in jobs than Service industries. The following projection for Horry County takes into account this sensitivity and reflects the differential rates of growth that comprise the aggregate figure. The projection distributes new jobs in Horry County according to existing sectoral patterns.

Figure II-24: Total and Sectoral Job Projections for Horry County 1998-2020

Sector	***1993***	***1995***	**1998**	**2000**	**2005**	**2010**	**2015**	**2020**
Agriculture	*320*	*396*	650	800	1,200	1,550	1,750	1,900
Construction	*3,223*	*4,772*	6,000	6,750	8,200	9,450	10,200	10,700
Manufacturing	*6,305*	*6,340*	7,000	7,650	8,250	8,550	7,800	7,250
Transport	*1,813*	*1,978*	2,600	3,000	3,900	4,650	5,200	5,450
Wholesale	*1,782*	*2,160*	2,750	3,100	3,900	4,500	4,900	5,100
Retail	*20,894*	*24,821*	27,600	29,500	33,300	36,750	39,750	41,000
F.I.R.E.	*4,635*	*5,703*	6,600	7,200	8,600	9,750	10,700	11,200
Services	*19,532*	*21,994*	29,200	33,600	44,250	53,400	60,700	65,400
TOTAL	***58,504***	***68,164***	**82,400**	**91,600**	**111,600**	**128,600**	**141,000**	**148,000**

The shaded columns in Figure II-24 represent actual statistics taken from County Business Pattern Data, while the non-shaded columns are projected job totals (rounded). Data include part-time and full-time jobs, counted at workplaces employing four or more people. It cannot, therefore, be equated with the number of employees resident in Horry County, nor used to count the number of workers commuting into or out of the county.

Figure II-25: Projected New Jobs Per Period for Horry County 1998-2020

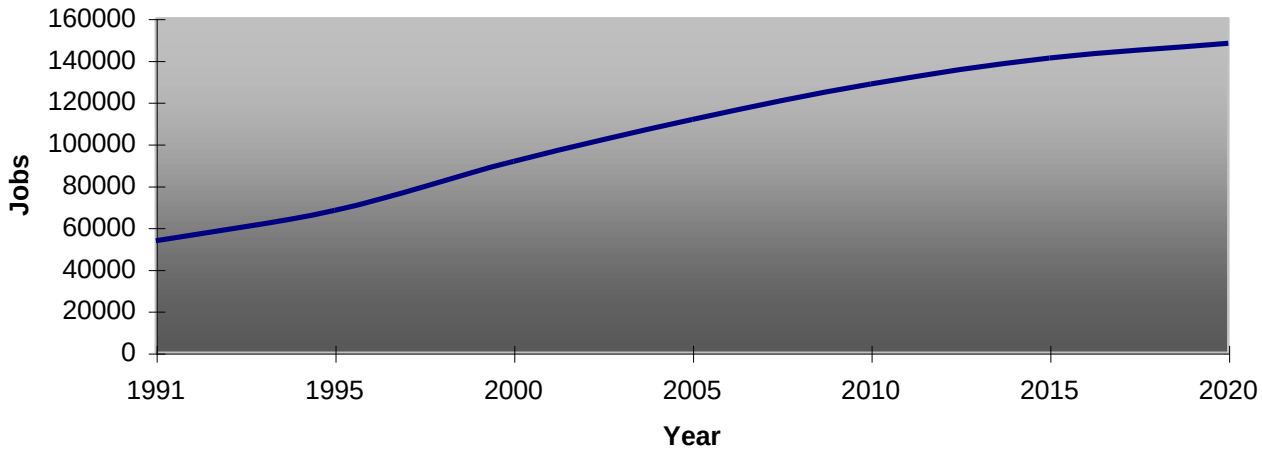
	1995-1998	**1998-2000**	**2000-2005**	**2005-2010**	**2010-2015**	**2015-2020**
Agriculture	254	150	400	350	200	150
Construction	1,228	750	1,450	1,250	750	500
Manufact.	660	650	600	300	-750	-550
Transport	622	400	900	750	550	250
Wholesale	590	350	800	600	400	200
Retail	2,779	1,900	3,800	3,450	3,000	1,250
F.I.R.E.	897	600	1,400	1,150	950	500
Services	7,206	4,400	10,650	9,150	7,300	4,700
TOTAL	**14,236**	**9,200**	**20,000**	**17,000**	**12,400**	**7,000**

The following job projections in Figures II-26 and II-27 draw on County and State Business Patterns (produced by the Census Bureau), South Carolina job projections issued by the Bureau of Economic Analysis (BEA), and the 1997 Population and Economy Study, prepared by the Regional Planning and Development Council of Waccamaw County.

Figure II-26: Total and Sectoral Job Projections for Horry County 1998-2020

	1993	***1995***	**1998**	**2000**	**2005**	**2010**	**2015**	**2020**
Agriculture	*320*	*396*	650	800	1,200	1,550	1,750	1,900
Construction	*3,223*	*4,772*	6,000	6,750	8,200	9,450	10,200	10,700
Manufacturing	*6,305*	*6,340*	7,000	7,650	8,250	8,550	7,800	7,250
Transport	*1,813*	*1,978*	2,600	3,000	3,900	4,650	5,200	5,450
Wholesale	*1,782*	*2,160*	2,750	3,100	3,900	4,500	4,900	5,100
Retail	*20,894*	*24,821*	27,600	29,500	33,300	36,750	39,750	41,000
F.I.R.E.	*4,635*	*5,703*	6,600	7,200	8,600	9,750	10,700	11,200
Services	*19,532*	*21,994*	29,200	33,600	44,250	53,400	60,700	65,400
TOTAL	***58,504***	***68,164***	**82,400**	**91,600**	**111,600**	**128,600**	**141,000**	**148,000**

Figure II-27: A Projection of Employment in Horry County



The shaded columns in Figure II-26 represent actual statistics taken from County Business Pattern Data, while non-shaded columns are projected job totals (rounded). Data include part-time and full-time jobs, counted at workplaces employing four or more people. It cannot, therefore, be equated with the number of employees resident in Horry County, nor used to count the number of workers commuting into or out of the county.

Figure II-28: Projected New Jobs Per Period for Horry County 1998-2020

	1995-1998	1998-2000	2000-2005	2005-2010	2010-2015	2015-2020
Agriculture Services	254	150	400	350	200	150
Construction	1,228	750	1,450	1,250	750	500
Manufacturing.	660	650	600	300	-750	-550
Transport & Utilities.	622	400	900	750	550	250
Wholesale	590	350	800	600	400	200
Retail	2,779	1,900	3,800	3,450	3,000	1,250
F.I.R.E.	897	600	1,400	1,150	950	500
Services	7,206	4,400	10,650	9,150	7,300	4,700
TOTAL	**14,236**	**9,200**	**20,000**	**17,000**	**12,400**	**7,000**

The BEA projection shows a continued net growth in jobs in South Carolina throughout the period leading up to 2020. The *rate* of growth, however, is expected to decline after 2005, which explains why Horry County is projected to create about 4,000 new jobs, net, between 2000 and 2005 and 3,400 net new jobs per year over the following five years. See Figure II-28.

Only the manufacturing sector is projected to show some decline, with a net decrease of about 150 jobs per year between 2010 and 2015 and a decrease of 110 jobs per year between 2015 and 2020. It is important, however, to emphasize that these relatively marginal figures could quite easily be reversed to show a net increase, should Horry county be successful in attracting one or two new manufacturing projects to the county, during the periods in question. The same argument applies, in reverse, to agricultural services. Small net job increases of between 30 and 80 jobs per annum are projected for this sector each year from 1998 to 2020. The marginal nature of these net changes is further emphasized when one compares job changes in the agricultural services and manufacturing sectors to the annual projected employment increase in the Services sector. Between 2000 and 2005, the Service sector in Horry County is projected to increase by 2,130 jobs per year on a net basis.

C. Key Findings

- Labor force participation rates for Horry County and South Carolina remained relatively unchanged between 1980 and 1990.
- During 1980 and 1990, Horry County had a slightly larger percentage of the labor force in Service occupations when compared to South Carolina.
- Horry County's average annual unemployment rate has been consistently higher than South Carolina's.
- Manufacturing sector in Horry County is significantly less prevalent than in the state as a whole.
- Tourism is the most important economic driver in creating a disproportionately high number of jobs in general merchandise stores, apparel stores, eating and drinking places, and miscellaneous retail.

D. Statement of Needs and Goals

The Horry County 1995 Comprehensive Plan presented a general framework in which emerging economic issues were identified and recommendations presented. The economic policies presented in 1995 were key considerations in the development of the needs and goals outlined in this updated element. The major policy areas addressed in the 1995 economic element are summarized below.

- Identify opportunities for economic development joint ventures and interlocal /regional cooperation.
- Continue to promote tourism and the location of clean industry in the county.
- Develop formal economic development material and financial assistance for prospective businesses.

The key observations presented in this element are an extension of the economic considerations that were identified in the 1995 Comprehensive Plan. These key observations highlight, the changing demographics, economy, and dramatic growth experienced in Horry County that have increased expectations and needs within the community. Many of the needs identified in this element are derived from stakeholder interviews and input gathered from the public workshops and are supported by findings in the existing conditions analysis.

Horry County is fortunate to have an established economic development function. In 1985, the Economic Development Board was formed and was later restructured in 1995 as a public-private partnership and renamed PARTNERS Economic Development. The needs and goals along with the implementation strategies presented in the following section are intended to support the efforts of PARTNERS – by reinforcing the county's efforts presented in the 1995 Comprehensive Plan and identifying program areas for potential expansion.

Economic Development Vision

To establish and implement strategies that support a sustainable economy through the creation of public-private partnerships, the diversification of markets, and the creation of higher wage jobs, while ensuring an attractive community and the protection of the natural resources of the county.

Need: Horry County is experiencing tremendous growth pressures which could adversely impact the quality of life and appearance of the built environment. In the future, it will take greater effort to maintain the image to which tourists and residents have grown accustomed. As a result, issues of visual clutter and planning practices that discourage strip development should be on a higher priority in the county's economic development strategy.

Goal 1: Encourage quality development of tourist-oriented facilities and residential development.

Need: The county should continue to promote Horry County as a family resort destination as well as support efforts to expand the tourist market.

Goal 2: Support efforts to lengthen the tourist season and expand the convention market in Horry County.

Need: As an effort to diversify the tourist economy, the county should target the non-traditional tourist base to include nature based tourism. This will provide the Horry County the opportunity to develop sustainable development strategies that combine protection of the natural environment and quality economic development.

Goal 3: In cooperation with local governments, actively pursue the promotion of eco-tourism in the county to include the development of "green ways" network throughout the county, and the continued maintenance of the ocean beachfront as a means of creating a balance between tourism and the county's sensitive environment.

Need: The county should address the needs of the service and retail trade labor force. It was noted in the public workshops and the existing conditions analysis that the service and retail trade sectors comprise the largest portion of the Horry County economy. These sectors usually consist of lower wage jobs. The lack of affordable housing and transportation alternatives were identified as pressing issues for this segment of the population.

Goal 4: Address labor force availability for Horry County through the development and coordination of specific affordable housing and transportation strategies.

Need: Horry County should take an active role in pursuing regional coordination of economic development. Participation in joint efforts would prove beneficial to the Horry County.

Goal 5: Establish stronger lines of communication with local governmental entities to encourage the development of a unified local and regional economic development effort.

Goal 6: Examine potential areas of economic diversification such as "clean industries" high technology, finance, insurance, and real estate that would not adversely impact the existing infrastructure and the county's natural resources.

Need: The county needs to ensure a work ready labor force for industries targeted for the county. Developing a quality workforce that can meet the demands of the 21st century and fulfill the needs of the businesses the county wishes to attract will require the development of a well prepared workforce.

Goal 7: Support an economic development program that will strengthen existing job readiness by promoting business-education partnerships and training opportunities within the Horry County community.

E. Implementation Strategies

The goals presented in the previous section are based on the future needs to promote a viable economy and protect the environment and the quality of life in the Horry County. The following implementation strategies present specific actions that should be taken by the county to support and achieve their goals.

1. Expand the economic development responsibility within the county.

- Strengthen linkages with the economic development community.

  As previously noted, the county has several entities public and private that have as their mission the economic development of the county. The county should continue its active role in coordinating the overall strategy for economic development with PARTNERS Economic Development.

- Promote growth in the local economy through regional coordination to selectively encourage industry sectors with higher annual salaries. According to 1995 South Carolina Employment Security Commission, Labor Market Information, some of these industry sectors include Engineering and Management Services, Communications, and Legal Services.

- Continue to support and develop a partnership with the City of Myrtle and other municipalities to address possible public transportation options for the county as they relate to helping the county address traffic congestion and lack of mobility east of the intracoastal waterway.

- Encourage the establishment of an economic forum through which the county's economic development strategies are shared with the greater public, local government, and private sector, representatives of the Horry County School system, and local colleges.

2. Continue to promote local initiatives that support the tourism industry in the county, encourage the expansion of the tourist market through the promotion of eco-tourism, and provide a high quality public environment.

- Coordinate with the Chambers of Commerce and Visitor Bureau to develop marketing strategies directed toward attracting nature-based tourism, and historic and cultural tourism to Horry County.

- Identify opportunities to develop open public spaces for the benefit of residents and visitors in the growing unincorporated areas of the county.

3. Work actively to promote a desirable environment necessary to attract and retain business and maintain a high quality of life.

- Use PARTNERS Economic Development and other local organizations and educational institutions to address the development of an economic database for the Horry County that provides an inventory of potential business development sites, identifies areas within the county suitable for cluster development of industries, highlights technical training programs that support local businesses and potential industries.

- The county economic data base should be coordinated with the Comprehensive Plan in order to encourage location of businesses to areas of the county where transportation, utilities, and other support services exist.

- Target industries should include Furniture and Furnishing stores, and Finance, Insurance, and Real Estate. These sectors have been identified as having higher average annual wages and substantial salary increases at the state-level from 1985-1995.

- Develop a commercial business recruitment program as part of the county's economic development strategy.

- Identify business development opportunities and strategies through the Division of Rural and Community Development and the Division of Research and Grants in the South Carolina Department of Commerce.

- Investigate as part of the county's economic strategy**;** developing and promoting the county as a center for light industry and promote technology and business parks that contain specific infrastructure requirements of 'clean industries'.

4. Promote and coordinate with local governments and private employers, efforts to link educational opportunities with economic development planning and job training.

- In cooperation with local educational institutions, i.e. high schools and technical colleges, encourage the development of job readiness programs and corporate training programs.

F. Benchmarks for a Sustainable Quality of Life

Benchmarks serve as quantitative indicators that when monitored on an annual basis can assist the county in determining its level of progress toward achieving the goals identified in the elements of the comprehensive plan. Positive trends can be promoted and reinforced while any emerging negative trends can be identified and proper steps taken to address the issue.

Develop baseline data for:

- Number of New Jobs Created in Finance, Insurance, Real Estate Sectors
- Number of Large Conventions (250 or more) Hosted on the Grand Strand
- Number of Annual Tourist Visits (including off-peak season)
- Number of New Businesses Recruited to the county
- Number of Business Start-ups Related to Eco-Tourism

III. NATURAL RESOURCES ELEMENT

A. Introduction

A community's natural environment, if properly protected, can greatly contribute to its social and economic prosperity. The Natural Resources Element demonstrates how the natural environment is not only a source of land for future urbanization but is also a set of resources to be conserved and maintained to achieve sustainable development. The challenge for the Natural Resources Element is to strike a working balance between a community's productive uses of land and natural resources, maintenance of ecological functions, and protection of people and property from natural hazards. The ultimate goal is community growth that is socially, economically, and environmentally sustainable.

B. Inventory and Analysis

The following provides an inventory and analysis of natural resources in Horry County. Several natural resource factors are considered, including slopes, soils, prime farmland and forestland, coastal resources, wetlands, floodplains, plant and animal habitat, and recreation and scenic views. These factors were analyzed according to various environmental suitability indicators to determine how future development in the county may affect natural resources. The information will provide a basis for several planning decisions within the comprehensive plan, especially those concerning the placement and allocation of future land uses.

1. Location

Horry County is in the eastern portion of South Carolina (Figure III-1). Its land area is approximately 1,160 square miles, or 741,300 acres. Its boundaries are North Carolina on the north and east; Georgetown County and the Atlantic Ocean on south; and Dillon, Marion, and Georgetown counties on the west. The Waccamaw River meanders along the southwestern part of the county. Its headwaters are in North Carolina and it empties into Winyah Bay in Georgetown County. The Lumber River, the Little Pee Dee River, and the Great Pee Dee River form the western boundary of Horry County. The Intracoastal Waterway cuts across the eastern portion of the county through the back swamps and behind the barrier dunes that form the Grand Strand beaches, a long, narrow area of smooth, sandy beaches bordering the Atlantic Ocean in Horry and neighboring Georgetown County.

2. Slopes and Soils

Slopes and soils are important considerations in local planning because they provide indicators of suitability and cost of developing particular sites. These characteristics directly influence the construction of buildings, highways, the installation of septic tanks, and agricultural activities, and thus have a profound effect on community development patterns. The most readily available source of soil information is the United States Department of Agriculture's (USDA) Soil Figure

III-1 – Location Map

Conservation Service (SCS) County Soil Survey. Typically, the data are used to identify such soil characteristics as prime agricultural or forestland, drainage capability, septic tank suitability, hydric soils, and such potential hazards as flooding or slope failure.

The topography of Horry County is generally level to gently sloping, with elevations ranging from sea level to over 100 feet. According to the soil survey, the majority of soils in Horry County range between 0 to 6 percent in slope. As such, slopes greater than 15 percent are not a prevalent development constraint in Horry County. The elliptical or oval depressions characteristic of South Carolina's Carolina bays are perhaps the only areas in Horry County where slopes exceed 6 percent. Most of the bays are aligned along a northwest-southeast axis parallel to one another in the central western portion of the county. Several of these bays are under State ownership and management as State Heritage Preserves.

The majority of soils in Horry County are loamy sand and sandy loam with generally poor drainage characteristics. Along the coast is a thin strip of soils with thick beds of level or dune sand, which provide better drainage. Consequently, poor soil drainage capacity and the lack of suitable land for septic tank absorption fields pose a potential threat to land development in rural Horry County. Avoiding intensive development in these areas may reduce stormwater drainage costs, soil erosion, water quality degradation, and public health concerns for groundwater.

The drainage capacity of soils is determined according to the intake of water when soils are thoroughly wet and receive precipitation from long-duration storms. Approximately 314,890 acres, or 43 percent, of the soil groups in Horry County have either high or medium to high run-off potential and, thus, poor drainage capacity and a slow infiltration rate (Figure III-2). These areas are found throughout the county but are concentrated near major rivers and streams. Areas of low run-off potential, which account for approximately 71,240 acres, or 10 percent, occur in soils adjacent to the Atlantic Ocean and in an area near the southeastern border of Georgetown County. These soils have a higher infiltration rate and better drainage capacity.

Approximately 651,620 acres, or 88 percent, of Horry County soils have severe limitations for septic tank absorption fields (Figure III-3). These areas are the least suitable for septic tanks and usually require special design, significant increases in construction costs, and increased maintenance. Approximately 50,810 acres, or 7 percent, of Horry County's total land area has moderate septic tank limitations (central and western portions of the county). Approximately 25,580 acres, or 4 percent, of the soils have slight septic tank limitations, and the majority of these soils are within incorporated areas paralleling the Atlantic Ocean. An area near the southeastern border of Georgetown County also has a concentration of soils with slight limitations. These areas are the most suitable locations for septic tanks.

Figure III-2 – Soil Drainage Capacity

Figure III-3 – Septic Tank Soil Suitability

3. Prime Agricultural

The USDA recognizes that prime farmland is of major importance in meeting short and long-range needs for food and fiber, and that high-quality farmland is limited and under increasing pressure from expanding development. Given these factors, it is critical for government at the Federal, State, and local levels to encourage and facilitate the wise use of prime farmland.

Prime agricultural soils are those soils best suited for producing food, feed, forage, fiber, and oilseed crops. Prime agricultural soils in Horry County account for approximately 200,090 acres, or 27 percent, of the total land area (See Figure III-4). Prime agricultural soils are distributed throughout Horry County, excluding soil groups found near the coast and to the east of the Great Pee Dee, Little Pee Dee, and Lumber rivers.

According to the 1995 Comprehensive Plan, Horry County experienced a decline in harvested acreage for soybeans, corn, wheat, and oats between 1980 and 1990. Accordingly, the amount of farmland declined by 16.9 percent and the number of farms declined by 37.3 percent. The majority of this decline is attributed to rising land prices, as more intensive uses replace agricultural uses. Horry County organized an Agricultural Task Force in 1993 to meet with staff and investigate the issues facing depleting agriculture in Horry County. The Task Force made several recommendations in an effort to preserve prime farmland in Horry County.

4. Prime Forestland

Forestry is a major land use in South Carolina, and the soil groups characteristic of Horry County are considered prime for forestland development. Forestlands provide one of the most varied and valuable natural resources, and, if properly managed, provide an excellent sample of sustainable development practices. Some of the values forestlands provide are:

- protection of both the quantity and quality of water supplies;
- outdoor recreational opportunities such as camping, hiking, picnicking, hunting, and bird watching;
- multiple uses while still supplying more than 5,000 products made from trees;
- habitat for a variety of wildlife, including both game and non-game species; and
- environmental quality by controlling noise, abating winds, preventing soil erosion, and providing scenic beauty.

Unfortunately, unmanaged and unregulated forestry operations can accelerate soil erosion and decrease the water quality in streams and rivers. The South Carolina Forestry Commission recently initiated a program to protect water quality in streams and rivers in 14 northeastern South Carolina counties. The program's emphasis is the prevention of non-point source pollution during harvesting operation and site preparation in the major river basins of the Pee Dee Region, such as Pee Dee, Little Pee Dee, Lynches, Black, and Waccamaw river basins, through South Carolina's Forestry Commission's Best Management Practices (BMPs). BMPs are guidelines that describe methods to prevent soil erosion from logging roads, skid trails, mechanical land clearing and other forestry operations.

Figure III-4 Prime Farmland

Since 1991, the Forestry Commission has monitored compliance with South Carolina's harvesting BMP's three times. BMP compliance was 84.5 percent in 1991, 85.7 percent in 1993, and 89.5 percent in 1994. The major problems noted in past surveys involve the design and construction of road stream crossings and the lack of use of buffers along streams.

Figure III-5 shows the soil productivity potential for forestland in Horry County. Approximately 705,230 acres, or 95 percent, of the soils in Horry County have either high or moderate soil productivity potential. A thick band of soil groups with high productivity potential run along the central portion of the county from the North Carolina border to the Little Pee Dee River. Landcover data to be added.

5. Coastal Resources

Horry County's coastal waters and associated habitat are a very dynamic ecosystem and an extremely valuable natural resource. Tidal marshes are highly productive components of the marine food web of coastal waters and estuaries. Many commercially and recreationally important fish and shellfish species depend on the marshlands and estuaries for all or part of their life cycle. In addition, many birds and other forms of wildlife use marsh and dune habitat for foraging and refuge.

Marshes also perform a valuable waste treatment function, as dense vegetation filters and traps sediments and pollutants that enter as run-off from the upland areas. Marsh and dune systems also protect adjacent highlands from erosion and storm damage. Marsh and dune vegetation absorb and dissipate wave energy and establish root systems that stabilize soils.

Coastal resources are also significant aesthetic, recreational, and educational assets to Horry County. Much of the expenditure for recreational and tourism in the South Carolina coastal zone is for purposes of enjoying outdoor activities and the aesthetic pleasures of undisturbed tideland areas.

The aesthetic and recreational value of natural resources increases land development pressures, especially in areas where these resources are most vulnerable. In 1994, the South Carolina Marine Resources Institute initiated the Tidal Creek Project (TCP), which addressed major pollution threats to tidal creeks from development of coastal watersheds and the cumulative impacts of watershed development on tidal creek habitats. The study approach was to compare conditions in tidal creeks draining pristine, undeveloped watersheds to conditions in creeks draining developed watersheds. Undeveloped watersheds were either predominantly forested and/or salt marsh, while developed creeks were selected to represent the major types of land use that occur in the South Carolina coastal zone: industrial, urban, suburban, and agriculture.

Most of the major pollution threats were found to relate to the amount of impervious surface in the watersheds the creeks drain; the more impervious surface in the watershed, the greater the magnitude of the impact. In the creeks studied, flow patterns were irreversibly altered and sediments contaminated with toxic chemicals to levels that cause harm to aquatic biota and stream morphology when the amount of impervious surface exceeded 30 percent. Scientists conducting similar research on freshwater streams and estuaries in other regions reached similar

Figure III-5 – Prime Forestland

conclusions about relationships between impervious surfaces. As such, the amount of impervious surface may be an indicator of watershed condition and a useful measure for determining the extent to which watersheds should be developed without causing harm to water quality and biological resources.

The South Carolina Office of Ocean and Coastal Resource Management (OCRM) is responsible for the protection and responsible development of South Carolina's coastal resources through the enforcement of the Coastal Zone Management Act. OCRM accomplishes this through a permitting and certification program that focuses on the protection of wetlands and coastal resources. The program is implemented through two regulatory devices. One is the direct permitting authority in "critical areas" of the coast. The other is the certification of all State and Federal permits in the eight coastal counties.

Critical areas are defined as coastal areas, tidelands, beaches, and dunes. OCRM is responsible for setting critical area lines delineating the limits of permitting authority, as well as acting on permit request. Many projects may also require a permit from the Army Corps of Engineers (Corps) as well as a 401-Water Quality Certificate from the South Carolina Department of Health and Environmental Control.

Projects requiring State or Federal permits within the eight coastal counties must also obtain a coastal zone consistency certification, a process which takes place automatically upon application of a State or Federal permit through an internal notification process. In addition, special categories of coastal resources are identified as Geographical Areas of Particular Concern (GAPC) and receive a higher level of protection. These include sites in the Heritage Trust Program, State Wildlife Preserves, State Parks, scenic rivers, marine and estuarine sanctuaries, shellfish areas, groundwater resources, threatened or endangered species habitat, State ports and navigation channels, mining operations, and areas of special historical, archaeological or cultural significance. OCRM is directed to consult with the appropriate State or Federal agency when addressing these issues.

6. Wetlands

Wetlands are generally lowlands covered with shallow water and/or saturated at or near the surface, and include both inland and coastal and fresh and saline environments. Wetlands serve numerous critical ecological, economic, and recreational functions:

- Critical breeding, nesting, and feeding habitats for many species of waterfowl, mammals, and reptiles.

- Water quality protection and enhancement by moderating surface runoff, recharging groundwater supplies, and trapping and removing sediments, nutrients, and chemical pollutants.

- Spawning and nursery grounds for many commercial fish and shellfish species.

- Flood hazard reduction by reducing the velocity of flowing water, absorbing and slowly releasing floodwaters, thereby lowering flood peaks.

- Recreational opportunities for bird watchers, hunters, canoeists, anglers, and others.

Typically, wetlands are defined by plants (hydrophytes), soils (hydric soils), or frequency of flooding. Figure III-6 defines wetlands according to USDA characteristics for hydric soils according to soil map units (soil map units may consist of more than one soil group). Approximately 396,550 acres, or 54 percent, of the soil map units within Horry County are 100 percent hydric (all soil groups found within the soil map unit have hydric characteristics). Approximately 270,850 acres, or 37 percent, are up to 30 percent hydric (30 percent of the soil groups within the soil map unit have hydric characteristics). Approximately 73,900 acres, or 10 percent, of the soil map units within Horry County are non-hydric.

Horry County also has over 300 Carolina bays, an unexplained phenomenon of the landscape of North and South Carolina. The elliptical or oval depressions characteristic of the Carolina bays usually fill with rainwater during winter and spring and dry during the summer months. When left in an unaltered condition, these bays are generally considered to be some type of temporary, isolated freshwater wetland. The bays provide many of the values associated with wetlands, including stormwater storage, water quality enhancement through biological processes, and habitat for many wildlife and plant species. Each bay may range in size from less than one acre to more than 1,000 acres. The Waccammaw River is the only river in the world to originate in and be fed by a Carolina bay. Fortunately, the state protects a large portion of these bays as State Heritage Preserves.

Another source of wetland data is the U.S Fish and Wildlife Service National Wetlands Inventory (NWI). NWI is currently working to complete digital wetland files for Horry County. These data files are either manually digitized or scanned from base copies of the 1:24,000 scale wetlands overlays registered by the standard U.S. Geological Survey (USGS) 7.5-minute quadrangles into topologically correct data files using Wetlands Analytical Mapping System (WAMS) software.

Given the nature of wetlands, wetlands maps are usually appropriate for planning purposes but not for determining actual regulatory boundaries. In fact, most regulatory programs require an on-site evaluation to locate precise wetland boundaries. Typically, this field investigation is undertaken by a soils scientist or wetlands biologists. Several communities impose wetland protection standards to manage wetlands delineated by the soil maps, pending delineation through site-specific investigations.

Figure III-6 – Hydric Soils

Despite growing appreciation of the value of wetlands and efforts to preserve them, wetland areas continue to be lost at a rapid rate, both from direct conversion and degradation. Federal, State and local governments have employed a variety of strategies to protect important wetland resources.

The principal Federal wetlands protection program is found in Section 404 of the Clean Water Act, which prohibits the discharge of materials into "the waters of the United States," including their adjacent wetlands, without a valid permit from the Corps. The Federal government also employs various non-regulatory tools for protecting and enhancing wetlands resources. Some of these include acquisition programs undertaken by various natural resource Federal agencies, funding programs to support State and local wetlands acquisition efforts, subsidy programs to help farmers not to cultivate wetlands, income tax incentives for charitable contributions of wetlands, conservation easements to qualified nonprofit and government agencies, and wetland restoration projects. At the State level, wetlands are considered "critical areas" by the OCRM and cannot be disturbed without a State permit.

7. Plant and Animal Habitat

The South Carolina Department of Natural Resources' Heritage Trust Program was created in 1976, the first such program in the nation. The program's purpose is to inventory, evaluate, and protect the elements considered the most outstanding representatives of our state heritage. The South Carolina Natural Heritage Program identified 3 plant and 4 animal species as either endangered or threatened and 44 plant and 4 animal species of concern occurring in Horry County (Figures III-7 through III-9). The largest concentrations of these species appear to occur in the following areas: southeast of Conway; near the coast between Myrtle Beach and Briarcliff Acres; and along the shorelines of the Waccamaw, Little Pee Dee, and Lumber rivers.

The Natural Heritage Trust Program is funded by appropriations, the Endangered Wildlife Fund, the Endangered Species License Plate, and by a small portion of revenue collected from the real estate documentary stamp tax. The income is deposited into the Heritage Land Trust Fund and used for acquisition of significant natural and cultural areas, or State Heritage Preserves. Currently, five State Heritage Preserves protect more than 24,000 acres of important natural and cultural areas throughout Horry County. The following presents a brief description of each preserve:

Cartwheel Bay – The property consists of 568 acres and contains over 200 acres of Carolina bays. The preserve is also the only known pine savanna-bay complex in the state. Venus' flytrap, two other rare plants, and nine native orchid species have been identified on the property.

Lewis Ocean Bay - The property consists of 9,343 acres and contains a group of 20 undisturbed Carolina bays. This preserve includes habitats for the black bear, the endangered red-cockaded woodpecker, the threatened Venus' flytrap, a rare Savannah milkweed, and a pond pine pocosin plant community.

Little Pee Dee – The property consists of 9,074 acres and provides protection for at least 17 miles of river frontage in Marion and Horry counties. Approximately 6,540 acres are within

Horry County. The preserve is composed of river, swamp, floodplain forest, nine different oxbow lakes, and linear dry sand ridges. The floodplain is covered by a mature forest composed of many trees 80 to 100 years old.

Waccamaw River – The property consists of 5,192 acres and is located in the Waccamaw River floodplain. The property contains the state's best example of the endangered plant species, dwarf fimbry. It also supports habitats for four other threatened plant species and contains a mature hardwood forest.

Ervin Dargan – The property consists of 2,405 acres and covers both sides of the Little Pee Dee River downstream from Galivants Ferry. This property was acquired to protect the rare sarvis holly, a mature floodplain forest, and scenic frontage along the Little Pee Dee River. The preserve includes Knife Island and four scenic oxbow lakes.

These Heritage Preserves also offer managed game hunting opportunities through a cooperative effort with the South Carolina Department of Natural Resources, the U.S. Forest Service, and private landowners as part of the South Carolina Wildlife Management Program. The Bucksport Wildlife Management Area, a 7,661-acre tract of land in the southeast corner of the county, provides additional managed hunting opportunities for wildlife enthusiasts.

Waccamaw National Wildlife Refuge

In addition to these state-owned preservation areas, the U.S. Fish and Wildlife Service (USFWS) proposes to establish the Waccamaw National Wildlife Refuge in the vicinity of the Great Pee Dee and Waccamaw rivers in Georgetown, Marion, and Horry counties, South Carolina (see Figure III-10). The USFWS is the primary Federal agency responsible for conserving, protecting, and enhancing the nation's fish and wildlife populations and their habitats. As part of their mission, the USFWS is proposing to acquire up to 49,800 acres along coastal floodplains of the Great Pee Dee and Waccamaw rivers between the cities of Georgetown and Conway. Its approximate location begins northeast of Georgetown on the Waccamaw River near the mouth of Butler Creek, and stretches north along the Great Pee Dee River past Sandy Island where it splits into two arms. One arm extends northeast along the Waccamaw River to Jackson Bluff, about 2 miles south of Conway; the other arm extends northwest along the Great Pee Dee just south of Highway 701 (See Figure – III-10).

The primary management objectives of the refuge would be to: (1) manage habitat for natural diversity of fish and wildlife; (2) protect and manage habitat for endangered species; (3) protect and manage nesting habitat for wood ducks; (4) protect and manage habitat for non-game migratory birds; (5) protect and manage wintering habitat for migratory waterfowl; and (6) provide opportunities for compatible environmental education, interpretation, and wildlife-dependent recreation.

Figure III-7 – Occurrence of Rare and Endangered Species

Figure III-8: Rare, Threatened, and Endangered Animal Species of Horry County

Scientific Name	Common Name	Status	# of Occurrences
Caretta Caretta	Loggerhead	FT	1
Clemmys Guttat	Spotted Turtle	SC	1
Elanoides Forficatus	Swallow-Tailed Kite	SE	1
Fundulus Diaphanus	Banded Killfish	SC	1
Mycteria Americana	Wood Stork	FE	1
Picoides Borealis	Red-Cockaded Woodpecker	FE	14
Pituophis Melanoeucus	Pine or Gopher Snake	SC	2
Sterna Antillarum	Least Tern	ST	5
Ursus Americanus	Black Bear	SC	1

Source: South Carolina Department of Natural Resources, Heritage Trust, 1998

FE = Federally Endangered
FT = Federally Threatened
ST = State Threatened (official state list - animals only)
SC = Of Concern, State

Figure III-9: Rare, Threatened, and Endangered Plant Species of Horry County

Scientific Name	Common Name	Status	# of Occurrences
Agalinis Aphlla	Coastal Plain False-Foxglove	SC	2
Agalinis Maritima	Salt-Marsh False-Foxglove	SC	1
Amaranthus Pumilus	Seabeach Amaranth	FT	5
Andropogon Mohrii	Broomsedge	SC	1
Anthaenantia Rufa	Purple Silkyscale	SC	2
Acclepias Pedicellata	Savannah Milkweed	RC	1
Aster Spectabilis	Showy Aster	SC	1
Balduina Uniflora	One-Flower Balduina	SC	7
Calamovilfa Brevipilis	Pine-Barrens Reed-Grass	NC	1
Calopogon Barbatus	Bearded Grass-Pink	SC	1
Carolina Bay	Carolina Bay		3
Chamaedaphne Calyculata	Leatherleaf	SC	1
Colonial Waterbird	Colonial Waterbird		11
Coreopsis Gladiata	Southeastern Tickseed	SC	1
Coreopsis Rosea	Rose Coreopsis	RC	2
Crotonopsis Linearis	Narrowleaf Rushfoil	SC	1

Figure III-9: Rare, Threatened, and Endangered Plant Species of Horry County (Continued)

Scientific Name	Common Name	Status	# of Occurrences
Dionaea Muscipula	Venus' Fly-Trap	RC	27
Echinodorus Parvulus	Dwarf Burhead	SC	5
Fimbristylis Perpusilla	Harper's Fimbristylis	NC	10
Helenium Brevifolium	Shortleaf Sneezeweed	RC	2
Helianthemum Georgianum	Georgia Frostweed	SC	3
Ilex Amelanchier	Sarvis Holly	SC	16
Isoetes Riparia	Riverbank QuillWort	SC	1
Lachnocaulon Beyrichianum	Southern Bog-Button	SC	1
Lechea Torreyi	Piedmon Pinweed	SC	1
Lilaeopsis Carolinensis	Carolina Lilaeopsis	NC	3
Lipocarpha Micrantha	Dwarf Bulrush	SC	7
Litsea Aestivalis	Pondspice	SC	3
Lygodium Palmatum	Climbing Fern	SC	1
Minuartia Godfreyi	Godfrey's Stitchwort	NC	1
Oxypolis Ternata	Piedmont Cowbane	SC	1
Parnassia Caroliniana	Carolina Grass-of-Parnassus	NC	3
Peltandra Sagittifolia	Spoon-Flower	SC	4
Physostegia Leptophylla	Slender-Leaved Dragon-Head	SC	6
Plantago Sparsiflora	Pineland Plantain	SC	1
Pteroglossaspis Ecristata	Crested Fringed Orchid	SC	1
Pyxidanthera Barbulata Var Barbulat	Well's Pyxie Moss	SC	5
Rhynchospora Oligantha	Few-Flowered Beaked-Rush	SC	1
Ruellia Pedunculata SSP Pinetorum	Stalked Wild Petunia	SC	1
Sabatia Bartramii	Bartram's Rose-Gentian	SC	1
Sabatia Kennedyana	Plymouth Gentian	RC	11
Sarracenia Rubra	Sweet Pitcher-Plant	SC	1
Schwalbea Americana	Chaffseed	FE	4
Scleria Baldwinii	Baldwin Nutrush	SC	1
Spiranthes Laciniata	Lace-Lip Ladies'-Tresses	SC	1
Sporobolus Teretifolius	Wire-Leaved Dropseed	SC	4
Stylisma Pickeringii Var Pickeringi	Pickerings' Morning-Glory	SC	2
Tofieldia Gladbra	White False-Asphodel	SC	1

Source: South Carolina Department of Natural Resources, Heritage Trust, 1998

FE = Federally Endangered
FT = Federally Threatened
NC = Of Concern, National (unofficial - plants only)
RC = Of Concern, Regional (unofficial - plants only)
SE = State Endangered (official state list - animals only)
ST = State Threatened (official state list - animals only)
SC = Of Concern, State

Insert Wildlife Refuge Map III-10

8. Parks and Recreation Areas

Parks and recreation areas contribute significantly to the quality of life in a community. Horry County's rapid growth and expanding urbanization have created a pressing need for additional parks and recreation areas. In 1998, Horry County established a County Recreation Department to lead in this endeavor. The Community Facilities Element provides a complete listing of the local park and recreational facilities managed by Horry County, which consist of approximately 348 acres of public parks and 31 acres of public boat landings.

There are no Federally owned parks or recreation facilities in Horry County. Myrtle Beach State Park, located 3 miles south of Myrtle Beach on U.S. 17, is one of the most popular parks in the South Carolina Park System. Facilities include cabins, camp sites, pool and ocean swimming, pier fishing, picnicking, and year-round nature and recreation programs. In addition, the four State Heritage Preserves located in Horry County are open for public educational and recreational uses during daylight hours in accordance with heritage preserve rules.

9. Scenic Views and Sites

The Cultural Resources Element discusses local initiatives to preserve scenic views and sites in Horry County. At the State level, the South Carolina Rivers Act of 1989 established the South Carolina Scenic Rivers Program to protect "unique or outstanding scenic, recreational, geologic, botanical, fish, wildlife, historic or cultural values" of selected rivers or river segments in the state. The goal of the program is the conservation of South Carolina's river heritage through the proper management of the natural and cultural character of the state's river corridor.

The basic method of river corridor protection is a cooperative, voluntary management program created by landowners, community interests, and the South Carolina Department of Natural Resources. The intent of the program is to bring landowners together to study the river and key river issues and to address these issues and management practices on lands bordering the river.

Fourteen miles of the Little Pee Dee River from Highway 378 to the confluence with the Great Pee Dee River was designated as a State Scenic River in March of 1990 by the Legislature. In November of 1997, Horry County Council approved a local initiative to designate the remaining upper portion of the Little Pee Dee River and the Lumber River as a State Scenic River. The expansion proposal was dismissed, however, due to opposition from neighboring Marion County Council.

The Little Pee Dee is one of the best remaining examples of a coastal plain blackwater river in South Carolina. The river is bordered by extensive cypress and tupelo swamplands, particularly below Highway 378 where the floodplain widens. Fishing and recreational boating are popular year round. Camping spots can be found on sand beaches and ridges along the river. There are currently 5 public access points on the portion of the Little Pee Dee that is designated as a State Scenic River.

10. Floodplains

Floodplains perform important natural functions, including temporary storage of floodwaters, moderation of peak flows, maintenance of water quality, groundwater recharge, and prevention of erosion. Floodplains also provide habitat for wildlife, recreational opportunities, and aesthetic benefits.

Horry County has both non-tidal and tidal floodplains, as well as coastal high hazard areas and coastal barrier resource areas. Approximately 177,070 acres, or 24 percent, of Horry County's total land area is composed of 100-year non-tidal and tidal floodplains. Approximately 3,090 acres, or 0.4 percent, of Horry County's total land area is composed of 100-year coastal high hazard area floodplains, and 2,520 of this classified as Coastal Barrier Resources Act areas. Figure III-11 provides the location for these areas according to preliminary Flood Insurance Rate Maps (FIRM) digital data files. The following is a description of each of these 100-year floodplain zones.

Nontidal floodplains– Areas consisting of the floodway and the floodway fringe along rivers and streams. The floodway carries the high velocity water, while the floodway fringe is subject to shallow flooding from the low velocity water. These areas are designated as **AE** or **A1-30** zones on the FIRM.

Tidal floodplains – Areas subject to coastal tidal flooding by high tides, hurricanes, tropical storms, and steady onshore winds. Tidal floodplains are also designated as **AE** or **A1-30** zones on the FIRM.

Coastal high hazard areas – Areas consisting of coastal shorelines subject to high velocity wind and wave action in addition to tidal flooding. They are designated as **VE** or **V1-30** zones on the FIRM. Buildings in these zones must meet stringent standards because of forces they must withstand.

Coastal Barrier Resource Areas – Areas situated along environmentally sensitive coastal barriers. Federal flood insurance is not available for structures in these areas.
The National Flood Insurance Program (NFIP) makes flood insurance available to property owners in participating communities. In return, local governments must adopt ordinances to manage development within 100-year floodplain to prevent increased flooding and minimize future flood damage. South Carolina's Department of Natural Resources, Land Resources and Conservation Districts Division serves as the State NFIP Coordinating Office, and cooperates with Federal Emergency Management Act to provide assistance to communities participating in the NFIP.

The NFIP requires participating communities to issue permits for all development in the 100-year floodplain. Development is broadly defined to include any man-made change to land, including grading, filling, dredging, extraction, storage, subdivision of land, and the construction or improvement of structures. If State and Federal permits are required, development may not begin until all necessary permits are issued. Proposed development must not increase flooding or create a dangerous situation during flooding, especially for adjacent or nearby property owners.

Local permit officials should work with applicants to avoid development in the floodplain whenever possible. If unavoidable, the effects of development must be minimized.

The Horry County Flood Damage Prevention and Control Ordinance establishes provisions for residential and non-residential construction in all areas of special flood hazard where base flood elevation data have been provided. New construction or substantial improvement of all buildings (or manufactured homes) shall have the lowest floor, including basement, elevated at least one foot above the base flood elevation. In addition, subdivisions shall be designed to minimize flood damage. In coastal high hazard areas, all buildings, excluding fishing piers, shall be located landward of the Coastal Council base line approved by the Coastal Council.

Figure III-11 – Horry County Flood Plain Areas

11. Environmental Sensitivity Analysis

Analysis of the development suitability of land is a useful step in land use planning. Land development suitability analyses incorporate a number of factors, including the environmental sensitivity of land, availability of adequate facilities, and population and economic forecasts. This process begins with preparation of a composite map that rates the environmental sensitivity of land based on all the previously described resources: soil drainage capacity, septic tank suitability, prime agricultural or forest land, hydric soils, and floodplains. It is important to note that this is a first stage analysis for determining land development suitability and is one of many land use planning tools available to help direct and guide development in the most suitable locations. Other land use variables, such as the amount of land necessary to sustain population and economic development, are introduced in the Land Use Element.

To depict the relative importance of avoiding or minimizing development in the more sensitive resource areas described above, a weighting system based on a 100-point scale was used. Resources that have the most unsuitable development constraints were assigned higher weights. Appendix Table A-1 lists the weights assigned to each resource. The environmental suitability map reflects those areas with the highest concentrations of these resources, or development constraints (Figure III-12).

Figure III-12: Environmental Suitability Map

C. Key Findings

- The majority of Horry County slopes range between 0 to 6 percent.
- Approximately 314,900 acres, or 43 percent, of the soils within Horry County have either high or medium to high run-off potential.
- Approximately 651,600 acres, or 88 percent, of the soils within Horry County have severe septic tank limitations.
- Approximately 73,900 acres, or 10 percent, of the soil map units within Horry County have non-hydric characteristics.
- Horry County has over 300 Carolina bays. These areas function as temporary, isolated freshwater wetlands when left in an unaltered condition. Over 200 acres of these bays are under State protection.
- Horry County's coastal waters and associated habitat provide an extremely valuable natural resource. SC Coastal Barrier Resource Act areas account for approximately 2,520 acres, or 0.3 percent, of Horry County's total land area.
- The SC Natural Heritage Preserve Program identified 3 plants and 4 animal species as either endangered or threatened and 44 plants and animal species of concern for Horry County.
- Currently 4 SC Heritage Preserves protect more than 21,640 acres of important natural and cultural resources throughout Horry County.
- Figure III-11 – Environmental Sensitivity Map
- In 1990 the SC Scenic Rivers Program designated 14 miles of the Little Pee Dee River as a State Scenic River.
- Approximately 177,070 acres, or 24 percent, of Horry County's total land area is composed of 100-year non-tidal and tidal floodplains.
- Approximately 3,090 acres, or 0.4 percent, of Horry County's total land area is composed of 100-year coastal high hazard area floodplains.

D. Statement of Needs and Goals

Natural Resources Vision

Promote the management of Horry County's natural environment in a manner that ensures balanced and sustainable growth and the preservation of environmental resources and open spaces for future generations.

Need: The rapid development and population growth in the county present many planning challenges. Residents and local officials recognize the need to address the impact of development on the county's vast natural systems utilizing critical area analysis.

Goal 1: Develop land management strategies that re-orient development patterns to complement the coastal plain landscape of Horry County.

Need: The county should continue to expand its mapping efforts to include a comprehensive inventory of natural resources.

Goal 2: Compile and maintain maps describing the natural resources of Horry County for use in suitability analysis to determine the intensity of future development.

Need: County residents have identified the need for increased education and coordination among agencies and local organizations regarding the conservation of natural resources.

Goal 3: Expand cooperative efforts with local governments and State agencies to establish conservation areas to protect the diversity of natural resources found in Horry County.

Need: Horry County is one of the most bio-diverse counties in South Carolina. In addition, the coastal waterways and associated habitats within Horry County are significant aesthetic and recreational resources. A complete inventory of these scenic resources is needed to conserve open spaces and the county's unique coastal plain environment.

Goal 4: Support county-wide programs with public/private sponsorship to designate and preserve scenic vistas.

Need: As the county continues to grow, the need to ensure the ecological value of its water bodies becomes a critical factor in maintaining the quality of life for residents and tourists.

Goal 5: Ensure water quality is maintained in Horry County through the protection and conservation of the natural function of wetlands and water bodies.

E. Implementation Strategies

The preservation and protection of natural resources is a priority of Horry County residents. The following implementation strategies provide specific actions that support the county's vision for a sustainable community.

1. Establish land management techniques that re-direct land use and development patterns away from urban sprawl patterns and promote the conservation of natural resources and sustainable development practices.

- Develop a county-wide mapped inventory of natural resources that identifies environmental constraints to future development. The inventory should identify natural features, environmentally sensitive areas, and other natural assets such as:

    - Stream corridors
    - Watersheds and wetlands
    - Viewsheds
    - Prime habitat
    - Wildlife corridors
    - Prime farmland
    - Open Spaces
    - Carolina Bays

    A current Natural Areas Inventory proposal outlined by the South Carolina Department of Natural Resources, Wildlife and Freshwater Fisheries Division, Wildlife Diversity Section, Natural Heritage Program, includes a three stage inventory process that would allocate funding for county–wide natural resource inventories. Horry County should work closely with the Natural Heritage Program to conduct a pilot resource inventory for Horry County. Under the three-stage process described below, Natural Heritage Program staff biologists could either conduct the inventory themselves or supervise work by contractors.

    Stage I. Collect and analyze existing public domain materials, including soil survey books, National Wetlands Inventory (NWI) maps, historical documents, and satellite imagery.
    Stage II. Incorporate Stage I analysis with low-altitude custom-flown aerial photography and videography of selected areas.
    Stage III. Incorporate Stage I and Stage II analysis combined with an on-the-ground evaluation of selected areas.

    The countywide Natural Areas Inventory would be used to identify tiered development suitability areas within the county such as development avoidance areas, conservation areas, and development nodes.

- Establish an environmental review process to determine the effects of subdivisions and rezonings to ensure mitigation of development impacts on natural resources.

- Establish a scenic vista program that identifies scenic viewsheds throughout the county and promotes the co-management of these areas by local community and conservation groups.

- Require a landscaped or forested visual buffer strip between new arterial roads and residential areas.

- Coordinate efforts with local governments, land owners, and conservancy groups to establish an urban forest management plan that promotes the county's reforestation goals.

2. Coordinate with local governments, non-profit organizations, and State Department of Health and Environmental Control to establish conservation areas and promote public awareness and education of Horry County natural resources.

- Expand County efforts to coordinate the designation of conservation areas.

- Promote and form partnerships with local non-profit organizations and conservation groups to secure grants and support environmental public education programs throughout the county with special emphasis within the county school system.

3. Establish incentive programs for landowners and developers to protect sensitive wildlife habitats and natural resources.

- Areas of 10 acres or more that are identified within conservation areas would be eligible for the incentives that could include:
    - conservation easements
    - property tax adjustments
    - density adjustments

4. Establish protection standards for water bodies and promote habitat preservation.

- Establish shoreline buffer areas along waterways and in tidal wetlands**.** Some of these areas could be placed in environmental easements.
- Identify and establish wildlife corridors within the county that create linkages between habitats.
- As part of the site review process, the county should require a site assessment of the impact of a project on listed wildlife and habitat.

5. Preserve air quality through the ongoing monitoring of air quality standards to identify areas that fall below State and Federal standards.

- Minimize the burning of yard and construction debris.
- Promote alternative modes of transportation to include the establishment of a mass transit system and greenway path network for Horry County.

F. Benchmarks for Sustainable Quality of Life

- Frequency of compliance with South Carolina Department of Health and Environmental Control (SCDHEC) water quality standards in the Pee Dee River Basin and tributary systems through the SCDHEC, Bureau of Water. A statewide Watershed Water Quality Management Strategy (WWQMS) exists for each of the five major basin groupings in South Carolina. Established water quality monitoring stations are used to study the water quality of each basin in five-year cycles.

- Frequency of official shellfish bed closures by the SCDHEC, Office of Ocean and Coastal Resource Management (OCRM).

- Acres of land purchased for natural resource preservation by private, local, State, and Federal agencies.

- Acres of land disturbed as monitored by OCRM.

IV. CULTURAL RESOURCES ELEMENT

A. Introduction

The Cultural Resources Element is an essential part of any local planning process, as it generates awareness and consideration for local community historical and archaeological heritage issues. This increased awareness and consideration works for the community in many ways. Moreover, many communities are realizing that through proper protection and awareness, cultural resource preservation can enhance the livability and distinctiveness of their community and, consequently, promote a greater sense of community roots and identity. In addition, communities are learning that the preservation and enhancement of cultural resources can provide substantial and direct social and economic benefits, some of which include historic revitalization, increased travel and tourism, and enhanced quality of life.

B. Inventory and Analysis

The following provides an inventory and analysis of the Federal, State, and local historic preservation efforts and the historic sites and structures and archaeological sites deemed significant by Horry County. These include historic and archaeological sites listed on the National Register of Historic Places, as well as sites that were identified as eligible for nomination. The information provided will help inform and educate Horry County about its rich historic and archaeological heritage and identify significant cultural resources that should receive special consideration in the comprehensive planning process.

1. Federal and State Historic Preservation Efforts

Horry County has experienced tremendous growth over the past three decades, some of which has jeopardized its historical and archaeological integrity. Recent advances in agriculture and industry, migration from rural to urban areas, and new development are some of the forces threatening the historical and architectural heritage. Private citizens and local government initiatives, coupled with Federal and State historic preservation laws and programs, are the best defenses for preserving these resources.

The Federal government exerts a powerful influence over both State and local historic preservation efforts. Important Federal laws and programs include:

- National Register of Historic Places;
- Department of Transportation Act of 1966;
- Archaeological Resources Protection Act of 1979;
- National Historic Preservation Act, Section 106 review process;
- Income tax credits for historic rehabilitation;
- National Park Service grant assistance for local preservation programs;
- Grant assistance under the Housing and Community Development Act of 1974; and
- National Environmental Policy Act.

The National Historic Preservation Act of 1966 (NHPA) is the principal Federal historic preservation statute. The NHPA institutionalized the National Register of Historic Places and created the Section 106 review process and the Advisory Council on Historic Preservation. In addition, the NHPA effectively provides the impetus for government historic preservation activity at all levels through the designation of the State Historic Preservation Office (SHPO).

The South Carolina SHPO was established in 1969 to implement the goals of the NHPA and is located in the South Carolina Department of Archives and History. The SHPO offers several programs to help local governments and private citizens identify, record, and preserve historic and prehistoric resources. Some of these programs include:

- Coordinating the Statewide Survey, which helps local governments and the SHPO identify and evaluate historic and prehistoric resources.

- Nominating significant historic and prehistoric resources to the National Register of Historic Places, which alerts individuals and communities to the value of their resources.

- Providing financial support for physical preservation projects and preservation planning and education and encouraging the rehabilitation of historic buildings through State and Federal tax incentive programs.

- Requiring consultation with the SHPO for planning projects that involve Federal funds and licenses and State permits and certifications.

- Administering the Certified Local Government (CLG) program, which allows local governments to participate in the preservation network and apply for Federal preservation grant funds set aside annually for CLGs.

Another important preservation statue is the Archaeological Resources Protection Act of 1979. Its primary purpose is to protect archaeological resources and sites on public and Indian lands, and to foster increased cooperation and exchange of information between governmental authorities, the professional archaeological community, and private individuals with collections of archaeological resources.

The South Carolina Institute for Archaeology and Anthropology maintains the South Carolina Archaeological Site File of all discovered archaeological sites. According to the South Carolina Institute for Archaeology and Anthropology, approximately 410 archaeological sites have been discovered in Horry County. The number of discoveries is considered low relative to other counties in South Carolina. The Federal and State regulatory compliance process was responsible for documenting approximately 95 percent of all the archaeological sites in Horry County. Unfortunately, the South Carolina Archaeological Site File is not available digitally; archaeological data are available on 7.5-minute USGS quadrangle maps and corresponding paper files or reports. The South Carolina Institute for Archaeology and Anthropology anticipates that site files will become more accessible at the County level in the future and, thus, more helpful for comprehensive planning purposes.

Figures IV-1 and IV-2 present the districts, sites, structures, and buildings designated by the United States Department of the Interior on the National Register of Historic Places. The incorporated area of Conway has the greatest concentration of sites. The Conway Downtown Historic District is a collection of 46 commercial buildings, two structures, and one public building that represent downtown development from 1900 to 1940. The Waccamaw River Warehouse District, also in Conway, represents the last existing warehouses (ca. 1880 to 1900) associated with the commercial trade on the Waccamaw River.

It is important to note that only those properties listed on the National Register of Historic Places have any type of protection, and that the protection offered is limited. Moreover, the National Register listings are used primarily to encourage national heritage preservation, and not to enforce or ensure preservation. In addition, National Register listings do not protect the properties from the effects of State or local projects unless Federal funding or a State permit or certification is involved. Ostensibly, the National Register program places no restrictions on properties that are listed – restrictive laws or ordinances under the jurisdiction of historical commissions, boards of architectural review, and zoning boards may apply, but these are established by State or local authorities.

2. Local Historic Preservation Efforts

Many communities have learned that while Federal and State influences on historic preservation offer important benefits, local community initiatives are necessary to maintain and enhance local cultural resources. As one of the first counties in South Carolina to become a CLG, Horry County is aware of the importance of integrating Federal, State and local historic preservation endeavors.

a. Horry County Board of Architectural Review

To better understand the county's historic resources, the Horry County Council enacted a Historic Preservation Ordinance in 1987. The ordinance established the Board of Architectural Review (BAR) and gave them the authority to review and recommend properties to the County Council for designation as a local historic property. Once designated, the board was charged with maintaining architectural governance over the property. Their most ambitious preservation project to date is the ongoing restoration of the Vereen Memorial Historical Gardens, a 114-acre tract of land on US 17 in Little River. A seven-member subcommittee of the Horry County BAR was created to assist the BAR in implementing the master plan for the renovation, development, protection, and maintenance of the Vereen Memorial Historical Gardens. The most recent renovation efforts involve refurbishing the Stone House, an historic house moved to the Gardens location as a county reception center and construction of a parking lot and boardwalk.

Figure IV-1: Horry County National Register of Historic Places

Name	Location	City	Type	Year
Waccamaw River Warehouse Historic District	Roughly Main St. between the Waccamaw River and Laurel St.	Conway	District	1890
Conway Downtown Historic District	Roughly bounded by Fourth Ave., Kingston St., Third Ave. and Laurel St.	Conway	District	1900 – 1940
Kingston Presbyterian Church Cemetery	800 Third Ave.	Conway	Site	1909
Waccamaw River Memorial Bridge	Main St. (US 501) over the Waccamaw River	Conway	Structure	1937
Ocean Forest Country Club	5609 Woodside Dr	Myrtle Beach	Building	1944
Ambrose, H. W., House	1503 Elm St.	Conway	Building	1926
Burroughs School	801 Main St.	Conway	Building	1905
Burroughs, Arthur M., House	500 Lakeside Dr	Conway	Building	1904
Holliday, J. W., Jr., House	701 Laurel St	Conway	Building	1910
Beaty--Spivey House	428 Kingston St.	Conway	Building	1870
Beaty--Little House	507 Main St.	Conway	Building	1904
Atlantic Coast Line Railroad Depot	N side of US 701	Conway	Building	1928
Winborne, W. H., House	1300 Sixth Ave.	Conway	Building	1925
Conway Methodist Church, 1898 and 1910 Sanctuaries	Fifth Ave.	Conway	Building	1910
Old Horry County Courthouse	Main St.	Conway	Building	1827
Quattlebaum, C. P., Office	903 Third Ave.	Conway	Building	1900
Quattlebaum, Paul, House	225 Kingston St.	Conway	Building	1911
Quattlebaum, C. P., House	219 Kingston St.	Conway	Building	1855
Buck's Upper Mill Farm	N of Bucksville	Bucksville	Building	1838
Hebron Church	10 mi. S of Conway off U.S. 701	Bucksville	Building	1855
Pleasant Inn	200 Broadway	Myrtle Beach	Building	1927
Chesterfield Inn	700 N. Ocean Blvd.	Myrtle Beach	Building	1946
Rainbow Court	405 Flagg St.	Myrtle Beach	Building	1935

Source: South Carolina Department of Archives and History, 1998

Figure IV–2: National Register of Historic Places in Horry County

b. Horry County Statewide Survey

In 1988, the South Carolina SHPO staff completed a statewide survey of Horry County. The survey identified historic resources by evaluating properties to determine their historical, architectural, and cultural significance. Historic properties surveyed included buildings, structures, and landscapes; archaeological resources were not surveyed. The 1988 survey identified 429 historical properties, and the BAR determined that approximately 100 of these properties warrant local or national designation. Appendix Table A-2 provides a complete list of these sites, many of which are located in the northern, eastern, and southern most portions of the county. Horry County also has several locations with a high concentration of historic properties, including the Socastee area, the Holliday Farms property in Galivants Ferry, and the Little River Business District.

Horry County's most recent historic preservation effort was the tax incentive program enacted by Horry County Council in 1997. The program allows the County to freeze property taxes for a period of two years for designated historic properties.

c. Horry County Cultural Arts Council

The Horry County Arts Council (HCAC) was established in 1986 and is a non-profit, umbrella organization that provides funding, support, assistance, and resource information to individuals and organizations involved with the visual, performing, and cultural arts in Horry County. Two overarching goals of the HCAC are to encourage and support the area arts organizations and individual artists by focusing special attention to under-served artists and improving the working relationships and communication channels to various levels of local governments and with the HCAC's arts constituencies.

HCAC past programs and services have been funded largely by monies from the South Carolina Arts Commission and the Horry County Accommodations Tax Advisory Committee. The following is a list of programs and services the HCAC provides for Horry County:

Programs
Artist-in-Education Program: provides opportunities for schools to enhance their curriculum and programs through direct interaction with professional, working artists.

Subgranting Program: provides funding for artists and arts organizations in Horry County.

Vivace: an annual festival that showcases Horry County artists and arts organizations in all disciplines at various settings along the Grand Strand.

Services
Art Council and Grant Workshops
1-800-868-ARTS
Quarterly Calendar Poster
Arts Alter Newsletter
Internet Homepage

HCAC is also in the process of developing a county-wide Artist Directory. A goal for 1998-1999 is to develop a county-wide Cultural Plan.

d. Other Cultural Resource Opportunities

There are other resources that may not be deemed significant by NHPA standards but that offer important cultural resources to an area. Some of these include libraries, museums, cemeteries, and cultural institutions. Other cultural facilities found within the incorporated and unincorporated areas of Horry County include:

- The Horry County Museum
- The Children's Museum of South Carolina
- The Franklin G. Burroughs-Simon B. Chapin Art Museum
- Theatre of the Republic
- Hobcaw Banny Visitor Center

C. Key Findings

- In 1987, Horry County Council enacted a Historic Preservation Ordinance that established the Horry County Board of Architectural Review (BAR) and the Certificate of Appropriateness.
- The BAR's duties include investigating and recommending to County Council properties or structures that have special historic, community, or architectural value and maintaining architectural governance over the properties designated by County Council.
- A 1988 State Historic Preservation Office (SHPO) Survey identified approximately 429 historic properties eligible for the National Register of Historic Places.
- To date, the BAR has determined that approximately 100 of the sites identified as eligible in the 1988 SHPO Survey warrant historic designation.
- Horry County has 21 Natural Register of Historic Places: 17 buildings, 1 structure, 1 site, and 2 districts. Most of these are located in the incorporated limits of the City of Conway.
- The SC Institute of Archaeology and Anthropology has identified approximately 410 archaeological sites in Horry County.
- In 1997, Horry County Council enacted a property tax incentive program for certified rehabilitation of significant historic structures, landmarks, sites, and districts for the unincorporated portions of Horry County.

D. Statement of Needs and Goals

The Board of Architectural Review has found it difficult to obtain local approval of the historical properties that warrant local or national designation. This prevents the board from fulfilling their duties set forth in the Historic Preservation Ordinance. To further the goals set forth in the 1987 Preservation Ordinance, Horry County is currently developing a Preservation Program. The vision of the program is to recognize the importance of Horry County's historic resources and promote both public and private stewardship of Horry County's heritage for the benefit of future generations.

Cultural Resources Vision

Horry County will promote its diverse cultural resources through the preservation of historic sites, landmarks, and historic traditions for the enjoyment and education of residents and visitors.

Need: Horry County needs to promote public and private stewardship of historic resources.

Goal 1: Promote the preservation and stewardship of Horry County's historic resources.

Need: The County's comprehensive planning process should incorporate the use of growth management strategies that encourage historic preservation.

Goal 2: Incorporate historic resource strategies into the long range planning and development process of Horry County.

Need: Horry County possesses a rich history and heritage that could benefit from more public education efforts to promote awareness of cultural resources.

Goal 3: Expand education efforts to promote awareness and understanding of Horry County's historic resources.

Need: Establish or improve working relationship and communication channels to various levels of local governments and with HCAC's art constituencies.

Goal 4: Promote attendance to all government meetings that may have an agenda relating to the arts.

E. Implementation Strategies

The Cultural Resources Element should serve as the document that coordinates or integrates preservation efforts with the Horry County land use programs. Moreover, Horry County must ensure compatibility between planning for historic preservation and zoning for historic preservation. Incompatible zoning can compromise the integrity of historic property or districts in many ways. It can allow incompatible uses or densities around historic properties and districts. Too much density can result in traffic congestion. Inadequate design standards in adjacent zones can detract from the integrity of the historic district. Zoning that allows high-density development in excess of the density of the existing structure can also encourage market pressure for demolition because the vacant lot may be more valuable than the lot with the building.

1. Develop an official historic preservation policy for adoption by the County Council.

- Many communities have adopted numerous growth management techniques to preserve local heritage as part of the planning process.

2. Complete a Horry County Cultural Resource Distribution list and provide ample notification for all State and local government meetings that may have an agenda relating to the arts.

3. Adopt the preservation strategy as part of the Comprehensive Plan and future updates.

- The following are some of the more promising planning tools that lend themselves to historic preservation goals.

Acquisition
"Fee-simple" land acquisition is the most direct and certain means of preserving historical resources. This is because one person owns all rights associated with the parcel, including the right to develop the parcel. As a result, fee simple acquisition provides a greater level of control over the use of the parcel, and thus a greater level of control for the qualified person or group acquiring the parcel. Fee simple acquisition, however, is the most expensive method of land acquisition. In addition to the substantial acquisition costs, fee simple acquisition, if made by the government, removes property entirely from local tax rolls and can result in significant maintenance costs.

Transfer of Development Rights (TDR)
The Transfer of Development Rights (TDR) provides an owner the opportunity to sell to another party the rights to develop the property. The landowner can protect historic resources by relinquishing their ability and, more importantly, the ability of future owners from further developing the property. It is important to note that selling the TDR does not affect the landowner's ability to use the land; it only prevents future development.

Easement Acquisition
Because fee simple land acquisition can be prohibitively expensive, easement acquisition is a particularly useful tool for local governments wanting to preserve historic sites. In most cases, a conservation easement requires that the owner of the parcel sign a legal agreement restricting the type and amount of development that may take place on a particular portion of their property. Easements may be purchased by a buyer but are typically tax-deductible donations, provided that the easement is perpetual and is donated exclusively for conservation purposes to a qualified conservation organization or public agency. Easements are permanent encumbrances on the property's deed. Easements do not have to cover the entire property, restrict development, or require public access.

Subdivision Regulation
Many communities have revised their subdivision regulations to encourage the preservation of historic districts and culturally significant landscapes. Communities have enacted waivers or special standards to encourage or require lot arrangement, street design and materials, sidewalk design and materials, and other development standards that are compatible with protection of local heritage.

Clustered Development Regulations
Cluster zoning allows for the flexible design and clustering of development to higher densities on portions of a parcel with the trade-off providing increased open space elsewhere on the parcel. Cluster development techniques typically do not allow increased overall development density, but simply rearrange development to preserve open land and improve site design.

Performance-Based Development Permitting Systems
Performance-Based Development authorizes a locality to evaluate the historic and cultural significance of each property as it is proposed for development or redevelopment. Some communities use a performance-based control system to require developers to conduct a site-specific historic survey and, if important resources are identified, to avoid or mitigate the negative impacts of the project on historic resources.

Building Code Revisions
Both the Building Officials and Code Administrators (BOCA) International Building Code and the Southern Building Code have amended their building codes to include special provisions for rehabilitation of landmark buildings. Local preservation advocates should educate local leaders and building code officials to the approach to landmark preservation taken by Building Officials and Code, linking preservation efforts to the local building code.

Local Tax Policies
Property taxes may be the largest single operating expense for owners of income-producing historic property. Local property tax policies can create a strong inducement for historic preservation. Property tax benefits can encourage historic preservation in numerous ways. Some of these benefits include reducing the incentive for landowners to demolish to reduce the property tax burden of an empty or underutilized building; reducing property taxes to reflect decreased property value resulting from historic preservation regulations or preservation easements; and encouraging renovation and reuse in return for tax concessions for renovated structures.

4. Develop a local award program for historic properties as a means of promoting stewardship and preservation.

- Continue to provide tax and financial incentives that promote historic preservation.

- Provide technical assistance to property owners that wish to rehabilitate historic properties.

F. Benchmarks for a Sustainable Quality of Life

- Number of sites eligible for the National Register of Historic Places according to the South Carolina Department of Archives and History, State Historic Preservation Office added to the Register.

- Number of annual local heritage events.

- Number of significant historic sites documented and added to the County's Architectural and Archaeological Sites Survey.

- Number of property owners receiving technical assistance or development incentives for historic preservation projects.

V. COMMUNITY FACILITIES ELEMENT

A. Introduction

The Community Facilities Element examines a wide range of activities essential to Horry County's growth and development. The element is divided into overall community facilities and a series of functional service areas - transportation, water and wastewater treatment, solid waste management, stormwater management, parks and recreation, public safety and emergency medical services, emergency preparedness, general government facilities, educational facilities, and libraries and cultural facilities. Within each functional section, the element presents an Inventory and Analysis that identifies current facilities and delivery arrangements and evaluates available capacity on the basis of desired levels of service and anticipated demand. Each element section then contains a Statement of Needs and Goals recognizing possible service deficiencies and establishing directions for facility improvement. The Implementation Strategies section that follows provides specific actions to advance the county's community facilities objectives.

The Community Facilities Element recommends more than the physical expansion of existing infrastructure. Facility planning decisions have a broad and cumulative impact, influencing the overall quality of life in a community. Infrastructure growth guides the timing and location of future development and enhances the ability to support and attract economic activity. Facility development that is integrated with land use planning preserves the natural landscape and promotes the aesthetic character of neighborhoods.

Infrastructure planning also links growth to adequate and sustainable funding sources, allowing the community to maintain quality service levels. The Needs and Goals and Implementation Strategies sections of the element focus on these interrelationships and identify opportunities to strengthen the county's economic, physical, environmental, and fiscal health through facility planning.

B. Overall Community Facilities

1. Inventory and Analysis

The following sections of this element identify specific level of service indicators for major county functions. These quantifiable performance benchmarks may be used to evaluate the existing capacity of the county's infrastructure and provide a general framework for anticipating where, when, and how community facilities may grow over the next 20 years.

2. Statement of Needs and Goals

Overall Community Facilities Vision

Provide for an adequate, sustainable, attractive, and efficiently managed network of facilities and infrastructure that will accommodate the present population, support continued growth, preserve the county's natural environment and promote desired patterns of development.

Need: With a rapidly growing population, the county is experiencing increasing demands on its current system of community facilities.

Goal 1: Ensure that all development is adequately supported by necessary infrastructure, particularly roads, schools, public safety protection, and a safe water supply.

Need: Inventory and analysis of community facilities reveals specific level of service deficiencies in major functional areas.

Goal 2: Develop specific action plans for each functional area reviewed under the Community Facilities Element of the comprehensive plan.

Need: Service delivery in Horry County is spread among a variety of local jurisdictions, independent authorities, special districts, and regulatory agencies directly involved in provision.

Goal 3: Promote intergovernmental coordination of community facilities expansion and development.

Need: The local government fiscal climate is constrained, with fewer traditional funding sources available for facility improvement and expansion.

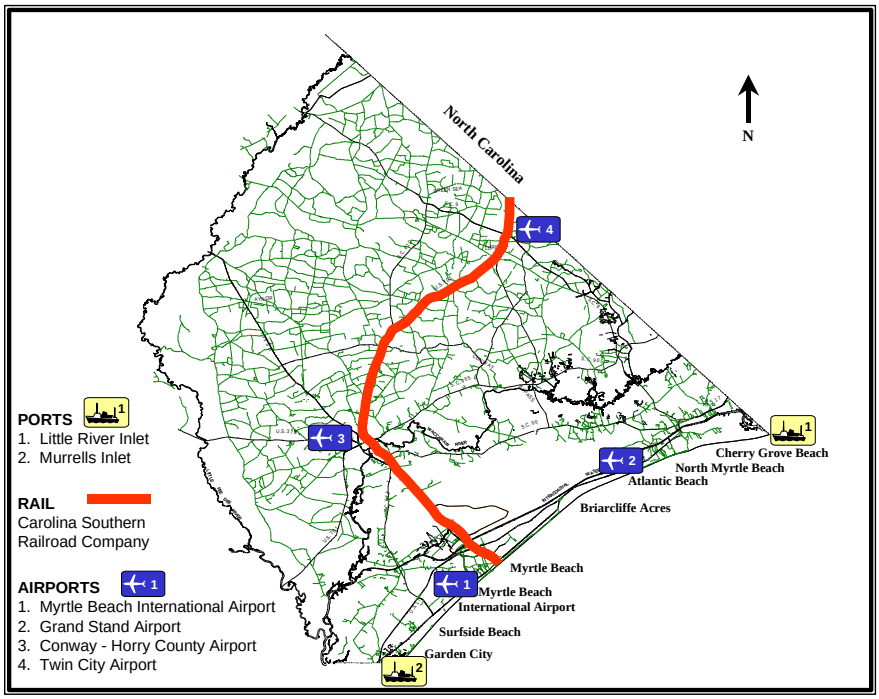
Goal 4: Link facility planning to stable, adequate, and equitable funding schemes and integrate community facility implementation strategies into a systematic Capital Improvements Program (CIP) process.

C. Transportation

1. Inventory and Analysis

This section addresses the existing transportation inventory and analysis. This element consists of all transportation modes (surface and air) within Horry County, as shown in Figure V-1.

Figure V-1: Horry County Transportation Facilities



Transportation planning is an essential component in the total process of the Horry County Comprehensive Plan Update. The efficient movement of people and goods must keep pace with the dynamic changes that will occur over the next 20 years throughout the county. From the point of view of present and future residents, tourists, and businesses, the ability to move easily from one area to another is of principal importance.

It is therefore necessary to examine the present (1998) transportation facilities and services to identify existing and potential transportation problems.

a. Functional Classification

Roads are roughly classified as arterial, collector, or local. They can be further classified as controlled access (freeways), limited access (expressways), or uncontrolled access. Each serves the conflicting requirements of mobility and access. A freeway provides the most mobility (and the highest speed), but does so with the least access. Entry is only allowed at very few points. On the other hand, a local street is designed to provide access. There are very few limits on the number of driveways and curb cuts, and speeds are low. This relationship is shown in the Figure V-2. Figure V-3 depicts the functional class for the Horry County road network.

Figure V-2: Concept of Functional Classification

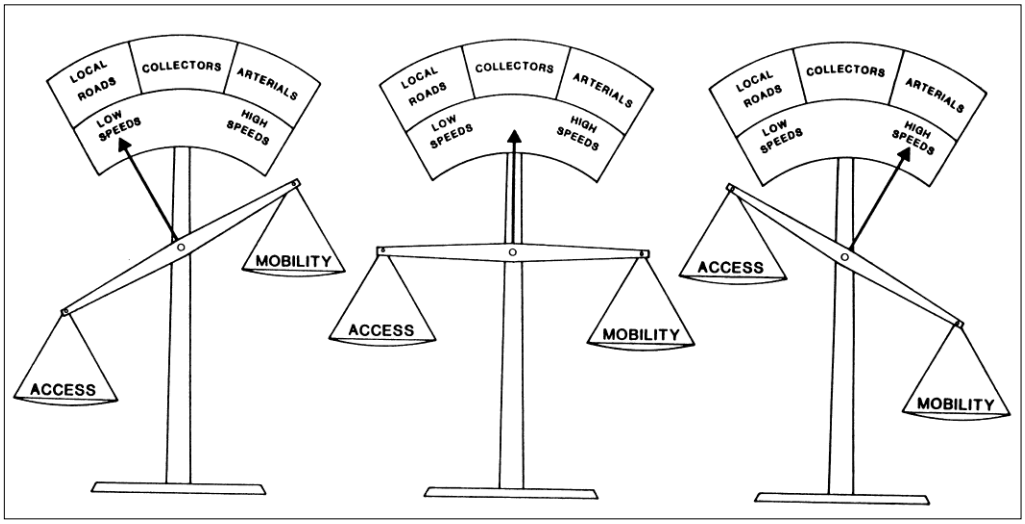


Figure V-3: Functional Classification for Horry County Road Network

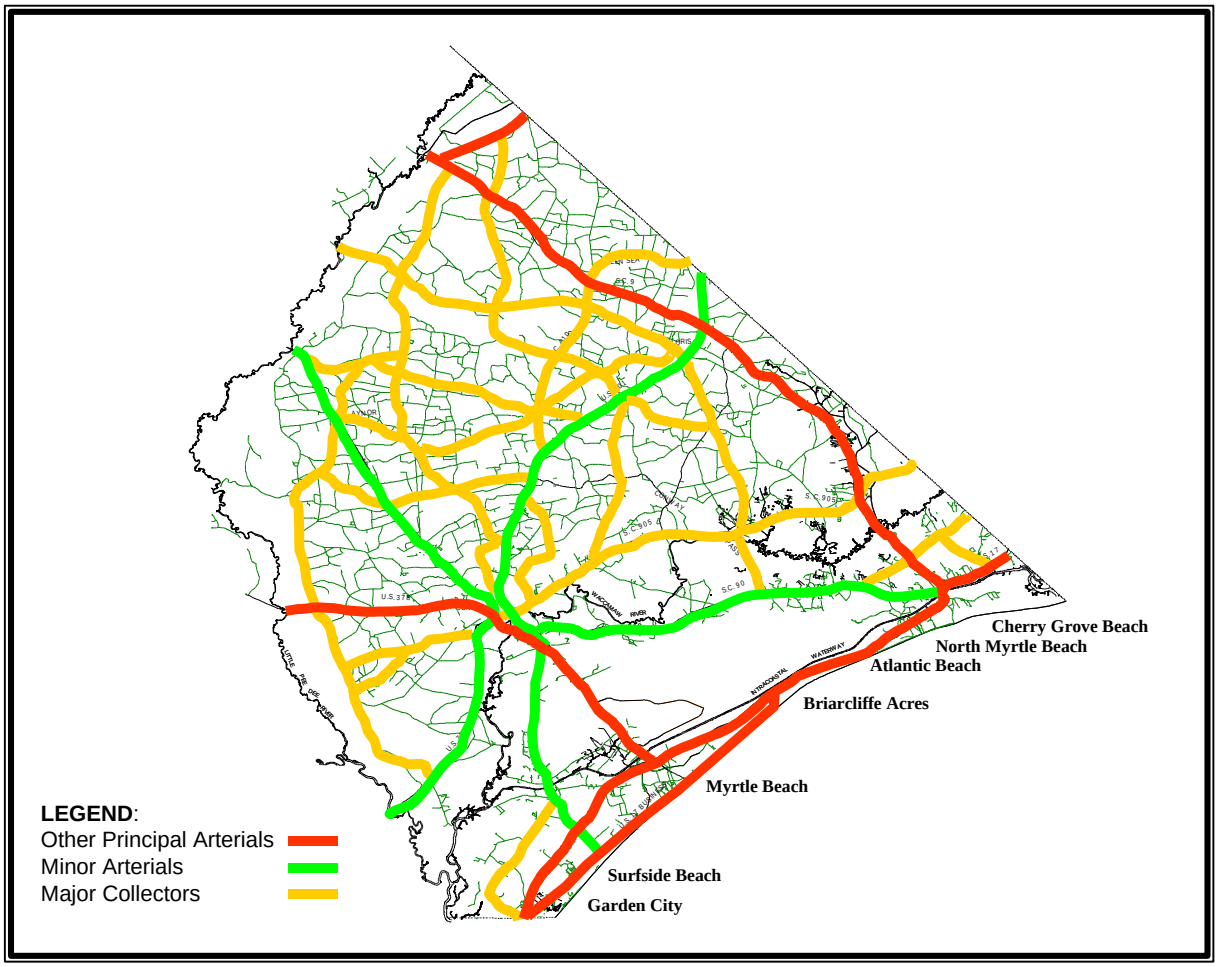


Figure V-4 shows the total miles and lane-miles for each functional class of roadway in Horry County.

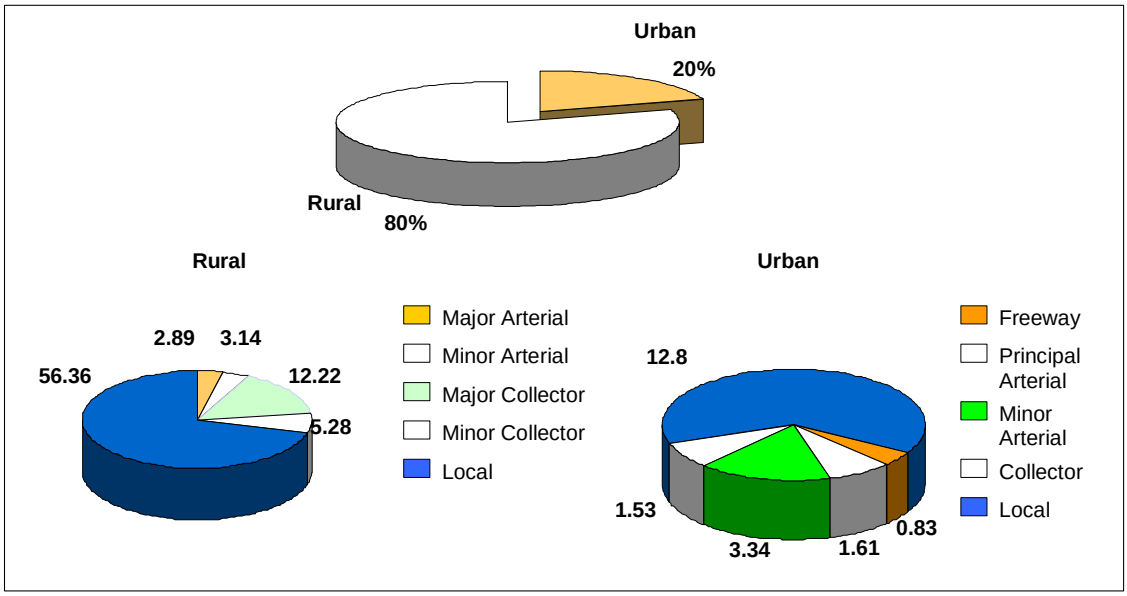
Figure V-4: Roadway Statistics for Horry County

	MILES								
	Number of Lanes								
FUNCTIONAL CLASS	**1**	**2**	**3**	**4**	**5**	**6**	**7 or 8**	**Total**	**% of Total**
Rural:									
Major Arterial		26		41		3		70	2.9
Minor Arterial		57		19				76	3.1
Major Collector		294		2				296	12.2
Minor Collector	3	125						128	5.3
Local		1,365						1,365	56.4
Subtotal	***3***	***1,867***		***62***		***3***		***1,935***	***79.9***
Urban:									
Freeway/Expressway				20				20	0.8
Principal Arterial				28		11		39	1.6
Minor Arterial		62		19				81	3.4
Collector		36		1				37	1.5
Local		309		1				310	12.8
Subtotal		***407***		***69***				***487***	***20.1***
Total	**3**	**2,274**	**0**	**131**	**0**	**14**	**0**	**2,422**	**100.0**
	LANE MILES								
	Number of Lanes								
FUNCTIONAL CLASS	**1**	**2**	**3**	**4**	**5**	**6**	**7 or 8**	Total	**% of Total**
Rural:									
Major Arterial		52		163		19		234	4.5
Minor Arterial		113		77				190	3.7
Major Collector		588		9				597	11.6
Minor Collector		250						250	4.8
Local		2,730		1				2,731	52.9
Subtotal		***3,733***		***250***		***19***		***4,002***	***77.5***
Urban:									
Freeway/Expressway	3			79				82	1.6
Principal Arterial				113	2	62	1	178	3.5
Minor Arterial		123		76				199	3.9
Collector		73		4				77	1.5
Local		618		5				623	12.1
Subtotal		***814***		***277***		***62***	***1***	***1,159***	***22.5***
Total	**3**	**4,547**	**0**	**527**	**2**	**81**	**1**	**5,161**	**100.0**

Source: SC Department of Transportation

The urban and rural systems consist of a network of routes with the service characteristics identified in Figure V-6. The rural routes constitute about 80 percent of Horry County's transportation network as shown in Figure V-5. Local routes account for the largest shares of highway miles in both rural and urban systems. While arterials and freeways account for only 11 percent of route miles, they account for over 17 percent of the lane miles and a still larger proportion of vehicles miles traveled in Horry County.

Figure V-5: Horry County Functional Class Composition by Miles



Source: SCDOT

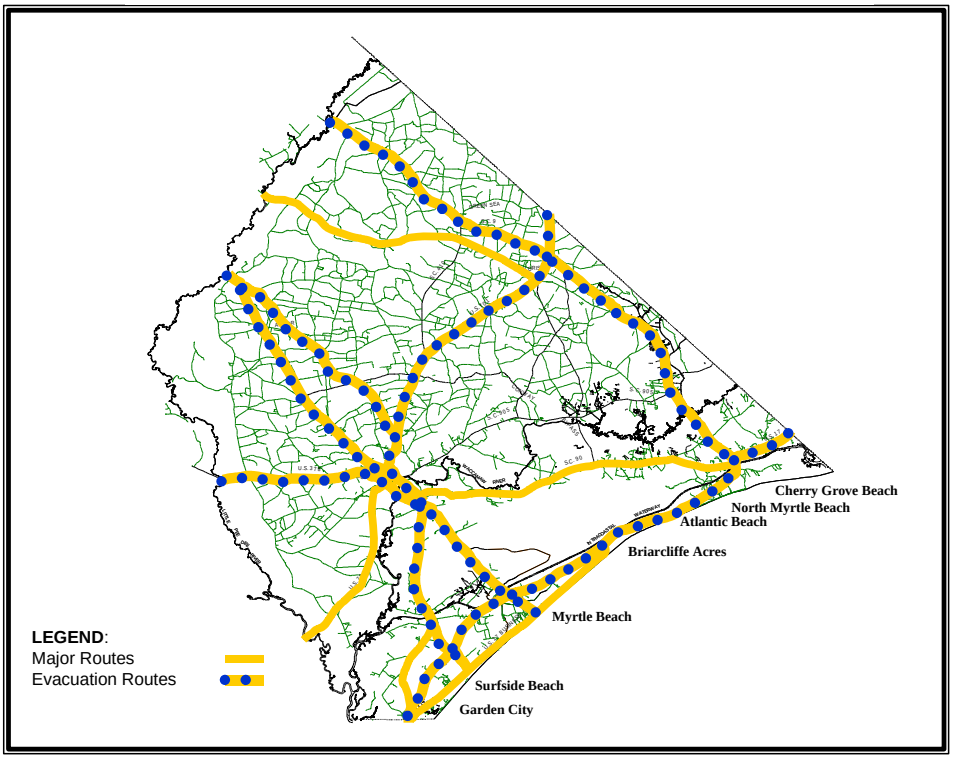
Figure V-6: Functional Classification Terminology

Rural Road System	
Major Arterial	• Corridor movement with trip length and density suitable for substantial statewide or interstate travel. • Movements between all, or virtually all, urban areas with populations over 50,000. • Integrated movements without stub connections except where unusual geographic or traffic flow conditions dictate otherwise (e.g., connections to coastal cities).
Minor Arterial	• Linkage of cities, larger towns, and other traffic generators (such as major resort areas) that are capable of attracting travel over similarly long distances. • Integrated interstate and intercounty service. • Internal spacing consistent with intercounty service. • Corridor movements consistent with trip lengths and travel densities greater than those predominantly served by rural collector or local systems.
Major Collector	• Serves county seats not on arterial routes, larger towns, not directly served by the higher systems, and other traffic generators of intracounty importance. • Links the county seats, larger towns and traffic generators with nearby larger towns or cities, or with routes of higher classification. • Serves the more important intracounty travel corridors.
Minor Collector	• Spaced at intervals consistent with population density to accumulate traffic from local roads and bring all developed areas within reasonable distances of collector roads. • Provides service to the remaining smaller communities.
Local Road System	• Provides access to land adjacent to the collector network and serves travel over relatively short distances.
Urban Road System	
Principal Arterial	• Serves the major centers of activity, highest traffic volume corridors, longest trips. • Carries most trips entering and leaving the urban area and through movements bypassing the central city. Also, significant intra-area travel such as between cities and between central business districts and outlying residential areas. • Most controlled access facilities are part of this functional class.
Minor Arterial	• Interconnects with and augments the urban principal arterial system, accommodates trips of moderate length and distributes travel to smaller geographic areas than the principal arterial system. • Provides intra-community continuity but does not penetrate neighborhoods.
Collector	• Provides both land access service and traffic circulation within residential neighborhoods and commercial and industrial areas, distributing trips from the arterials to ultimate destinations. • Collects traffic from local streets in neighborhoods and channels it into the arterial system.
Local Street	• All facilities not in higher systems and permitting direct access to abutting lands and connections to the higher order systems. • Service to through traffic movement is discouraged.

b. Roadway Corridors

Brief descriptions of all major routes serving Horry County are given in the following paragraphs and are shown in Figure V-7.

Figure V-7: Major Roadway Corridors and Evacuation Routes in Horry County



US 17 – This facility provides the spine on which the internal roadway network is built and runs the entire length of Horry County. It is a rural/suburban arterial in the extreme north, changing to an urban cross-section with two-way left turn lanes in North Myrtle Beach. The new segment, built as US 17 (Bypass) between Briarcliffe Acres and Murrells Inlet in the 1970s, is a limited access divided highway, but development in northwest Myrtle Beach has reduced speeds on this roadway. The portion south of US 501 to Murrells Inlet has been generally maintained as a limited access expressway. US 17 is a designated evacuation route.

US 17 Business – This facility called Kings Highway in the City of Myrtle Beach is the main north-south arterial in the built-up area. It is a six-lane divided road in the center of the city, with four-lane divided (raised median and two-way left turn lanes) segments in the north and south. The following roads provide east-west circulation: 3rd Avenue South; 10th, 21st, 29th, 38th, 48th, 62nd, 67th, 76th Avenues North; and 82nd Parkway. The land between is filled in by an irregular pattern of local and collector roads.

Ocean Boulevard runs continuously along the beach from the north end of Myrtle Beach to the main gate of the former Air Force Base. Although critical to Myrtle Beach's tourist industry, it only serves as a collector. Intensive retail and hotel development, along with heavy vehicular and pedestrian traffic, discourage long-distance travel.

SC 707 – This 10-mile facility is a potential reliever to US 17 (Bypass) for intermediate and long range north-south travel. SC 707 runs from US 17 (Bypass) at the former Air Force Base back gate through Socastee to US 17 (Bypass) at Murrells Inlet. The two-lane cross-section discourages longer distance travel, so it mainly serves to feed traffic to SC 544 and provide access to land between US 17 and the Intracoastal Waterway. The speed limit on this facility is 55 miles per hour (mph) in the rural areas.

SC 90 – One of the main north-south routes west of the Waterway. This facility runs from an intersection with SC 9 near the North Carolina State Line to Conway. This 22-mile roadway has a two-lane cross-section and good sight distance. Lane widths are 12 feet and the speed limit is 55 mph. Unlimited access and location away from most travel origins and destinations diminish its use for high speed, long-distance travel.

US 701 – This facility is also a main north-south route west of the Waterway and is a designated evacuation route. It extends from the North Carolina State Line through Loris to Conway and connects Conway to Georgetown. With the exception of a section between SC 319 and US 501 Business in Conway, which is four-lane, the rest of US 701 is two-lane. Speed limits range from 30 mph in the towns to 55 mph in rural areas. As with SC 90, this facility's unlimited access and location away from most travel origins and destinations diminish its use.

SC 544 – This 15-mile roadway between US 501 and 17 Business provides an alternative route to the coast from (but not bypassing) Conway to Surfside Beach. It is predominantly two lanes; however, a four-lane bridge has been completed over the Intracoastal Waterway near Socastee. The speed limit is 55 mph. This facility is a designated evacuation route.

SC 9 - Traversing the entire length of northern Horry County and running perpendicular to the coast, SC 9 is a major access route into Myrtle Beach. This facility is a two- to four-lane highway running from I-95 at Dillon to US 17 at North Myrtle Beach. A bypass is provided at Loris. The speed limit on this facility is 55 mph in rural areas; town speed limits range from 25 to 45 mph. This facility is a designated evacuation route and is so signed with evacuation markers.

US 501 – This facility is the dominant corridor of entry to the Myrtle Beach area. It extends approximately 42 miles, from SC 576 to the US 17 Business (Kings Highway), maintaining four lanes of traffic over this entire length. The roadway is divided by a grass median with the exception of segments through Rains, Aynor, and Conway. US 501 gradually changes to an undivided urban arterial as it nears its terminus in downtown Myrtle Beach. Lane widths are 12 feet and grass shoulder widths are approximately 8 to 10 feet. The speed limit is 55 mph, except through Rains (50 mph), Aynor (45 mph), Conway (35 mph), and Waccamaw Pottery (45 mph). The entire length of US 501 through Horry County is a designated evacuation route and is marked with evacuation trailblazer signs in the northern direction.

SC 917 – Running more or less parallel to SC 9, SC 917 travels about 20 miles from its junction with SC 41 in Mullins to SC 410 near Loris. This two-lane secondary highway has good sight distances and has a posted speed limit of 55 mph. A two-mile segment of SC 410 connects SC 917 to the SC 9 bypass around Loris.

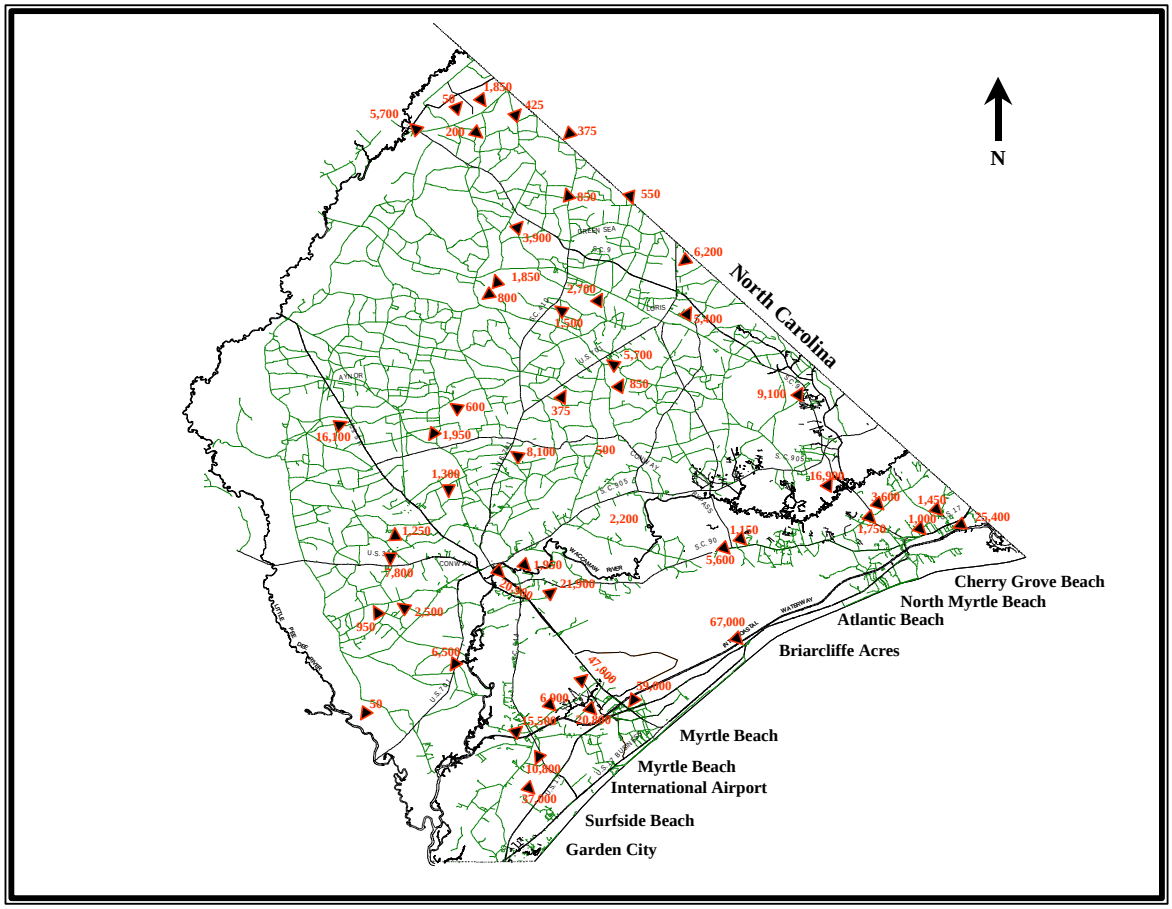
SC 319 – This two-lane highway spanning approximately 11 miles connecting US 701 to US 501 provides access to more rural areas of the county. Also, as a designated evacuation route it provides an alternative to US 501. The speed limit is 55 mph.

US 378 – Traffic is also drawn into Horry County from Sumter and Lake City via US 378. This facility is generally two-lanes from I-95 to Conway. The only two exceptions are a 5-mile stretch from I-95 to Tuberville and an approximate 3-mile section west of Conway. These two sections are four-lane. Lane widths are 12 feet, with 8 to 10 feet of grass shoulders. Speed limits are 55 mph except the towns through which US 378 runs. Lake City, the most populous city along this route, is bypassed to the north, thereby facilitating travel along US 370. US 378 is a designated hurricane evacuation route and is so marked with evacuation route marker in the westbound direction.

c. Traffic Volumes

Average Annual Daily Traffic (AADT) volumes were obtained from the South Carolina Department of Transportation for the latest year available (1997) and are presented in Figure V-8. Traffic volumes range from a high of 67,000 on US 17 in Myrtle Beach to a low of 50 vehicles per day on some of the rural roads.

Figure V-8: Average Annual (1997) Traffic Volumes in Horry County



d. Traffic Growth

The last 14 years of average annual traffic counts on Horry County roads were utilized in a traffic growth analysis and are presented in Figure V-9. The highest growth was recorded on US 17 at the North Carolina State Line - 8.7 percent growth per year. Once outside the influence area of Myrtle Beach, growth is more in the range of about 2.5 to 3 percent per year.

Figure V-9: Average Annual Traffic Counts in Horry County

Location	1983	1997	Percent Growth Over Last 14 Years	Average Compound Growth Rate Per Year
U.S. 17 at Welcome Center at NC State Line	7,900	25,400	222	8.70
S.C. 9 at Intracoastal Waterway	4,800	13,900	190	7.89
East of U.S. 76	2,800	3,900	39	2.40
U.S. 501 – West of Intracoastal Waterway	21,400	47,000	120	5.78
At Little Pee Dee River	11,000	16,100	46	2.76
S. C. 544 West of Socastee	8,800	15,500	76	4.13

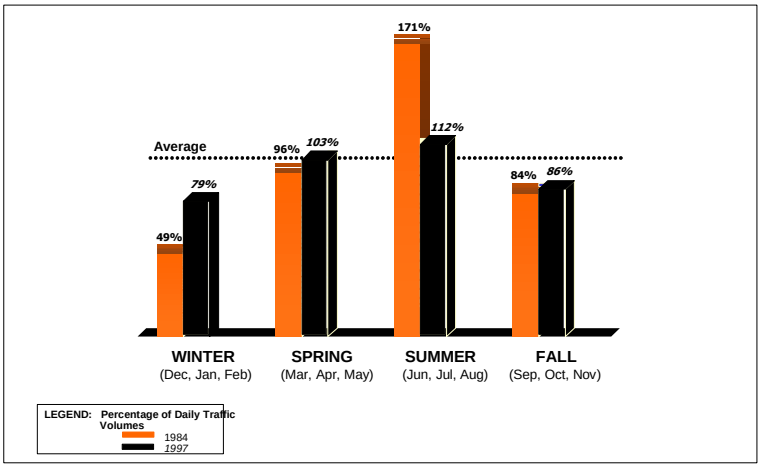
Source: SCDOT

e. Seasonal Variation

Seasonal fluctuations in traffic demand reflect the social and economic activity of the area being served by the highway network. Characteristic variations of the seasonal pattern of traffic flow are shown in Figure V-10, as well as a comparison of the 1983–1997 variations.

Typically, midwinter has the lowest volumes of traffic movement and midsummer generates maximum volumes. A typical variation shows January or February traffic only 70 percent of the annual average and July or August traffic about 130 percent of the average. May, June, October, and November volumes are usually close to the annual average.

Figure V-10: Horry County Seasonal Traffic Variation



Source: SCDOT 1997 Control Counts

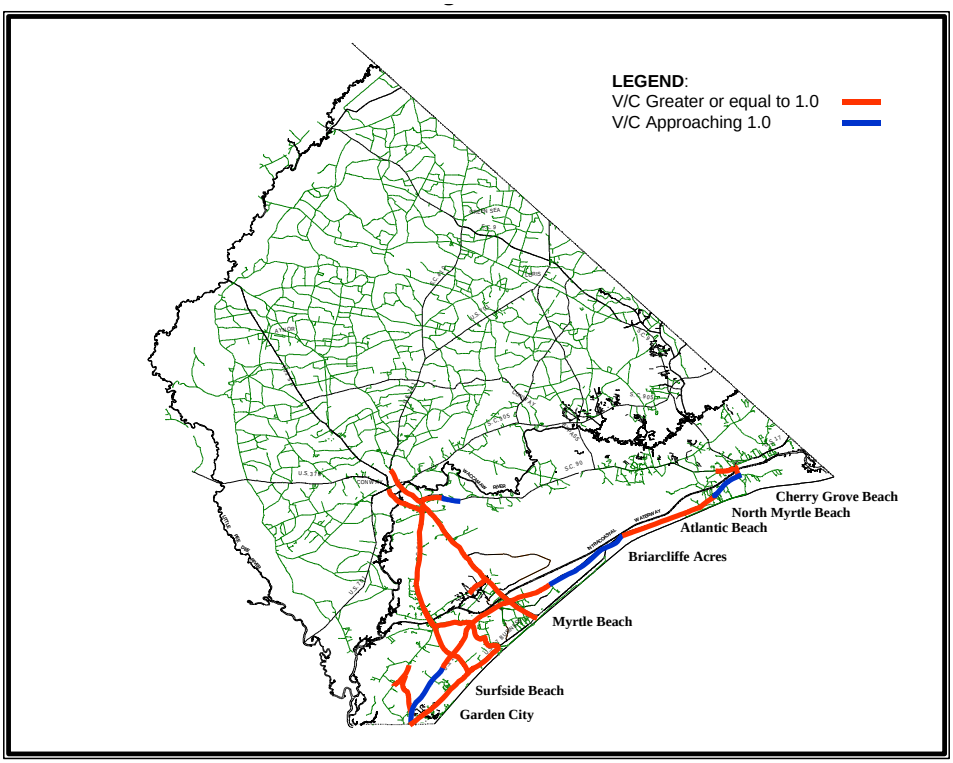
As seen in Figure V-10, the variation of traffic in Horry County generally follows the above-generalized relationship for both years depicted. However, in 1984 summer traffic was about 1.7 times higher than the average month. This is indicative of tourist areas. In 1997, summer traffic was only about 1.12 times the average while the other seasons were all somewhat higher than in 1984. This would indicate that the area is attracting traffic more evenly throughout the year rather than during the summer months alone. The increase in resident population in the county will also contribute to more even distribution of traffic volumes throughout the year.

f. Volume Capacity Ratios

To determine deficiencies within the roadway network, the Grand Strand Area Transportation Study (GSATS) Model was used with the year 2000 volumes. These volumes closely approximate conditions in 1998.

Long queues and delays at key intersections along the coast are testimony to current unacceptable traffic conditions. Congestion occurs not only in the primary destination areas near the coast, but also on key roadways such as US 501 and SC 544 that serve as gateways to the area. These conditions can be expressed in terms of a volume-to-capacity (V/C) ratio. A V/C ratio of less than 1.0 represents acceptable, stable conditions. A ratio of 1.0 or greater represents unstable flow or worse conditions. Results of traffic analysis are graphically depicted in Figure V-11.

Figure V-11: Traffic Conditions in Horry County, 2000



As shown in Figure V-11, most major facilities are operating over capacity or near capacity. Both US 17 (Bypass) and US 17 Business are operating over capacity today. Even SC 707, which is a potential reliever to US 17 (Bypass) for north-south travel, is congested. With the two major access routes of SC 544 and US 501 over capacity, long queues are common place during an average summer day as visitors and residents try to move through the area. Conway serves as

the gateway to the central Grand Strand Area. Traffic arriving from the west on US 501 and US 378 passes through residential and commercial districts on various divided and undivided four- and two-lane roads. These roads, and especially their critical intersections, get very congested during peak periods. Virtually all beach traffic is funneled through the narrow Church Street-Wright Blvd (US 501/378) intersection.

g. Hurricane Evacuation Volume Implication

Horry County, like all municipalities along the Gulf Coast and Eastern Seaboard, is extremely vulnerable to high winds and storm surges associated with hurricanes. In the interest of personal safety, coastal communities typically prepare evacuation plans to apply under the threat of severe weather.

Many factors affect the amount of time required to evacuate a community during an emergency, such as the transportation system available to serve the evacuation plan. Horry County has three major evacuation routes: SC 9, US 501, and SC 17. Routes US 378, SC 544, and SC 319 are also marked as evacuation routes and support the three major routes. Existing conditions along US 17, SC 544, and SC 501 are already over capacity.

To determine the impact of additional volumes on the existing network, traffic counts were obtained from the South Carolina Department of Transportation during the evacuation for Hurricane Bonnie (August 25, 1998 – August 26, 1998). Traffic count data recorded on US 501 northwest of the Intracoastal Waterway and on SC 9 between Waccamaw River and SR 57 revealed that the peak hour of evacuation occurred between 7:00 and 8:00 PM (the evacuation order was issued around 5:00 PM on August 25, 1998). Volumes recorded on SC 9 and US 501 in the northbound direction were nearly five and two times greater than normal traffic for an average Tuesday, respectively. The traffic counts also indicated that most people were evacuated by midnight. Added capacity along these routes would be of value during times of evacuation, as it would be during normal day to day traffic.

h. Public Transportation

The Coastal Rapid Public Transit Authority (CRPTA) bus network is a mixture of local and express lines, and demand-responsive paratransit services serving Horry County. CRPTA operates 13 routes, as shown in Figure V-12, which include regular commuter and local transit service between the cities of Myrtle Beach, North Myrtle Beach, and Conway.

CRPTA is the largest provider of transit service in the Grand Strand, accounting for nearly all of the annual total ridership. Ridership has been declining because of cuts in schedules due to Horry County budget constraints. CRPTA is planning to add a route from Conway to Georgetown and from Georgetown to Myrtle Beach, which will add ridership and possible future revenue support from Georgetown County.

Ridership figures, by route, are shown in Figure V-13. During the 1995-1996 fiscal year, which runs from July 1 to June 30, CRPTA carried 214,698 passengers. These are counted as

"unlinked" trips (i.e., a trip with a transfer is counted as two separate trips even though a single journey is made.) Approximately 25 percent of all trips were transfer trips. Slightly over half of all trips were made on the Conway-Myrtle Beach route.

Figure V-12: Existing CRPTA Bus Routes

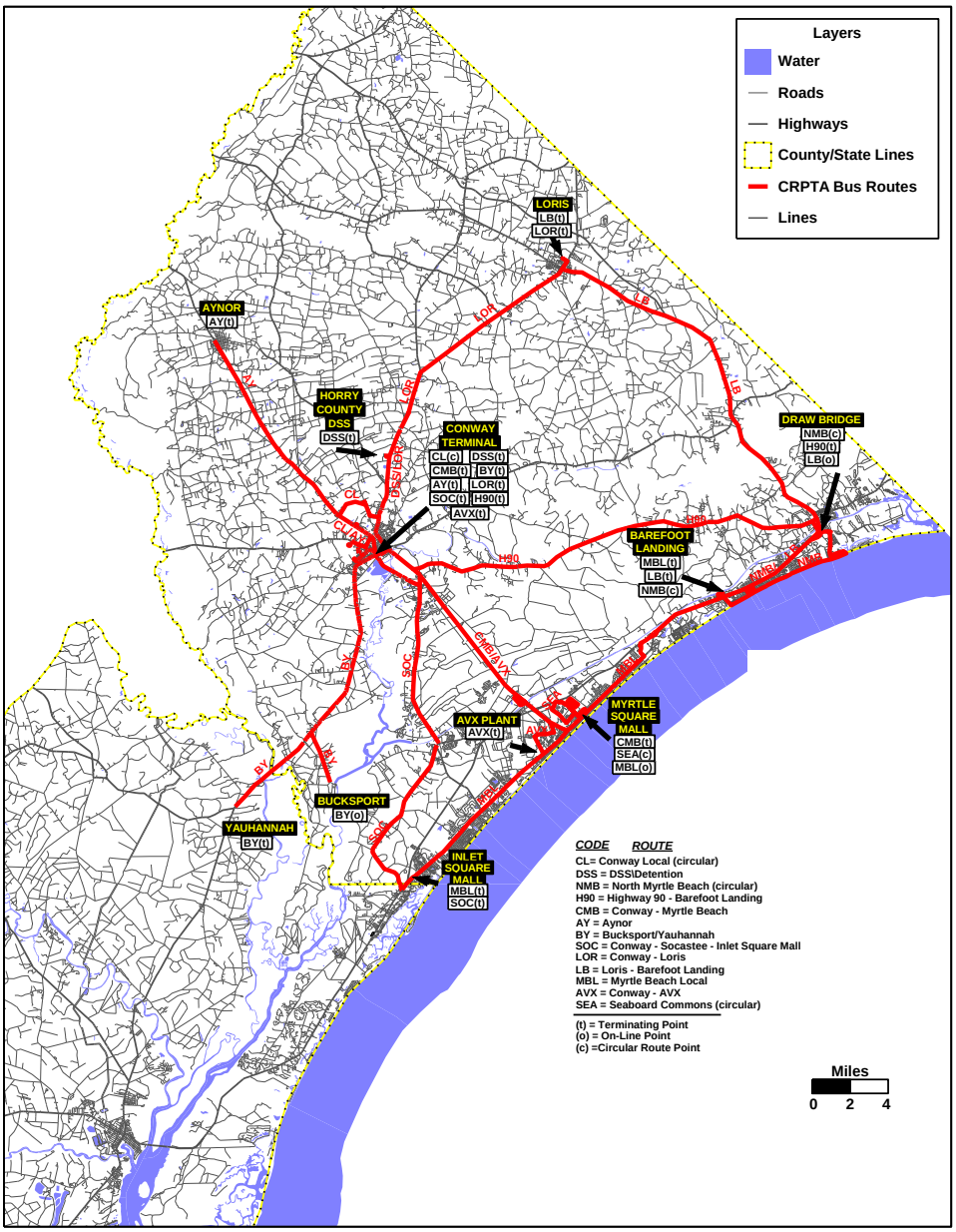


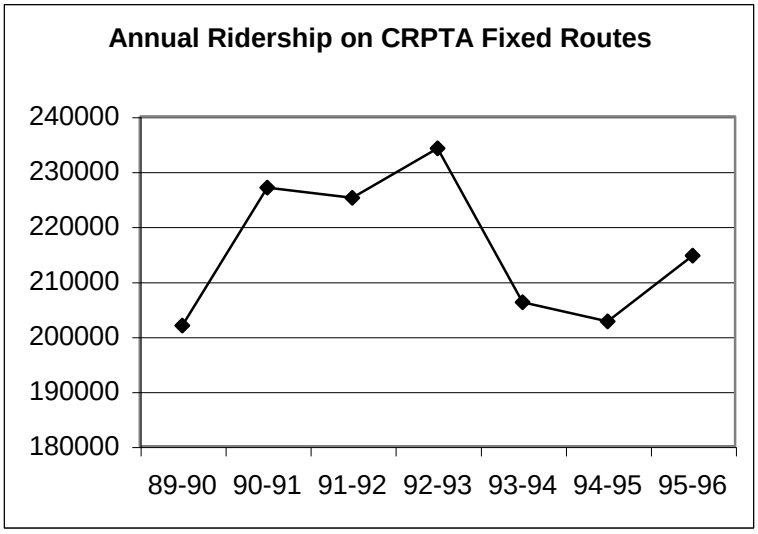
Figure V-13: Existing CRPTA Routes – Annual Passengers, FY 1995-96

	PASSENGERS					PERCENT
ROUTE NAME	**Passengers**	**Transfers**	**Seniors**	**Special**	**TOTAL**	**DISTR.**
Conway Local	16,720	8,415	333	237	25,705	12.0
DSS/Detention	680	274	5	26	985	0.5
Conway-Myrtle Beach	78,026	27,256	982	2,836	109,100	50.8
Myrtle Beach Local	17,362	8,038	2,161	587	28,148	13.1
Seaboard Commons	1,855	1,058	296	45	3,254	1.5
Bucksport/Yauhannah	8,636	643	15	85	9,379	4.4
Aynor	1,141	630	1	53	1,825	0.9
Conway – AVX	13,305	2,969	38	433	16,745	7.8
Conway – Loris	4,054	83	8	2	4,147	1.9
North Myrtle Beach	7,283	2,706	886	162	11,037	5.1
Highway 90	2,644	1,206	219	304	4,373	2.0
Conway – Socastee – Inlet Square	(a)	(a)	(a)	(a)	(a)	---
Loris – Barefoot Landing	(a)	(a)	(a)	(a)	(a)	---
All Routes	151,706	53,278	4,944	4,770	214,698	100.0
Percent Distribution	70.7	24.8	2.3	2.2	100.0	

(a) Passenger data included with Myrtle Beach Local route.

Ridership figures over the past five years on CRPTA's fixed routes are shown in Figure V-14. Ridership for the latest fiscal year is down slightly from previous years due to service changes and the temporary closure of the Pee Dee River bridge on US 701, which forced discontinuance of service to Yauhannah for several months. Even so, total ridership grew by nearly six percent from Fiscal Year 94/95 to Fiscal Year 1995/96.

Figure V-14: Annual Ridership on CRPTA Fixed Routes, 1989-1996



i. Existing and Planned Bikeways and Sidewalks

Several area municipalities and non-governmental groups have begun independent bikeway and walkway projects. Myrtle Beach currently has approximately two miles of bicycle facilities, with most being the least formal bike routes on streets. The city has proposed a long-range plan with over 90 miles of bikeways needed to link residential, commercial, recreational, employment, and tourist land uses. Myrtle Beach also has a program for building 42 miles of sidewalks at 111 locations for a cost of over $3 million. The City of Surfside Beach is beginning to build and improve about 1,000 linear feet (LF) of sidewalks and plans to designate 38,800 LF of bike lanes. Finally, the Bike the Neck organization is starting to raise money to build trails between Murrells Inlet to the Waccamaw River Bridge at Georgetown. North Myrtle Beach is currently preparing a comprehensive bikeway plan that will address linkages to residential areas and centers of employment.

j. Rail Passenger Service

While Horry County is not directly served by a passenger train, it is connected to the Amtrak national system via a van connection. The van, a joint Amtrak-Pee Dee Regional Transit operation, connects Myrtle Beach and Conway with Amtrak's Silver Palm at Florence. The Silver Palm is a daily train operating between New York City and Miami, Florida. It is scheduled to depart Florence at 8:49 AM northbound and 7:51 PM southbound. The van uses the Myrtle Beach International Airport at Myrtle Beach and the Atlas Travel Agency at Conway as its terminals.

Additional rail passenger services for Horry County have been proposed. There have been several proposals, past and present, to operate excursion or tourist trains between Conway and Myrtle Beach over the line segment owned by Horry County. While this service would primarily fall into the amusement category, it could be scheduled to serve as a commuter service.

Intercity service to Conway and Myrtle Beach was examined in the conduct of the *South Carolina Statewide Passenger Rail Transit Plan and Program.* Service to the county was proposed using alternative routes from Florence (with connections to existing Amtrak service) to Poston (near Kingsburg) consisting in one case of existing lines combined with new construction, and in the other, reconstruction of abandoned lines. From Poston to Conway, a new line would have to be constructed to connect with the Horry County Railroad, which would be used to reach Myrtle Beach.

A route to Columbia from Florence was also considered. This connection would permit access to a future Southeastern regional high speed rail service being planned by the states along a route from Washington, DC to Jacksonville, Florida. Rail passenger service in South Carolina is currently being pursued under the auspices of the South Carolina Department of Transportation, Division of Mass Transit. An advisory committee comprised of government officials and private citizens is assisting the DOT.

k. Rail Freight

Horry County is served by the Carolina Southern Railroad Company. After purchasing 75.5 miles of track from CSX Transportation (CSXT), this short line carrier began operations on March 28, 1987 as the Mid-Atlantic Railroad. The purchase included the Mullins, South Carolina to Whiteville, North Carolina branch line (36.5 miles) and the Chadbourn, North Carolina to Conway, South Carolina branch line (39.0) miles). The company has changed hands and is now known as the Carolina Southern. It operates over 53.6 miles of track within South Carolina. This includes 14.5 miles of the Mullins-Whiteville branch, 25 miles of the Chadbourn-Conway branch and the 14.1-mile Horry County Railroad which extends from Myrtle Beach to Conway.

The latter line was formerly owned and operated by CSXT, which filed to abandon it in 1984. To maintain rail service over the line, Horry County purchased it in 1984 and has contracted with several companies to provide rail service, the Carolina Southern being the latest. Due to unsafe conditions, the Department of Highways and Public Transportation on November 16, 1988 closed the railroad drawbridge which spans the Intracoastal Waterway. The bridge has since been repaired. Headquarters for the Carolina Southern is located in Conway, South Carolina. The railroad interchanges traffic with CSXT at Mullins, South Carolina. It also connects with the Marion County Railroad at Mullins.

l. Airports

Air travel is an important element of the overall transportation system serving the Grand Strand Area. The number of enplaned passengers at Myrtle Beach International Airport (MBI) in Myrtle Beach increased from 291,295 in 1992 to 477,756 in 1996[1], growth of 64 percent in just four years or a 13.9 percent average annual increase. Nationwide, the increase in commercial passenger enplanements was 5.11 percent. The Federal Aviation Administration (FAA) forecasts domestic US enplanements to increase at an average annual rate of 3.5 to the year 2009 and 2.9 percent from 2010 to 2020[2]. Applying these conservative rates to MBI would result in 2020 enplanements of 1,023,000. It is expected that the increase in enplanements will outpace the national average, at least in the short term (until the year 2005).

Airport Descriptions

The Myrtle Beach International Airport is located within the city limits of Myrtle Beach at the former Myrtle Beach Air Force Base. Currently, five airlines serve MBI – Delta ASA, Vanguard, Spirit, US Airways, and Midway. The airport has a single 9,502'x150' fully instrumented (ILS) runway.

[1] FAA DOT/TSC CY1996 ACAIS Database.
[2] *FAA Long Range Forecasts, Office of Aviation Policy and Plans, June 1998.*

The Grand Strand Airport (CRE) is located approximately 1 mile northwest of the City of North Myrtle Beach and has 5996'x100' runway with instrument approaches. The airport occupies 413 acres of land adjacent and parallel to the Intracoastal Waterway.

The Conway-Horry County Airport is located 4 miles west of the city and is accessed via US 378. The airport is probably best known for the major tenant there, the North American Institute of Aviation, a professional pilot training school whose students are drawn in principally from the Scandinavian countries and Europe. The airport is situated on 306 acres of land and offers a 4,400-foot paved and lighted runway.

Twin City Airport (5J9) is located 2.5 miles northeast of the Town of Loris off US 702. It is the smallest of the three general aviation facilities in Horry County. It is situated on 50 acres of land and has a 3,700-foot paved and lighted runway.

Georgetown County Airport (GGE) is one of the many airports built by the military immediately before or during World War II. It is located adjacent to US 17, four miles south of the City of Georgetown, and has a triangular pattern of runway approximately 5,000 feet in length. One of the runways is closed. This airport is currently being promoted by the Department of Commerce as a potential base for the new hyperspace aircraft under development.

Assuming a modest growth rate (when compared to the 1992-94 average annual increase) of 8 percent to 2005 and the national forecast rates to the year 2020, MBI enplanements could reach 1.5 million a year. This activity will have significant impact on the ground traffic on the road network serving the airport.

The Horry County Airport System Plan[3] projected enplaned passengers to increase to 683,000 in the year 2007. This compares favorably with the increases in the national growth rate but since it was completed in 1990, does not include the high growth rates from 1992 to 1996.

Aircraft operations are forecast to increase to 334,400[4] in 2008, but since the plan was completed prior to the opening of MBI to general aviation activity, this level will probably not be reached for many years. Many aircraft formerly based at CRE have relocated to MBI. The Department of Airports is currently preparing to update the plans for all the Horry County airports. These fundamental changes will be considered in the new plans.

Aviation Projections

The South Carolina System Plan provided forecasts of aeronautical activity at the airports. They differ from the forecasts of the Horry County System Plan, a problem that will be rectified when the Department of Airports completes the update of the plans for each of the airports. Figure V-15 summarizes these forecasts.

[3] *Horry County System Plan, Horry County Department of Airports, The LPA Group, Inc., July 1990.*
[4] ibid.

Figure V-15: Historical and Forecast Aviation Activity in Horry County

HISTORICAL AND FORECAST AVIATION ACTIVITY				
Parameter	**Data for 1995 (2015)**			
	HYW	**5J9**	**CRE**	**MBI**
Airfield Operations	107,700 (207,800)	13,100 (23,000)	103,000 (150,000)	57,700 (117,200)
General	107,700 (206,000)	13,000 (23,000)	102,000 (149,000)	47,000 (94,200)
Air Carrier	Na	Na	Na	5,900 (16,900)
Regional/Commuter	Na	Na	Na	7,800 (9,800)
Air Taxi	600 (1,700)	100 (200)	1,000 (2,600)	800 (2,300)
Military	100 (100)	Na	1,000 (1,000)	4,000 (4,000)
Total Enplanements			2,200 (5,900)	337,000 (1,000,000)
Air Carrier	Na	200 (500)	Na	285,000 (854,000)
Regional/Commuter	Na	Na	Na	50,000 (141,000)
Air Taxi	1,400 (3,700)	Na	2,200 (2,600)	2,000 (5,000)
Based Aircraft	45 (89)	9 (19)	84 (133)	66 (113)

Source: SC Airport System Plan, 1992

More recently, forecasts have been prepared by the FAA[5] as shown in Figure V-16. These forecasts are probably very conservative due to the growth of the Grand Strand area. This is particularly evident in the forecasts of aviation demand to be expected at the MBI, where the air carrier enplanements and operations projections do not take into consideration the recent high growth rates. The FAA forecasts also indicate no growth at the Conway-Horry County and Twin Cities Airports and negative growth at the Grand Strand Airport.

It is apparent that discrepancies exist between the two forecasts. However, since the 1992 SASP Update was prepared by those more familiar with the aviation environment of the Grand Strand area, it is considered to be the more accurate of the two forecasts.

Myrtle Beach International Airport - Based on the above SASP Update forecasts, MBI aircraft operations will be sufficient to consider the possibility a parallel runway system. If traffic continues to outpace the national growth rates in commercial airline activity, the single runway could very well reach capacity by the year 2020. This will create congestion at the airport and costly delays in aircraft operations. Other areas of the airport will also be taxed including the terminal building, auto parking facilities, and access to the airport. Earlier studies have recommended that a new four-lane airport access road be constructed from US 17 Bypass to US 17 Business. This recommendation should be implemented in the near future.

[5] APO Terminal Area Forecast Detail Report, 1997-2010, Federal Aviation Administration

Figure V-16: FAA Terminal Area Forecasts in Horry County

FAA TERMINAL AREA FORECASTS								
PARAMETERS	**HYW**		**5J9**		**CRE**		**MBI**	
	1996	**2010**	**1996**	**2010**	**1996**	**2010**	**1996**	**2010**
Airfield Operations	119,565	119,100	13,100	13,100	62,443	62,012	52,637	58,388
General Aviation	119,100	119,100	13,000	13,000	69,096	62,012	23,875	23,875
Air Carrier	0	0	0	0	0	0	12,810	15,406
Regional/Commuter	Na	Na	0	0	Na	Na	Na	Na
Air Taxi/Commuter	325	325	0	0	2,499	2,499	12,894	16,049
Military	140	140	100	100	1,008	1,008	3,058	3,058
Total Enplanements	0	0	0	0	0	0	477,756	751,595
Air Carrier	0	0	0	0	0	0	378,285	551,595
Regional/Commuter	0	0	0	0	0	0	99,471	200,000
Air Taxi	0	0	0	0	0	0	Na	Na
Based Aircraft	Na	Na	Na	Na	Na	Na	Na	Na

Conway-Horry County Airport – The high projections for this airport would also indicate the need for a parallel runway. It should be recognized that the overwhelming majority of the traffic generated at this airport is due to the presence of the North American Institute of Aviation. Since the demand level is highly dependent on the level of business activity of this entity, development should be considered when actual operational activity reaches 60 percent of the capacity of a single runway airport or 126,000 annual operations. At that time a study should be conducted to determine the weighted capacity of the airport based on the type of operations and the timing of the development of the second runway should it be necessary.

Grand Strand Airport – The SASP forecasts for this airport assumed some of the traffic would relocate to MBI. However, it under-estimated the amount of diversion. Therefore, while the forecasts indicate that a new parallel runway could be considered, it is recommended that this be postponed until a new demand forecast is prepared.

Twin City Airport – The forecasts and the expectations of State and local aviation officials reflect that little improvements are needed at this airport in the near future. However, it should be recognized that growth from the North Myrtle Beach area is moving toward the airport. This could result in the need to provide additional facilities at the airport in the long-term.

Georgetown County Airport – Since the opening of Myrtle Beach International Airport to general aviation activity, the market area north of Georgetown has receded southward. With total activity projected to reach 41,000 by 2015, few improvements are expected to be required for the short term; if the airport is selected for the hyperspace aircraft base, however, complete airport redesign and construction will be needed.

m. Ports

The Atlantic Intracoastal Waterway runs the entire length of Horry County one to five miles inland from the shore. However, there is no barge traffic loading or unloading in the study area. The former Air Force Base once received jet fuel deliveries via a privately built and operated terminal on the Waterway. This system is not in use because the Air Force's fuel storage and distribution system is much larger than what the Myrtle Beach Jetport needs or is willing to support. There is no other commercial use of the Waterway in Horry County.

The shallow draft ports of Murrells Inlet and Little River Inlet will continue to serve both commercial fishing vessels and pleasure craft. Environmental regulation will severely limit the construction or substantial expansion of new marinas, so the value of those existing will become more important to the tourists and commercial residents.

n. Grand Strand Area Transportation Study (GSATS)

This study involved transportation needs analyses to the Year 2015. After an extensive meeting process held throughout the region, it was determined that the plan must provide for both accessibility and mobility in the area. This could best be accomplished through a balanced plan of highway and transit improvements. In addition to an exhaustive list of highway improvements, a monorail system, expanded bus service, and water taxi were proposed to move tourists and residents through the area. An assessment of hurricane evacuation clearance times with and without the proposed GSATS Long Range Transportation Program was performed as a major analytical task of this overall study.

The study concluded that there is no way the region can accommodate anticipated future travel demands under existing conditions. With the provision of major new facilities, such as Carolina Bays Parkway, Conway Bypass and widening of US 501, there is generally sufficient capacity to accommodate traffic demands to the year 2015. The magnitude of change expected in the area between 1998 and 2015 can be simplified to the following generalizations:

- Population is expected to more than double from 136,000 to 327,000 residents;
- About 14,000 more hotel rooms are expected to be built in the next 20 years, raising the total from 25,000 to 39,000;
- Commercial square footage is expected to more than double from 19 million square feet to 39 million square feet;
- Total daily trips likely to occur on a typical peak season day are expected to increase from 1.4 million to 2.4 million over the next 20 years;
- With only committed improvements in place (basically just the Conway Bypass), congestion, as measured by hours of delay, will be five times worse than it is today; and

- Building just about every road imaginable will bring congestion back to today's levels, but will not solve all the problems and will provide little additional capacity beyond year 2015.

Preferred Plan Elements

The Preferred Plan elements consisted of a wide range of highway projects necessary to accommodate future travel demands. Conway Bypass; Carolina Bays Parkway; widening of US 501, US 17, SC 544, and SC 707 are just a few of the projects that will be needed. To augment this extensive list of highway projects, a mass transit system was recommended that includes a monorail system from Murrells Inlet to North Myrtle Beach, water taxi service on the Intracoastal Waterway, expanded local bus service complemented by trolley and double-decker bus service, commuter rail service between Myrtle Beach and Conway, and expanded commuter bus service. All of the Preferred Plan elements are identified, according to priority. There are three priority groups, generally characterized as:

- Priority Group 1: All existing Transportation Improvement Program (TIP) projects, generally oriented toward improving capacity on routes leading into the Grand Strand Area, as well as major routes within the area; transit projects which are extensions/enhancements of existing services since other transit projects require long range planning and environmental studies.

- Priority Group 2: Projects which carry lower traffic volumes or are more sub-regional in nature; first phase of major transit improvements including monorail.

- Priority Group 3: Continuation of sub-regional highway improvements plus proposed interchanges; extensions to major transit improvements.

Twelve funding options were explored as part of this study; seven were found viable for the Grand Strand setting: motor vehicle fuel tax, vehicle registration tax, county sales tax, accommodations tax, resident assessment, impact fees, and admissions fee. If the tax/fee already exists, it is assumed there would be additional revenue from the increase devoted to funding the proposed transportation projects.

It is possible to raise approximately $1.4 to $2.2 billion over a 20-year period from a combination of these sources. Under the Intermodal Surface Transportation Efficiency Act's mandate for a financially feasible long-range plan, the lower revenue local options could fund Priority Groups 1 and 2 improvements. The Preferred Plan, or balanced system, can be funded only with a higher revenue funding package.

The RIDE Plan

The 1996 Road Improvement and Development Effort (RIDE) combines the efforts of Horry County, the South Carolina Infrastructure Bank, and the South Carolina Department of Transportation in creating comprehensive solutions to the area's transportation deficiencies. The following summarizes RIDE study recommendations.

Short-Term Improvements

These are projects that are currently ongoing and could be implemented by the year 2005.

- Conway Bypass
- Carolina Bays Parkway (as designed, 6 lanes from SC 9 to US 501).
- SC 544
- Conway Perimeter Road
- Metropolitan Loop
- US 501
- Intersection Improvements
- Implementation of all or portions of the Proposal for the Development of the Grand Strand Area Congestion Management Program.

Financing the RIDE plan will be achieved using an increase in the hotel accommodation tax (hospitality fee) as a means of leveraging monies from the State Infrastructure Bank (SIB).

Long-Term Improvements

Following is a list of projects that were recommended for the next 20 to 30 years.

- GSATS Long-Range Plan (as approved March 1995).
- Conway Bypass (as designed, 6 lanes between US 17 and SC 905 and 4 lanes between SC 905 and US 501).
- Carolina Bays Parkway (from US 501 to US 17)
- Fire/Water Tower Road (2 lanes between Conway Bypass and S-1029 [paved section]).
- Burroughs Road (2 lanes between Carolina Bays Parkway and SC 90, approximately 8.4 miles).
- Perry Road (4 lanes between US 501 and SC 544).
- US 501 (6 lanes with frontage roads between Forestbrook Road and Conway).
- Ocean Boulevard in Atlantic Beach.
- SC 9 (4 lanes between Green Sea and Horry County line).
- Big Block Road through the MBAFB to Ocean Boulevard.
- US 17 (6 lanes between Inlet Square Mall and US 17/US 17 Business interchange).
- US 701 (4 lanes from Conway to Loris).
- SC 410 (4 lanes from US 701 to SC 9).
- Loris to Tabor City Connector.
- US 701 (4 lanes, Conway to Georgetown).
- Conway Perimeter Road (complete the bypass around Conway).
- Pee Dee Road (4 lanes between US 701 and US 378).
- Florence to Conway Connector (I-20 extension).

- US 378 (4 lanes, Conway to Horry County line).
- SC 90 (4 lanes between Conway and SC 9/US 17 interchange).
- US 501/SC 544/SC 90 interchange.
- Community Bus System (shared bus system with hotels/motels.)

The total cost of the proposed short-term RIDE projects is approximately $775 million. Horry County will contribute 30 percent to the overall cost, primarily through implementation of a 1.5 percent hospitality fee. Additional funding options for future projects include developer impact fees, additional tax increment finance (TIF) districts, and increases in vehicle registration fees.

Anticipated Future Conditions

The future conditions analysis reflects year 2015 capacity with no improvements implemented, as well as the existing system with committed projects.

Future No-Build Conditions

If only the current highway network was in place by the year 2015, congestion primarily concentrated on major routes approaching the beach (US 501 and SC 544) and along the beach (US 17 [Bypass] and US 17 Business) would spread. All principal roadways in Myrtle Beach, North Myrtle Beach, Surfside Beach, and Garden City Beach would have major congestion. Congestion would spread south to Georgetown. US 701 and SC 90 would also be congested, and there would be no uncongested routes into the Grand Strand area.

Committed Projects

For the purposes of this study, a committed project is defined as one where at least a portion of the construction funds have been allocated and it is known that the project will be completed within the 20-year horizon of this study. Three projects qualify under this strict definition: the Conway Bypass, the Carolina Bays Parkway, and the widening of the entire length of SC 544. Several smaller projects (SC 707, US 17 Business in Murrells Inlet, and a shorter section of US 17 in North Myrtle Beach) meet the definition of "committed" but are too limited in scope to make a significant impact in this analysis. Although other projects are obviously going to be needed during this period, none are in a sufficiently advanced stage of planning to indicate where the necessary funds to construct the project will come from. There also are no major committed transit improvements expected in the next 20 years.

Future Existing Plus Committed Conditions

The addition of the Conway Bypass, the Carolina Bays Parkway, and the SC 544 project to the highway system yields an Existing Plus Committed (E+C) network. With the Conway Bypass, conditions would improve, but congestion would remain on major facilities such as US 17 (Bypass); US 17 Business and US 501; and on other roads including SC 90, SC 544, and SC 707.

Figure V-17 compares the V/C ratios on principal roadways for the year 1995, year 2015 No-Build and year 2015 E+C networks. As can be seen, the three projects will improve but not solve congestion problems on US 17, US 501, and SC 544. Hence, significant improvements will be necessary in the future to bring congestion levels to acceptable (V/C ratio less than 1.0) conditions.

Figure V-17: Anticipated Conditions on Principal Roadways

	MAX. V/C RATIO FOR		
ROADWAY	**Existing**	**2015 No-Build**	**2015 E+C**
US 17 (Bypass)		2.4	1.2
US 17 Business	1.3	2.0	1.0
US 501	1.3	2.0	1.6
US 701	0.5	1.2	0.9
SC 9	0.8	0.9	0.8
SC 90	1.1	2.0	2.0
SC 544	1.5	3.2	1.2
SC 707	1.1	2.4	2.3
Ocean Boulevard	1.0	1.4	1.2
10th Avenue North	1.4	2.5	2.0
21st Avenue North	1.2	1.6	1.4

Source: GSATAS

o. Summary of Existing Transportation Deficiencies

The review of the existing transportation system within Horry County revealed the following deficiencies:

Lack of Bikeways and Sidewalks

There is a region-wide plan for pedestrian and bicycle transportation; however, several municipalities have developed separate initiatives. These existing and proposed networks should be linked to encourage their use by casual travelers and commuters. An extensive bicycle and pedestrian network not only stimulates single-mode trips (walking or biking, alone) but also encourages the use of public transit. This, in turn, may reduce the need for the construction of new highway lane-miles. Therefore, a comprehensive, multimodal transportation plan must include provisions for pedestrian and bicycle travel.

Lack of Interface with Intermodal Terminals and Critical Land Uses

Airport

The main entrance to the Myrtle Beach International Airport is provided via a two-lane roadway off of US 17. Over time, this facility will have to be widened to four lanes. Additionally, the entrance from US 17 Business is provided via a circuitous series of two-lane highways. Since this connection links the airport with most of the beach hotels, it is vital to extend Jetport Road to US 17 Business as called for in the region's Long-Range Transportation Plan (LRTP). Some form of fixed guideway between the airport and the Central Business District is also part of the LRTP.

Bus Stations

Long range revitalization plans within the historic area of Myrtle Beach call for the construction of an intermodal center. If built, this center would include a major parking garage, as well as a people mover station, the terminus of the Waccamaw Railroad, and taxi, bus, bicycle rental, and pedestrian linkages for the region. This center would be located immediately adjacent to US 17 Business between 8th and 9th Avenues North. A companion facility in Conway is also being considered, which could be tied into CRPTA's bus system or the proposed passenger rail system to Myrtle Beach.

State Parks

Myrtle Beach State Park's main entrance is located opposite the former Air Force Base entrance. There are substantial traffic conflicts and delays. Detailed accident studies should be conducted at this location, and traffic levels should be closely monitored to determine when this intersection warrants the installation of a traffic signal.

Highway Capacity Problems

A typical summer day is currently characterized by long queues on major highways such as US 501, SC 544, as well as both US 17 Business and Bypass. Along the oceanfront, pedestrians and vehicles compete for space on Ocean Boulevard and Kings Highway. These situations confirm the results of technical analyses that indicate the region's present highway system is operating just over capacity and cannot handle any significant increases in traffic without intolerable delays.

Lack of Park-and-Ride Facilities

Formal park-and-ride lots to be used by employees of the hotels, restaurants, and other employment centers in the resort area must be constructed on the perimeter of the resort area. This would eliminate some traffic in the peak afternoon hours when shift changes occur. More importantly, this shift in parking strategy would free up valuable land adjacent to hotels and other commercial enterprises for other value added services and enterprises, or provide more adequate parking spaces for overnight guests.

These park-and-ride lots also can be utilized by visitors who plan to stay only one day in the Myrtle Beach area. These visitors must be intercepted at the perimeter of the resort area to prevent them from adding unnecessary traffic to the congested local road network. The park-

and-ride lots could be served by the trolley and CRPTA bus system in the short run and by the monorail and commuter rail system in the long run.

Need of Additional Roadway Capacity During Hurricane Evacuation
Realizing that only about a 12-hour window exists for evacuation between the time an order is issued and the point when wind as well as tidal surge conditions make the highway network impassable to traffic, it becomes clear that complete evacuation of the Grand Strand would become very difficult. Even assuming that everything goes as planned, it would not be possible to get all the traffic evacuated using the existing or existing-plus committed networks. However, if the RIDE plan were implemented, evacuation times would decrease and would facilitate the movement of traffic within the study area so that motorists could more easily access exit routes. As a result, traffic backups would be expected to dissipate within 12 hours of an evacuation order. This would permit the timely evacuation of the at-risk population under the worst possible conditions (a major storm and a slow evacuation process).

Lack of Paved Roads
The lack of paved roads in Horry County impedes the movement of people and goods. Given the level of development which has occurred over the last three decades, the rural road system has not kept pace. A comprehensive plan for surfacing needed unpaved roads should be developed and implemented.

Poor Rail Service
Additional rail passenger services for Horry County have been proposed. This proposal should be evaluated and implemented if found feasible to serve existing traffic demands as well as anticipated future demands.

2. Statement of Needs and Goals

Transportation Vision

Promote development of a balanced transportation system with integrated highway, transit, bicycle, and pedestrian linkages that can facilitate the efficient, economical, and sustainable movement of all people and goods throughout the county and support continued growth.

Effective mobility planning involves three inter-related dimensions - land use management, travel demand management, and transportation capacity management. The relationship is illustrated in Figure V-18 below. The balanced transportation plan requires a full and equal treatment of land use management and travel demand management in equilibrium with the management of supply-side planning performed when highway and transit system capacity is increased.

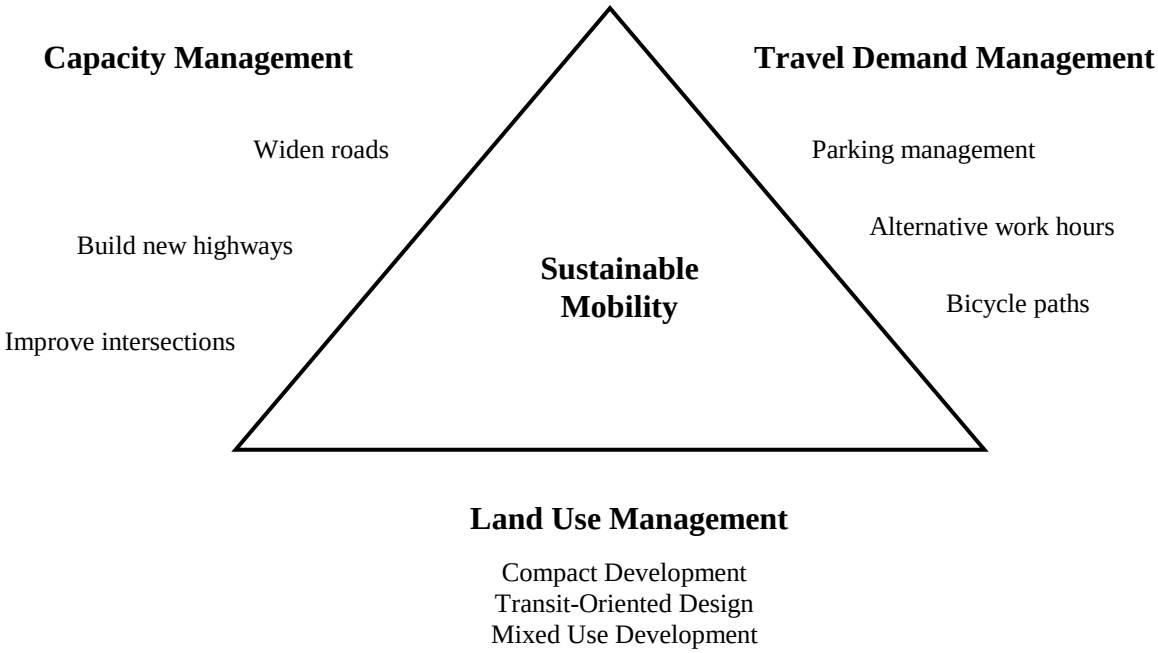
Need: As a result of tourist activity and an increasing permanent residential population, the capacity of Horry County roadways is strained, especially in the urbanized areas of Conway and the Grand Strand.

Goal 1: ***Provide sufficient capacity to accommodate transportation demands at an acceptable quality of flow. Align the demand for automobile travel with the supply of roadways by providing alternatives to auto-dominated transportation.***

Need: Horry County's transportation system currently lacks alternative modes of transportation.

Goal 2: ***Foster an appreciation of multi-modalism. Develop a balanced transportation system permitting safe and efficient travel by transit, bicycle, and walking. Alternative modes of transportation should accommodate Horry County's seasonal visitors, as well as provide for the movement of permanent residents.***

Figure V-18: The Sustainable Mobility Triangle



Need: Many residential developments in Horry County do not currently provide safe and adequate ingress and egress.

Goal 3: ***Integrate the land development and site design approval process to transportation goals.***

Need: Many roads, particularly in the county's rural areas, are poorly maintained and lack paving.

Goal 4: ***Improve road infrastructure and ensure proper road maintenance in order to preserve existing facilities and promote safer and more efficient travel in all portions of the county.***

Need: The cost of transportation infrastructure development strains current funding.

Goal 5: Develop a practical funding scheme that can be used to finance multi-modal plan elements.

Need: Extension of the transportation network can compromise environmentally sensitive areas of the county.

Goal 6: Preserve the natural as well as constructed environments through the comprehensive planning process.

D. Water Supply, Treatment, and Distribution

1. Inventory and Analysis

The Grand Strand Water and Sewer Authority (GSWSA) is the major supplier of potable water for Horry County, servicing an area of approximately 700 square miles (Figures V-19 and V-20). GSWSA utilizes Bull Creek, averaging daily flows of over one billion gallons, as its raw water source. GSWSA's Bull Creek Regional Water Treatment Plant, located in Bucksport, has a daily peak flow capacity of 26 million gallons and is designed for ready expansion.

GSWSA contracts with several retail water providers. The Little River Water and Sewer Company (LRWSC) is capable of drawing 2.1 million gallons per day from the Bull Creek Plant for delivery to its 27 square mile service area. LRSWC services over 5,700 residential units and 350 businesses. The municipalities of Conway and Loris and their extra-municipal service areas also receive water from GSWSA. With continued development in Horry County, there is an emerging trend away from multiple providers toward more consolidated water and sewer service delivery. The towns of Surfside Beach and Aynor have recently merged their water and wastewater treatment systems with GSWSA.

Along with the GSWSA, other major water suppliers in the county include the Bucksport Water Company and the Municipality of Myrtle Beach. Bucksport serves approximately 8,750 primarily residential customers through 3,500 connections. Bucksport's groundwater wells can yield up to 1.6 million gallons per day. Average daily water flow through the system is 704,692 gallons per day with a per capita flow of 80. The City of Myrtle Beach supplies water for its incorporated area, as well as North Myrtle Beach and unincorporated portions of the county. While Myrtle Beach's surface water treatment plant now has the ability to generate 29.9 million gallons per day, the facility's treatment capacity is slated for expansion.

Water provision can be assessed according to two criteria – a treatment capacity sufficient to accommodate water consumption, and water pressure and flow adequate for fire fighting purposes. Current capacity at the Bull Creek plant is adequate relative to present demand. The plant's daily flow has peaked at 23 million gallons, with an annual average flow typically ranging between 15 and 16 million gallons per day. According to GSWSA estimates, average water

consumption is approximately 100 gallons per person per day. With a projected 2020 population of 362,388 and a visitor population of over 900,000 the county will require treatment generation of over 46 million gallons per day. To satisfy increasing service needs, the GSWSA plans to expand its maximum water treatment capacity at the Bull Creek Plant to 31 million gallons per day by 2000 and 42 million gallons per day by 2003. Treatment capacity will also be provided by the Myrtle Beach and Bucksport facilities. To reduce demand on the existing system, the GSWSA participates in water conservation activities, including publication of a newsletter and use of a scaled pricing scheme linked to water consumption. GSWSA predicts fairly constant rates of water consumption within the service area.

Water pressure within the GSWSA, Bucksport, and North Myrtle Beach systems satisfies peak flow and fire flow conditions as regulated by the South Carolina Department of Health and Environmental Control (SCDHEC). However, portions of the Bucksport system do not have adequate line size to accommodate fire flow.

GSWSA has actively extended water services to the developing unincorporated portions of the county. Since the Rural Water Program was initiated in 1991, the Authority has installed over 150 miles of lines servicing an additional 2,300 customers. To provide safe drinking water meeting all quality standards, provide fire flow, and meet growth, GSWSA has placed major transmission and treatment lines along transportation corridors, such as Highway 501, Highway 701 south, Highway 701 north to Loris, Highway 90 to Little River, Highway 905 to Longs and Highway 9 from Longs to Loris.

Figure V-19: Water and Sewer Service Areas in Horry County

Figure V-20: GSWSA Water Supply, Treatment, and Distribution Facilities

2. Statement of Needs and Goals

Water Supply, Treatment and Distribution Vision

Where economically and environmentally feasible, provide a safe and adequate public supply of drinking water and water flow sufficient for fire protection purposes throughout the county.

Need: Approximately 60% of the Grand Strand Water and Sewer service area is presently connected to public water.

Goal 1: To accommodate existing and future residential population and attract growth and development, extend public water provision to currently unserviced areas of the county.

Need: With a water consumption rate of approximately 100 gallons per person per day, the county will require treatment capacity of over 46 million gallons per day by 2020.

Goal 2: Expand the capacity of the Regional Surface Water Treatment Facility.

Need: Water provision influences the location and timing of development.

Goal 3: Target the extension of additional capacity of public water to areas of environmental suitability and strong development appeal.

E. Wastewater Treatment System

1. Inventory and Analysis

The GSWSA provides most of Horry County's wastewater treatment services (Figure V-21). The municipalities of Myrtle Beach, North Myrtle Beach, and Loris maintain separate treatment facilities. GSWSA offers treatment to Conway, the Little River Water and Sewerage Company service area, the Bucksport Water Company service area, the municipalities of Surfside Beach, Aynor, and North Myrtle Beach, and remaining portions of the unincorporated county.

Figure V-21: GSWSA Wastewater Treatment Facilities

Figure V-22 lists wastewater treatment facilities operating within the county, along with permitted capacities and monthly average treatment flow. Monthly average flows are derived from June 1998 data. Peak flows may exceed the average flow figures.

Figure V-22: Wastewater Treatment Facilities and Capacities, 1998

Wastewater Treatment Facility	Permitted Capacity (in millions of gallons per day)	Monthly Average Flow – June, 1998 (in millions of gallons per day)
GSWA Schwartz	13.50	6.76
GSWA Vereen	2.50	1.58
GSWA Conway	3.20	1.54
GSWA Central	1.20	0.77
GSWA Bucksport	0.20	0.08
GSWA Longs	0.20	0.12
City of Myrtle Beach	12.00 (Oct.-March) 17.00 (April-Sept.)	7.40
Town of Loris	0.70	0.38
City of North Myrtle Beach Ocean Drive	3.40	2.25
City of North Myrtle Beach Crescent Beach	2.10	1.67

Source: South Carolina Department of Health and Environmental Control

The adequacy of the county's wastewater treatment provision can be assessed by comparison with regulatory standards established by SCDHEC. SCDHEC requires that all wastewater treatment plants exceeding 80 percent of maximum permitted capacity plan for physical expansion. None of the GSWSA facilities currently exceeds the 80% capacity threshold. The Authority, however, anticipates capacity upgrades at three of its plants – Central, Schwartz, and Vereen. The GSWSA system must accommodate wastewater volumes of approximately 100 gallons per person per day. The Authority predicts a fairly constant rate of wastewater production.

The SCDHEC also establishes wasteload allocations for treatment facilities discharging into the area's surface waters. These wasteload allocations set the maximum amount of treated effluent that rivers and streams can assimilate without violating water quality standards. Generally, the allocation is based on the pollutant's effect on oxygen levels within the surface water. Oxygen is depleted as part of the natural biological process of dissolving pollutants within rivers and streams. Surface waters, particularly in the urbanized portions of the county, already contain low levels of oxygen and thus have little remaining ability to absorb additional wastewater discharges. SCDHEC is now reviewing current maximum wasteload allocations and may recommend reductions in pollutant discharge. In anticipation of possible SCDHEC limitations, the GSWSA has planned treatment upgrades at the Schwartz, Central, and Vereen facilities. Treatment upgrades would enable the facility to release cleaner discharge into surface waters, thereby reducing demands on dissolved oxygen. The Authority has also been very active in

exploring alternative wastewater disposal strategies, including the use of golf courses, turf farms, trees farms, and wetlands for land applications.

Areas of Horry County contain high water tables and soils with poor drainage characteristics. These natural features severely limit the safe use of on-site wastewater disposal systems. With funding from Community Development Block Grants and the U.S. Environmental Protection Agency, GSWSA has installed sewer collection and treatment infrastructure in qualifying communities, such as Bucksport, Longs, and Burgess. The county continues to seek CDBG funding for areas where the lack of water and sewer facilities threatens public health. In 1995, the GSWSA also established the Rural Sewer Program, laying 65 miles of sewer lines for 900 customers. Additionally, sewer transmission lines have been placed along major transportation routes, such as Highway 501, Highway 90, Highway 905, and Highway 9 to Loris.

2. Statement of Needs and Goals

Wastewater Treatment Vision

To provide for the treatment and disposal of wastewater discharge in a manner which protects public health, enhances the efficiency of treatment provision and the preserves the county's natural environment.

Need: Portions of the county remain unserviced by public sewer provision.

Goal 1: Extend public sewer provision to those currently unserviced areas of the county with high rates of septic tank failure and suitable environmental conditions. Sewer access and provision should also be used to reinforce and direct desired patterns of growth through careful coordination with land use and transportation planning.

Need: Wastewater generation will rise in connection with the increasing resident and tourist population.

Goal 2: Expand the maximum permitted treatment capacity of county wastewater treatment facilities.

Need: As a result of diminished water quality in the area's surface waters, the SCDHEC may reduce maximum permitted wastewater discharge loads.

Goals 3: Develop wastewater treatment practices that conform with State regulations and protect the quality of the county's surface waters.

Need: Much of the county contains soils and water tables poorly suited to septic tank usage.

Goal 4: Provide for the safe operation of individual septic systems and the provision of public sewer where economically and environmentally feasible.

F. Stormwater Management

1. Inventory and Analysis

Horry County is challenged by flooding, erosion and sedimentation, and water quality issues. Flooding is caused by a combination of natural conditions, rapid development, and infrastructure deficiencies. The county has an extremely flat topography, highly erodible soils, and semi-tropical climate with periods of intense rainfall. Urban development adds to the flow and speed of stormwater traveling through system. Current drainage structures cannot accommodate the resulting runoff because of poor design, inadequate maintenance, and underinvestment in necessary infrastructure. Development may also be placed in areas of marginal environmental suitability, increasing their vulnerability to flooding.

Stormwater management also significantly impacts the quality of area surface waters. Two types of pollutants compromise water quality – point sources and non-point sources. Point sources include direct and identifiable producers of pollution such as industrial sites, sewer plants, farms, and marinas. Non-point source pollution is the product of a range of diffuse activities, including urban development, land-disturbing work such as construction and forestry, excessive nutrient loading resulting from fertilizer applications and failed septic tanks, and the accumulation of heavy metals caused by pesticide use and auto travel. Stormwater is a major conveyor of non-point source pollution. Runoff crosses impervious surfaces, construction sites, golf courses, lawns, parking lots, and streets, carrying sedimentation, fertilizers, and heavy metals, such as lead and mercury, into rivers and streams.

Federal and state regulatory measures necessitate a more pro-active stormwater control approach from the county. By approximately 2002, Phase II of the EPA's National Pollutant Discharge Elimination System (NPDES) will require Horry County to develop stormwater Best Management Practices (BMPs) to reduce pollution in its urbanized areas. As a result of diminished water quality, the State of South Carolina may also impose limits on pollutant wasteloads flowing into the Intercoastal Waterway. Since non-point source runoff from Horry County is assumed to be a major contributor to declining water quality, any such reductions would greatly affect development within the county.

Horry County's Stormwater Advisory Committee (SWAC) recently completed a *Stormwater Management Feasibility Study* to assess current practices. The county now allocates about $1.1 million a year on piecemeal stormwater activities spread across County Engineering, Public Works, and Code Enforcement. Stormwater efforts consist largely of functions performed secondarily to other major county operations, such as road repair and development regulation. As part of the feasibility study, SWAC recommends the establishment of a comprehensive stormwater regulatory program with a preventative orientation. Activities would be organized primarily under the Public Works Department. Recommended measures include adoption of a stormwater management ordinance and design criteria manual to promote better design and construction practices, creation of a stormwater utility to provide stable and adequate funding, completion of an inventory of stormwater structures and master plan with planned capital improvements, a physical upgrade of current canals and ditches, and promotion of public

awareness. The recommended programs would require approximately $3 to 5 million annually in expenditures through FY 2006, with dedicated funding provided by a utility charge based on gross land area parcel size and the amount of development on the land. The utility is to be designed only for the unincorporated areas, but could be expanded to include municipalities. The county has begun to implement the action plan identified in the SWAC feasibility study, including drainage improvements scheduled in FY 1999 for the Burgess Watershed, Collins Creek and Garden City.

2. Statement of Needs and Goals

Stormwater Management Vision

Provide for the management of stormwater which maintains adequate drainage throughout the county, minimizes flood damage to property, and protects the water quality standards of Horry.

Need: The county's current stormwater infrastructure is insufficient to control runoff and prevent flooding.

Goal 1: Ensure the proper maintenance of existing stormwater structures and expand the drainage system.

Need: The county currently lacks a comprehensive policy approach to stormwater management.

Goal 2: Establish a stormwater utility with a comprehensive set of management activities, planned capital expenditures, enforcement mechanisms, and dedicated funding.

G. Solid Waste Collection and Disposal

1. Inventory and Analysis

The Horry County Solid Waste Authority, Inc. provides solid waste recovery, recycling, and disposal services to the unincorporated county, as well as municipal areas. The *Solid Waste Management Plan* prepared in August 1998 establishes the policy framework for solid waste delivery in Horry County through 2017. The new plan envisions continuing operations at the current site and expanding over time into a recently acquired adjoining 11,820-acre site which contains the remainder of the Steritt Swamp headwaters.

a. Collection System

In the unincorporated portions of the county, the Solid Waste Authority owns and operates 19 staffed convenience centers and 10 dumpster sites, serving 30,500 households. Collection sites are located within a five-mile radius of any given county residence (Figure V-24). Neighborhoods and businesses in the unincorporated county also contract for collection services with private haulers. The municipalities of Myrtle Beach, North Myrtle Beach, Aynor, Conway, Loris, Surfside Beach, and Atlantic Beach offer curbside collection of household waste and yard waste within their jurisdictions.

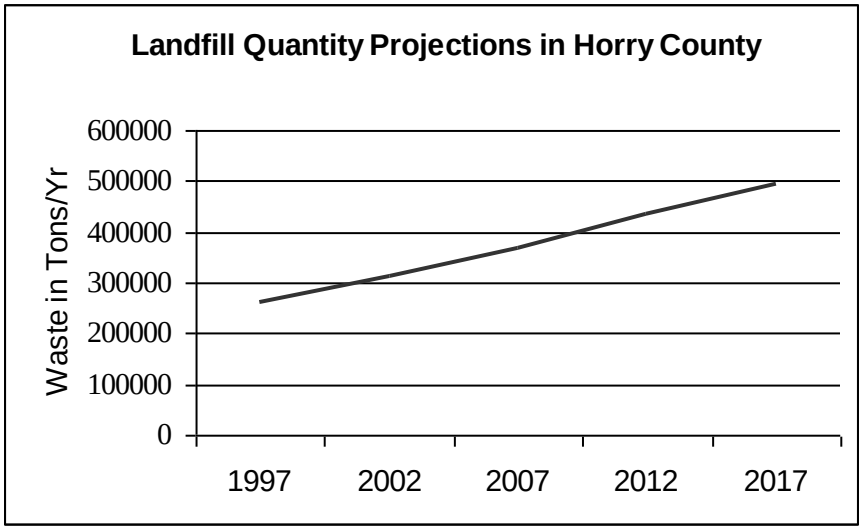
b. Transfer Stations

There are two municipally operated transfer stations located in Myrtle Beach and North Myrtle Beach. The facilities have a combined capacity of 700 tons per day.

c. Disposal Facilities

In 1997, Horry County managed 309,060 tons of solid waste. The waste stream consists of two main components – municipal solid waste (MSW) produced by households and businesses and "other solid waste" yielded by construction and industrial activity. Horry County generates approximately 5.1 pounds of MSW per person per day, exceeding the State per capita waste generation rate of 4.2 pounds. The Authority estimates that MSW generation is growing at an annual rate of about 5 percent. Tourism is a major contributor to MSW production in Horry County. The total 1997 per capita generation rate in the county, including MSW and other solid waste, was 8.9 pounds of waste per person per day. Reflecting anticipated population and waste projections, Figure V-23 displays total solid waste quantities requiring landfill disposal through 2017.

Figure V-23 Landfill Quantity Projections in Horry County, 1997-2017



Source: Horry County Solid Waste Authority Solid Waste Management Plan, 1998

Figure V-24: Horry County Solid Waste Authority, Inc. Facilities

Solid waste management is evaluated on the basis of two level of service indicators – remaining landfill capacity and waste reduction and recycling rates. The Solid Waste Authority owns and operates a 90-acre sanitary landfill located near Conway. Approximately 550 tons of MSW per day require disposal. The site also receives 250 tons of construction and demolition debris (C&D) material each day. Capacity at the facility is virtually depleted. The Authority has initiated closure and a new 27-acre landfill, located to the south and west of the existing facility, has begun receiving MSW.

The new facility has a site life of about six years and is capable of 40-acres of expansion. Combining expansion with the newly opened area will provide 12 to 15 years of total landfill capacity. Additional capacity will be required to accommodate Horry's disposal requirements through the year 2020. Engineering and permitting efforts are also underway to develop a new C&D landfill site.

Hazardous materials comprise less than 1 percent of the waste stream in Horry County. The Authority landfill maintains a plan for conformance with the provisions of the South Carolina Solid Waste Policy and Management Act, which regulates the disposal of special wastes in municipal landfills. According to the SCDHEC Bureau of Land and Waste Management Site Assessment Section, 17 sites in Horry County are identified as hazardous. Of these sites, nine are included in the Comprehensive Environmental Response, Compensation, and Liability Inventory System (CERCLIS). CERCLIS is an EPA database of abandoned, inactive, or uncontrolled hazardous waste and spill sites.

d. Waste Reduction/Reuse/Recycling

Horry County maintains programs to encourage the recycling of waste, including recycling convenience centers in the unincorporated areas, educational activities, and a central Materials Recycling Facility (MRF). The 22,000 square foot MRF was constructed in 1997 and currently processes 800 tons of material per month. In 1997, the Authority recycled over 80,500 tons of material, a 50 percent increase from the previous year. Waste reduction efforts include the promotion of backyard composting. The county operates a yard waste/composting facility, accepting about 50 tons of waste per day. Two recycling convenience centers also offer materials for reuse.

The South Carolina Solid Waste Policy and Management Act establishes a statewide goal of diverting 30 percent of the solid waste stream from landfills and incinerators and recycling 25 percent of all generated waste. Reductions are determined by comparing the per capita waste generation in the base year of 1993 to current generation figures. According to 1997 calculations, Horry County actually saw 12 percent growth in waste per capita received at landfills. The Authority is now actively diverting more waste, including yard trash, land clearing debris, white goods, and tires from the MSW landfill. However, rapid growth and development hamper efforts to achieve the full reduction goal. The county has achieved greater success in its recycling activities, with 1997 recycled quantities equaling 24.5 percent of the waste stream.

The Authority is financed through an enterprise fund, with revenue typically generated through tipping fees from landfill disposal and the sale of recycled goods. As of 1998, most of the Authority's capital needs have been funded through user charges. Future capital expansion, however, may require issuance of bonds. Planned capital improvements to the solid waste system include: expansion of collection sites to a total of 23 to 25 staffed centers throughout unincorporated areas; construction of new waste transfer facilities, particularly in the high-growth Socastee area; construction of new MSW and C & D debris landfills; and permanent administrative facilities for the Authority. Given the rising cost of solid waste management, the Authority is also actively exploring opportunities for regional disposal. Horry County has begun steps to participate in a multi-county solid waste authority.

2. Statement of Needs and Goals

Solid Waste Management Vision

Minimize the amount of solid waste generated within the county and dispose of all solid wastes in a manner which maintains public health, reduces management costs, and protects the county's natural environment.

Need: The county's level of MSW is growing at an annual rate of 5 percent.

Goal 1: Ensure the sustainability of the solid waste disposal system by reducing the amount of per capita waste requiring landfill disposal and explore alternative methods of solid waste disposal.

Need: No areas of the unincorporated county are currently serviced by curbside collection.

Goal 2: Where economically feasible, establish curbside collection in the urbanized portions of the unincorporated county.

H. Parks and Recreation

1. Inventory and Analysis

The Horry County Recreation Department was established in 1998. The Department's activities are funded through the County General Fund, and the Maintenance Department currently dedicates two staff people for park upkeep. A special tax district in Socastee finances a separate community recreation fund. Figures V-25 and V-26 identify parks in the Horry County Recreation system, along with available facilities and acreage. The list includes public park space that is owned, leased, or used by the county under agreement. Recent improvements to the park system include the development of McNeil Park, the Greenwood Activity Field, Racepath Community Park and the Carolina Forest Park sites. The municipalities of Horry County provide an additional 145 acres of local parks, giving the county a total of 493 acres of park space. This

current inventory provides 2.8 acres per 1,000 county residents. Myrtle Beach State Park offers 312 acres of regional park space. (See #17 on Figure V-26)

Horry County contains many natural features, including beach and coastline, as well as landscaped open spaces such as golf courses, that provide a diversity of recreational opportunities. This inventory, however, evaluates the provision of local public park and recreational facilities for use by the general county population.

The adequacy of local park facilities is assessed through comparison with standards established by the National Recreation and Park Association. The Association recommends a minimum of 6.25 acres of local park space per 1,000 persons. Local recreational space is generally designed for the convenience of residents within a 1- to 2-mile radius. As a uniform standard, the acreage per 1,000 persons figure establishes a basic, quantifiable starting point for measuring the availability of recreational opportunities within a community. The acreage standard, however, may be adapted to local needs. The National Recreation and Park Association recommends the use of public participation techniques, such as surveys, workshops, and questionnaires, to determine actual demand for recreational facilities. The supply of parks may then be tailored to the expressed preferences of community residents.

Based on the 1995 Waccamaw Regional Planning and Development Council's 1995 population estimate, Horry County should provide a total of 1,095 acres of local park space to satisfy the minimum acreage recommendation. The national standard indicates a current deficit of approximately 600 acres. With an estimated 2020 county population of 362,388, the recommendation demonstrates a need for 2,265 total acres of local park space, an increase of 1,775 acres over the present inventory. The Horry County Recreation Department has proposed the acquisition of 1,730 additional acres of park land through 2004. With the proposed land, the County's park inventory will approach the recommended 2020 figure, offering a total of 2,223 acres of local park space. If the county were to maintain its current per capita provision of 2.8 acres per 1000 residents, park space would have to expand to 1,015 acres by 2020 to accommodate expected population growth.

Association standards suggest the distribution of space across three park categories: 0.25 acres per 1,000 residents for specialized miniparks of less than one acre; 1 acre per 1,000 for neighborhoods parks of 1 to 25 acres; and 5 acres per 1,000 for community parks 25 to 75 acres in size. The current park deficit appears to be greatest in the provision of larger community parks, smaller miniparks, and athletic fields.

Figure V-25: Parks and Recreational Facilities Under County Control

Public Parks	Map Number	Acres	Ballfield	Basketball Court	Community Center	Football Field	Golf Course	Gymnasium	Picnic Table	Playground	Multi Use Trail	Racquetball Court	Soccer Field	Swimming Pool	Tennis Court	Track	Volleyball Court
Aynor High Recreation	7	6.6	1														
Michael Morris Graham	NA	17.0	4												3		
Vereen Memorial Gardens	3	115.0							4	1							
McNeil	25	9.6	2						4		3						
Frinks	NA	2.0															
Garden City	13	.3															
Green Sea/Floyds HS	18	.4													2		
Horry School Mini	NA	1.1		1						1					1		
Bayboro Community	6	10.0	1	1					4	1					1		
Poplar Community	2	4.1	1	2					4	1							
Sandridge Community	8	10.0	2	2					4								
Burgess Community	10	3.3		1						1							
Bucksport Community	9	5.0	1	1					4	1					1		
Waccamaw Athletic Assoc.	1	6.0	3	1					4	1							
Red Bluff-Longs	5	10.0	1						4	1							
Pee Dee Athletic Assoc.	12	5.0	3							1							
Mt. Vernon Courts	14	.4													2		
Greenwood Field	23	10.0															
Pee Dee Courts	NA	.4													2		
Kingston Courts	24	.3													2		
Dog Bluff Community	21	2.3		1											1		
Adrian Community	16	.5		2											2		
Hibbens Park	15	1.0															
Racepath Park	26	3.2	1						4	1							
N Myrtle Beach Field	NA	11.1	1														
Heniford Athletic Field	NA	8.3				1											
Socastee Yacht Basin	NA	3.6															
Carolina Forest Site # 1	NA	34.0															
Carolina Forest Site # 2	NA	28.0															
Carolina Forest Site # 3	NA	25.0															
Playcard Center	NA	8.3			1						1						
Bethea	4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Tillmond Park	27	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Green Sea-Floyds Middle School	19	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Floyds Community	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total		348.4	22	12	1	1	0	0	36	10	4	0	0	0	17	0	0

Source: Horry County Recreation Department, 1998

Horry County Proposed Park Sites

Area Location	Acreage
Green Sea Floyds School Facility	55
Cartwheel Facility	200
Conway	300
Poplar	55
Briarcliff	55
Bucksport	55
Socastee	300
Aynor	55
Longs	300
Mt. Vernon	55
Pee Dee	300
Carolina Forest Sites #1, 2, 3	87
Total	1,817

Figure V-26: Horry County Park Facilities

With its convenient access to waterways, Horry County also provides a wide range of water-related recreational opportunities. Figure V-27 identifies public boat landings located in Horry County.

Figure V-27: Horry County Public Boat Landings

Public Boat Landings	Acres
Savannah Bluff	.9
Pitts Landing	2.0
Punch Bowl	2.0
Pitch Landing	.5
Bucksville	.25
Peachtree	.5
Rose Wood	2.0
Yauhannah	1.0
Port Harrelson	1.4
Enterprise	2.5
Stanley Drive	.3
Jordan Lake	.5
Causey	1.0
Ricefield	.2
Sandy Bluff	.8
Galivants Ferry	.2
Huggins	4.1
Gunter's Lake	1.6
Highway 9	1.0
Wortham's Ferry	.2
Hughes Landing	.2
Red Bluff	.8
Lees Landing	.5
Reeves Ferry	6.8
Total	31.25

Source: Horry County Recreation Department, 1998

The county is now in the process of reviewing and expanding recreation service delivery. The Department began recreational programming in 1998, with an emphasis on instructional classes and youth camps. The Department is also undergoing a comprehensive needs assessment study to be completed by 1999.

2. Statement of Needs and Goals

Parks and Recreation Vision

Provide quality open space and a wide range of recreational opportunities meeting the diverse needs of the county's growing residential population.

Need: Horry County has not completed a comprehensive recreation plan since 1978.

Goal 1: Complete a comprehensive recreation study assessing needs and identifying areas for facility improvement and expansion.

Need: A minimum National Recreation and Park Association standard of 6.25 acres of local park space per 1,000 county residents indicates a current deficit of approximately 600 acres and a need for an additional 1,750 acres by 2020.

Goal 2: Acquire additional open space and expand the existing park system to meet the growing county population.

Need: Relatively few recreational facilities exist in the rural, western portion of the county.

Goal 3: Ensure equitable access to open space and recreation opportunities for all county residents.

I. Public Safety and Emergency Medical Services

1. Inventory and Analysis

a. Fire Protection

The Horry County Fire Department provides fire protection services to the unincorporated portion of the county and the Town of Aynor. The Murrells Inlet – Garden City Fire Department operates within a Special Purpose District serving approximately 45 square miles in southeastern Horry County and northeastern Georgetown Counties. The cities of Myrtle Beach, North Myrtle Beach, Conway, and Loris deliver fire services to portions of the county on a contractual basis. The county and municipal departments also augment individual delivery arrangements by participating in mutual aid agreements. County fire service operations are financed through a restricted tax millage.

The department currently operates 25 fire stations and maintains a career staff of 44, including support personnel, and 400 volunteers. Ten stations are staffed, with two providing 24-hour service and 8 offering day-only coverage. The Murells Inlet –Garden City District maintains two fire stations with a career firefighting staff of nine complemented by approximately forty volunteers.

Figure V-28 lists the fire stations, current staffing arrangements, and Insurance Service Organization (ISO) ratings. Figure V-29 identifies station locations. ISO is a private insurance organization that evaluates fire protection capabilities. Ratings criteria include the distance between structures and fire stations, the composition of structures, numbers and types of fire fighting equipment and apparatus, fire stations, and personnel. Lower ratings represent lower premiums assumed by the insurance-holder. Slashed ratings reflect the difference in premiums for structures within 1,000 feet of a fire hydrant and those beyond a 1,000-foot distance.

Figure V-28: Horry County Department and Murrells Inlet – Garden City District Department Fire Stations

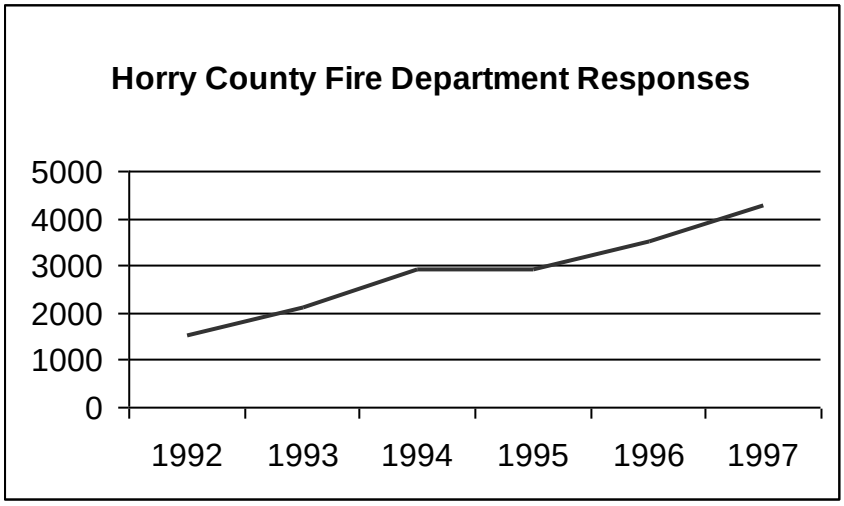
Fire Station	Station No.	Staffing	ISO Rating
Socastee	1	Day-time Career	6/9
Little River	2	Volunteer	6/9
Bucksport	3	Day-time Career	6/9
Forestbrook	4	Volunteer	7/9
Wampee	5	Day-time Career	6/9
Mt. Olive	6	Day-time Career	9
Lake Arrowhead	7	24-hour Career	7
Juniper Bay	8	Volunteer	8/9
Antioch	9	Volunteer	6/9
Ketchuptown	10	Volunteer	9
Nixonville	12	Volunteer	5/9
Longs	13	Volunteer	5/9
Shell	14	Volunteer	7/9
Bayboro	15	Volunteer	7/9
Cates Bay	16	Day-time Career	7/9
Mt. Vernon	17	Day-time Career	5/9
Brooksville	18	Volunteer	Not rated
Cherry Hill	19	Volunteer	5/9
Maple	21	Day-time Career	7/9
University	23	24-hour Career	Not rated
Aynor City	24	Day-time Career	6/9
Goretown	26	Volunteer	5/9
Allens Crossroads	27	Volunteer	7/9
Joyner	28	Volunteer	7/9
Floyds	38	Volunteer	9
MI/GCFD 1		Career/Volunteer	4
MI/GCFD 2		Career/Volunteer	4

Source: Horry County Fire Department and Murrells Inlet – Garden City Fire District, 1998

Figure V-29: Horry County Fire Department Facilities

Reflecting rapid population growth, Figure V-30 demonstrates the rising call volume handled by the Horry County Fire Department. In 1997, the Department responded to 4,272 calls, an increase of 22 percent over the previous year. The high volume is due primarily to increases in rescue and first response activity, rather than fire suppression.

Figure V-30: Horry County Fire Department Call Volumes, 1992-1997



Source: Horry County Fire Department, 1998

Fire service delivery can be assessed on the basis of turnout time, which represents the elapsed time between the dispatch of a call and the departure of an engine from the station. According to the International Association of Fire Chiefs, the national average turnout time for volunteers is 3 minutes and 6 seconds. In 1996, average turnout time at the county's 23 all-volunteer stations was 7 minutes and 30 seconds between the hours of 8 am to 5 pm. During the hours of 5 pm to 8 am, turnout time decreased to 4 minutes and 20 seconds. The county has since added 19 career firefighters to its staff. Turnout times at stations with professional daytime coverage have been consistently below 1 minute.

b. Police

The Horry County Police Department provides law enforcement services to the unincorporated portion of the county. Municipalities within Horry County also maintain individual police forces. The county participates in mutual aid agreements with the cities and supplements their police services upon request. The Department maintains a staff of 198 commissioned officers, plus 16 non-commissioned support personnel. Delivery arrangements are currently centralized, with the M.L. Brown facility in Conway acting as operational center.

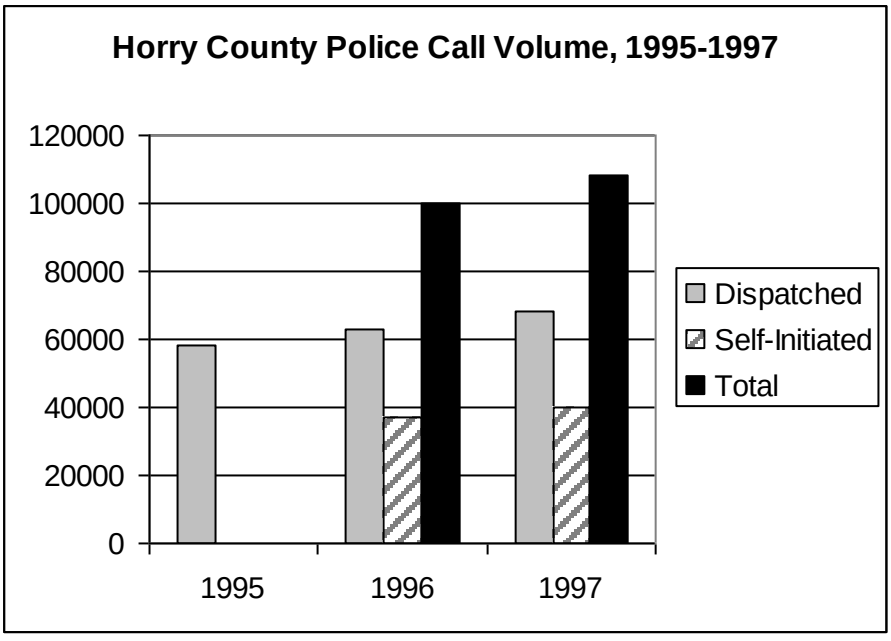
Figures V-31 and V-33 identify Horry County Police Department facilities. Office space reserved in the seven magistrate complexes and the Long Detention Center is used for administrative purposes. The Department also informally contracts with area businesses for workstation space. The county does not currently operate autonomous substations with full-time police coverage.

Figure V-31: Horry Police Department Facilities

Police Facilities	Map No.	Type of Facility
M. L. Brown Public Safety Building (Conway)	1	Main Facility
Mt. Olive Complex (Green Sea)	2	Office Space
Stevens Crossroads Complex (Little River)	3	Office Space
Surfside Complex (Surfside)	4	Office Space
Olin Blanton Complex (Myrtle Beach)	5	Office Space
Conway Complex (Conway)	6	Office Space
W.C. Hucks Complex (Aynor)	7	Office Space
James P. Stevens Complex (Loris)	8	Office Space
J. Reuben Long Detention Center Complex	9	Office Space

Figure V-32 indicates trends in the call volume handled by the Horry County Police Department. Total volume increased by 8.2 percent between 1996 and 1997. Volume information from 1995 does not include data on self-initiated or total response due to a change in dispatch call nomenclature.

Figure V-32: Horry County Police Department Call Volumes, 1995-1997



Source: Horry County Police Department, 1998

Figure V-33: Horry County Police Department Facilities

The level of police service delivery can be assessed along two dimensions – staffing ratios and response times. The national average for police staffing is 2.3 officers per 1,000 persons in suburban communities and a ratio of 2.6 officers to 1,000 persons in rural areas. The national staffing average for all jurisdictions is 2.2 officers per 1,000. The county does not currently approach these national staffing standards. Based on an estimated 1995 permanent population figure of 117,804, the present ratio is approximately 1.68 officers for every 1,000 residents of the unincorporated county. The staffing ratio is even lower when considering the influx of visitors during the tourist season. Standard police response time is seven minutes for priority calls. Priority calls include requests for assistance when a crime is in progress or when there is an immediate and impending threat to person or property. The Department's actual average response time for priority calls is 7 to 8 minutes. All other calls average a response time of 12 to14 minutes.

c. Emergency Medical Services

The county provides direct emergency medical service response to the unincorporated portions of Horry, as well as incorporated areas. Figures V-34 and V-35 identify the Emergency Medical Service (EMS) stations located throughout the county. Each facility is staffed with a least one advanced life support ambulance, an emergency medical technician, and paramedic. The 911 system is maintained on a countywide basis at the Horry County Emergency Communications Center in Conway.

Figure V-34: Horry County EMS Facilities

EMS Sites	Map No.	Average Response Time (in minutes)
Myrtle Beach	9	4.49
Socastee	12	6.54
Mt. Olive	1	9.11
Conway	7	6.48
Lake Arrowhead	8	5.16
Bucksport	11	8.03
Loris	2	7.05
Surfside Beach	13	6.06
Stephen's Crossroad	3	7.18
Aynor	6	8.18
South Myrtle Beach	10	4.34
North Myrtle Beach	4	5.20
Red Bluff	5	8.51

Source: Horry County EMS, 1998

Figure V-35: Horry County EMS Facilities

Eight volunteer-based rescue squads within Horry County provide a supplement to EMS and Fire Department response. However, volunteer rescue activity has recently declined, requiring the county to commit additional staff and resources to call response. After 1995, the EMS Department shed responsibility for routine patient transport. Call volume, however, continued to increase. In 1997, the EMS Department handled approximately 23,000 calls for emergency medical service, a rise of 2.5 percent in demand over the previous year.

EMS delivery is assessed on the basis of response time. Standard response time is 4 to 6 minutes for basic life support and 8 minutes for advanced life support. The Department's overall response average was 7 minutes. Figure V-34 also presents average response times by station. Higher response times for sites in the rural part of the county reflect the more geographically dispersed nature of the service population.

2. Statement of Needs and Goals

Public Safety Vision

Protect the health, safety, and welfare of county residents and visitors through the provision of responsive, adequately equipped and staffed, and highly trained public safety services.

Need: County Fire Department turn-out times at volunteer-staffed stations do not meet national standards.

Goal 1: Increase professional fire fighting coverage at existing stations to decrease turn-out times.

Need: County Police Department staffing is currently below the staffing averages of similarly sized jurisdictions.

Goal 2: Increase police staffing to maintain desired response times and provide adequate police protection.

Need: Eastern areas of the county, such as Socastee and Carolina Forest, are experiencing significant population growth.

Goal 3: Target rapidly growing portions of the county for the expansion of public safety facilities.

Need: All public safety departments are experiencing considerable increases in service demand.

Goal 4: Improve and expand the current public service delivery system to accommodate expected population growth.

Need: The population, particularly in the western portion of the county, is dispersed, requiring public safety personnel to be spread over of a large geographic area.

Goal 5: Examine the establishment of new delivery arrangements, such as decentralization and the development of joint fire/police/EMS facilities, which enable public safety personnel to be more evenly spread across the county.

Need: Though originally designed to provide space sufficient for 10 years, the Brown Public Safety Building, constructed in 1996, is now occupied at capacity.

Goal 6: Provide adequate administrative space to accommodate any growth in public safety functions.

J. Emergency Preparedness

1. Inventory and Analysis

The county has prepared a new draft *Horry County Emergency Operations Plan* (EOP) which establishes an organizational framework for the delivery of disaster management services. The county EOP maintains an operational focus consistent with the Federal response plan and the State of South Carolina Emergency Operations Plan. The Emergency Preparedness Department Director develops and maintains the Horry County EOP and, upon activation of the plan, heads efforts at the County Emergency Operations Center located in the M.L. Brown Public Safety Building. During disaster response, county departments and local agencies performing similar organizational activities are grouped under various Emergency Support Functions, such as transportation, communications, public works, information and planning, resources support, fire fighting, mass care, law enforcement, business and insurance, and health and medical. Horry County emergency operations are also fully coordinated with the activities of county municipalities.

Given Horry County's particular vulnerability to disasters such as hurricanes, flooding and severe storms, the county has also developed a separate draft *Horry County Hurricane Plan*. The plan is coordinated with the State Hurricane Plan and the Northern Coastal Conglomerate, which includes the counties of Horry, Georgetown, Marion, Lee, Florence, Dillon, Clarendon, Sumter, Darlington, Marlboro, and Williamsburg. The plan specifies five levels of operating conditions during the "pre-landfall" phase, with functions ranging from the monitoring of storm activity, to alert, stand-by, preparation, and eventual evacuation. Under each condition, emergency support function groups are assigned specific activities to perform. Post-impact operations then follow the procedures established in the EOP.

Horry County emergency preparedness delivery is evaluated on the basis of available shelter capacity. In a worst-case scenario of full evacuation during the peak tourist season, Horry County would generate an estimated shelter demand of approximately 15,000. Figure V-36 lists the shelters and capacities available in Horry during a mandatory evacuation.

Figure V-36: Horry County Public Shelters

Facility	Emergency Capacity
Conway High School	1,300
Loris High School	552
Aynor High School	500
Carolina Forest Elementary School	320
Forestbrook Elementary School	250
Green-Sea Floyds High School	615
Loris Middle School	656
Whittemore Park Middle School	500
North Myrtle Beach High School	500
Forestbrook Middle School	1,100
Total	**6,293**

Source: Horry County Hurricane Plan, 1998

The Conway High School and Loris High School facilities also operate during voluntary evacuation. North Myrtle Beach High School and Forestbrook offer only supplemental shelter. Total shelter capacity provided directly by the county is 6,293. Two additional facilities – the Conway Hospital Wellness Center and the Loris Hospital Wellness Center – maintain space for evacuees who require medical assistance short of hospital-level care. The Homewood Elementary School also supplies shelter for county emergency personnel and their families.

Horry County shelter capacity is supplemented on a regional basis, with space maintained by counties participating in the conglomerate. In the event of evacuation, a number of Horry County residents are assumed to seek public shelter in the facilities of nearby jurisdictions, such as Georgetown County. Regionally supplied capacity is sufficient to satisfy the anticipated shelter demand generated in Horry.

2. Statement of Needs and Goals

Emergency Preparedness Vision

Provide for disaster management that is consistent with recommended federal and state practices and minimizes the threat to life and property.

Need: As a coastal area, Horry County is particularly vulnerable to the threat of hurricanes and storm surges.

Goal 1: Provide for comprehensive, responsive, and technologically advanced disaster management that protects the health, safety, and welfare of county residents and visitors.

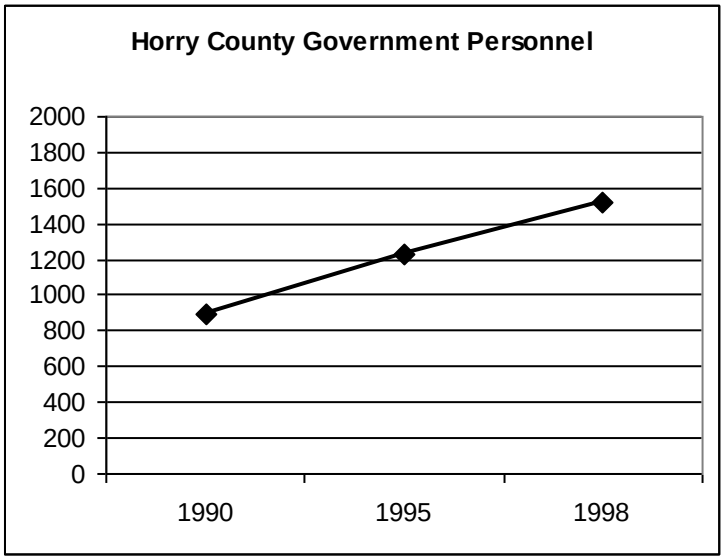
K. General Government Facilities

1. Inventory and Analysis

Horry County maintains a council-administrator form of government, with a current full-time staff of approximately 1,515. According to payroll data gathered by the U.S. Census Bureau in 1994, State of South Carolina local governments, including municipalities and counties, employed an average of 94 full-time equivalent staff members per 10,000 population. This State figure represents personnel in basic administrative, maintenance, and public safety functions and excludes staff employed in education, hospitals, solid waste, and water and sewer. As of 1997, Horry County fell below the State staffing standard with approximately 86 employees per 10,000 total county residents.

However, as Figure V-37 demonstrates, county employment rose by 68 percent in the 1990s. Staffing growth is a likely function of population increases and heightened development activity in Horry County. The county workforce has also become more professionalized, with less reliance on part-time temporary staff.

Figure V-37: Full-Time Horry County Government Personnel, 1990-1998



Source: Horry County Personnel Department, 1998

Most Horry County government facilities are located in the county seat of Conway. Horry County has approximately 360,000 square feet of space available for general government operations. Major additions to county facilities include the 1996 construction of the M.L. Brown Public Safety Building in Conway and the Ralph H. Ellis Office Complex in Little River. Facility expansion continues with development of a new Judicial and General Government Complex and Public Works building budgeted for FY 1999. Proposed Public Works improvements include two district centers located in the Little River/Stephen's Crossroads and the Socastee/Garden City areas. As currently envisioned, these facilities are to be used primarily for equipment storage purposes and will not feature a public service delivery component.

2. Statement of Needs and Goals

General Government Facilities Vision

Provide for administrative facilities of sufficient space, functionality, and design to maintain the efficient delivery of government operations, ensure convenient access to services for county residents, and promote the aesthetic character of the county.

Need: County administrative space is currently limited.

Goal 1: Improve and expand government offices to accommodate the growing service demands of the county.

Need: The county is large and the service population is geographically dispersed.

Goal 2: Provide for the development of community government complexes which can serve as functional "town centers" that anchor neighborhoods and increase access to the county population.

L. Educational Facilities

1. Inventory and Analysis

a. PK-12 Education

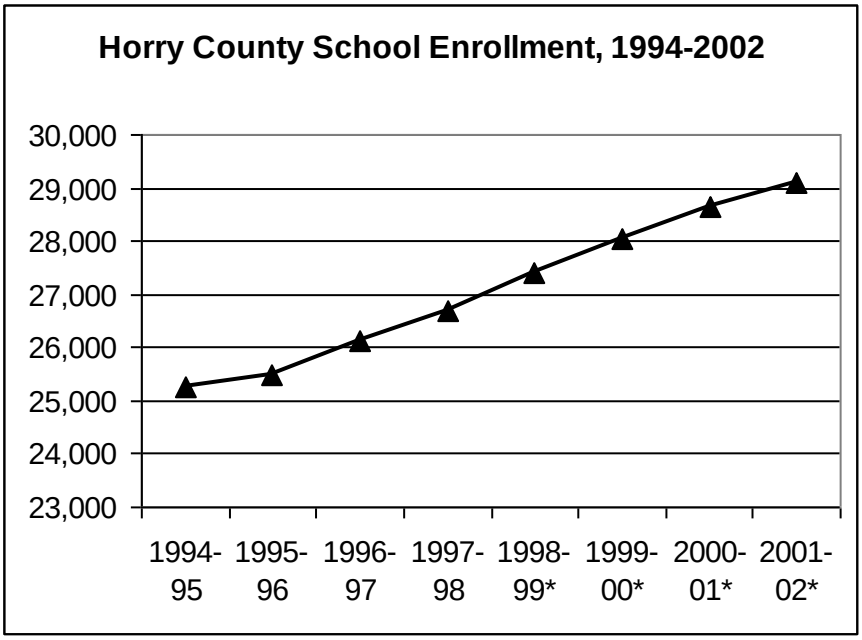
Horry maintains a countywide school system with eight attendance districts in Aynor, Conway, Carolina Forest, Green Sea/Floyds, Loris, Myrtle Beach, North Myrtle Beach, and Socastee. The system is currently the fifth largest in South Carolina.

As of 1998, the district operated a total of 42 schools: 23 elementary/primary schools, 8 middle schools, 8 high schools and 3 career center/academies (Figure V-38). Figure V-39 uses historical attendance data and projections to illustrate the trend toward steadily rising enrollment within Horry County schools. Between 1997-1998 and 2001-2002, the number of students is expected to increase by approximately 9 percent. Figure V-40 provides a more detailed breakdown of enrollment data and projections by grade level.

Figure V-38: **Horry County School System Facilities**

School Name	Map Number
Green Sea Floyds High	1
Green Sea Floyds Elementary	2
Finklea Career Center	3
Loris Middle	4
Loris Elementary	5
Loris High	6
Midland Elementary	7
Aynor Elementary Annex	8
Aynor Elementary	9
Daisy Elementary	10
Aynor High	11
Horry Elementary	12
Aynor Conway Career Center	13
Homewood Elementary	14
Kingston Elementary	15
N. Myrtle Beach High	16
N. Myrtle Beach Middle	17
Conway Primary	18
N. Myrtle Beach Elementary	19
Conway High	20
Conway Elementary	21
Conway Middle	22
N. Myrtle Beach Primary	23
District Office	24
Pee Dee Elementary	25
Whittemore Park Middle	26
South Conway Elementary	27
Waccamaw Elementary	28
Academy for Arts, Science & Tech	29
Carolina Forest Elementary	30
Myrtle Beach High	31
Myrtle Beach Middle	32
Myrtle Beach Intermediate	33
Myrtle Beach Primary	34
Myrtle Beach Elementary	35
Forestbrook Elementary	36
Socastee High	37
Socastee Middle	38
Lakewood Elementary	39
St. James Elementary	40
St. James Middle	41
Seaside Elementary	42

Figure V-39: Horry County Public School Enrollment, 1994-2002



Source: Horry County School District, 1998
* Enrollment figure based on projections developed by the Horry County School System

Figure V-40: Horry County Public School Enrollment by Grade, 1994-2002

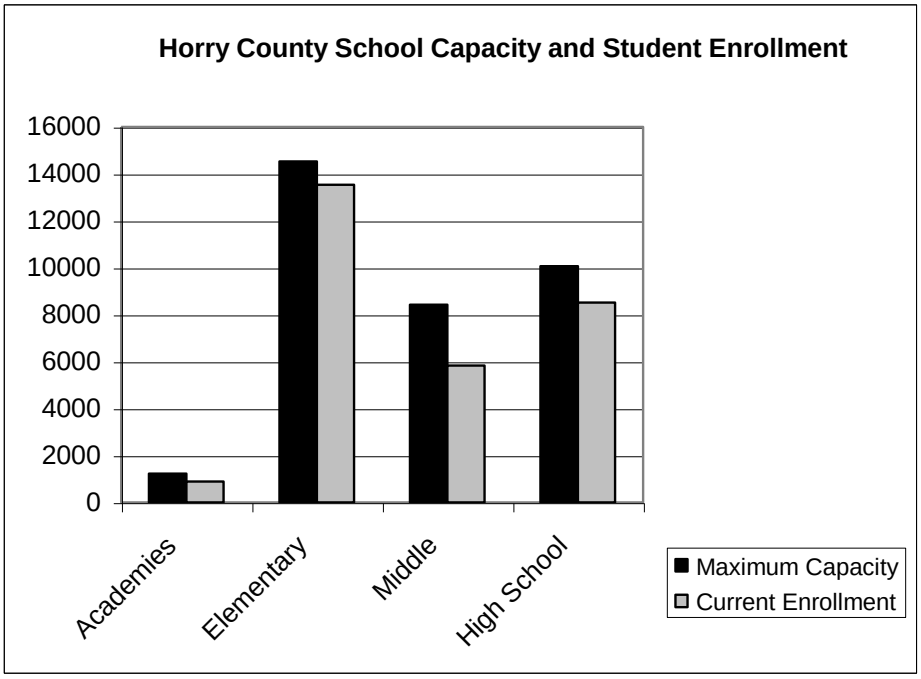
Year	Kindergarten	Elementary Grades 1-8	High Schools & Career Centers Grades 9-12	Total Enrollment
1994-95	1,974	15,859	7,423	25,256
1995-96	1,730	16,251	7,492	25,473
1996-97	2,079	16,357	7,677	26,113
1997-98	2,049	16,837	7,817	26,703
1998-99*	1,916	17,487	8,003	27,406
1999-00*	1,900	17,876	8,254	28,030
2000-01*	1,950	18,147	8,537	28,634
2001-02*	2,084	18,292	8,721	29,097

Source: Horry County School District, 1998
*Enrollment figure based on projections developed by Horry County School System

The school system recently completed a major facility expansion phase to accommodate the county's growing student population. New facilities include Carolina Forest Education Center – High, Carolina Forest Education Center – Middle, the Forestbrook Middle School, Myrtle Beach Middle School, North Myrtle Beach Middle School, Aynor Elementary School, Carolina Forest Elementary School, Loris Elementary School, Myrtle Beach Intermediate, Seaside Elementary School.

The adequacy of PK-12 educational facilities can be assessed through two level of service indicators – the percentage of maximum enrollment capacity used and comparison with State of South Carolina average enrollment guidelines. Recent facility expansion did not add significant slack capacity to the system, but allowed for the absorption of the existing student population and alleviated congestion in high growth attendance areas such as Conway, Myrtle Beach, and Socastee. New middle and elementary school facilities in Carolina Forest opened in 1997/1998. Overall, the school system is now operating at 84 percent of its maximum enrollment capacity. Of the county's 42 schools, 18 now exceed recommended capacity. As Figure V-41 demonstrates, facility space is particularly limited among the county's elementary/primary schools. To supplement existing capacity, a total of 231 portable units are used throughout 30 of the county's 42 schools. Additional educational space will likely be necessary by 2003, especially in the developing Carolina Forest area.

Figure V-41: Horry County Public School Maximum Capacity and Current Student Enrollment, 1998



Source: Horry County Schools Facilities Manual, 1998

South Carolina's Department of Education establishes the following guidelines for student enrollment by school type: 600-700 students for elementary schools; 650-900 students for middle schools; 700-1,250 students for high schools. Horry County's current enrollments fall within these recommended ranges. The average size of the student body is 588 for elementary and primary schools, 730 for middle schools and 1,065 for high schools.

Based on Waccamaw Regional Planning and Development Council projections, Horry County will have 57,064 children age 5 to18 in 2020. To arrive at this estimate, the 2015 age distribution for the county is inflated by half the growth rate of the previous five-year period. Assuming that

the percentage of children attending public schools remains constant from the calculated 1995 figure, approximately 80 percent of the total school age population, or 46,670 children, will enroll in the Horry County system. Figure V-42 identifies 2020 space requirements by comparing the current enrollment capacity of each school type with projected student populations.

Figure V-42: Student Enrollment Projections and Capacity Needs, 2020

	Current Capacity	2020 Student Population	New Capacity Required
Elementary school	14,527	21,273	6,746
Middle school	8,428	9,117	689
High school	11,292	16,280	4,988
Total	**34,247**	**46,670**	**12,423**

With a total facility capacity of 34,247, the system will have to accommodate an additional 12,423 students by 2020. Assuming the county maintains present average enrollment sizes for each school type, a total of 17 new facilities will be required – 11 elementary schools, 1 middle school and 5 high schools.

b. Higher Education

Three major institutions of higher education provide a rich learning and research resource for Horry County.

Coastal Carolina University

Coastal Carolina University is a four-year institution located in Conway. The University includes 24 buildings on a 244-acre campus. Coastal Carolina offers 27 baccalaureate degrees in the fields of business administration, education, the humanities and fine arts, and natural and applied sciences. Students may also receive a Master's Degree in education. Coastal's growing Marine Science program has established a national reputation and attracts a large number of out-of-state students from the entire eastern seaboard.

As of 1998-1999, the University had an enrollment of over 4,500 students, with projected growth to a total enrollment of 6,000 by 2005. Approximately two-thirds of the student body is comprised of South Carolina residents.

Horry-Georgetown Technical College

Horry-Georgetown Technical College maintains three campuses located in Conway, Georgetown, and Myrtle Beach. The college awards Associate Degrees in such fields as business, computer technology, hospitality and tourism, and golf course management. Horry-Georgetown has been the fastest growing educational institution in South Carolina with enrollment increasing by 138 percent in the past decade. As of 1998, total enrollment was approximately 3,500 students. The College projects an annual enrollment growth rate of 5 to 6 percent. The College has expanded its Grand Strand facilities and plans further improvements.

Webster University

Webster University maintains a Myrtle Beach campus with a current enrollment of 340 students. The University offers a Master's Degree in Business Administration and a Master of Arts with emphases in business, counseling, human resources development, and management. With the addition of a new campus facility, Webster's enrollment virtually doubled between 1996-1997. The University anticipates further expanding classroom space and increasing enrollment.

2. Statement of Needs and Goals

Educational Facilities Vision

Well-managed schools facilities of adequate size and quality to promote a positive learning environment for Horry County students.

Need: As a result of rising enrollment, school capacity is limited

Goal 1: Improve and expand the existing school system to accommodate the growing student enrollment of Horry County.

Need: Increasing residential growth in eastern portions of the county, particularly in areas such as Carolina Forest and Socastee, generates high demand for nearby school facilities.

Goal 2: Target school expansion to areas of anticipated population growth.

Goal 3: Coordinate planning activities with Horry County School District planning staff.

M. Libraries and Other Cultural Facilities

1. Inventory and Analysis

a. Libraries

The Horry County Municipal Library System provides library services on a countywide basis. The system is centralized, with the Conway branch acting as the main library and administrative center. Horry County residents may also use the Chapin Memorial Library operated by the City of Myrtle Beach. Figures V-43 and V-44 identify the county's libraries and current facility capacity.

The Green Sea/Floyds and Carolina Forest facilities are proposed as part of the Library's *Comprehensive Facilities Development Plan* prepared in February 1997. Green Sea/Floyds, a 15,000-volume library and community center, is now in the design phase, with operation anticipated to begin in 1999.

Figure V-43: Horry County Library Facilities

Figure V-44: Horry County Public Library Facilities

Library Service Area	Map No.	Facility Square Footage	Facility Volumes	Facility Annual Circulation
Conway	5	9,000	53,378	118,518
Aynor	4	2,900	16,145	17,039
Bucksport	6	3,000	10,475	12,005
Loris	1	4,300	21,002	44,230
North Myrtle Beach	3	7,200	35,244	121,483
Socastee	7	6,600	33,873	61,868
Stephens Crossroad	2	4,000	13,000	33,000
Surfside Beach	8	7,260	22,875	100,665
Chapin Memorial (Myrtle Beach)	NA	24,980	80,000	212,000
Green Sea/Floyds	9	Proposed		
Carolina Forest	10	Proposed		

Source: Horry County Memorial Library Comprehensive Facilities Development Plan, 1997

Figure V-45 indicates the current size and projected population increases for each of the county's 10 library zones. Conway, Socastee, and Surfside Beach serve the largest population bases. The eastern areas of North Myrtle Beach, Carolina Forest, Socastee, Surfside Beach, and Stephens Crossroad are all expected to experience substantial growth and rising service demands. Population increases will continue beyond the ten-year timeframe of Library's Facilities Plan. Based on WRPDC projections, Horry County will add nearly 50 percent to its population between 2005-2020, with much of the growth focused in Myrtle Beach, North Myrtle Beach, Little River, and the eastern Conway area.

Figure V-45: Horry County Library Service Area Population Growth

Library Area	1995 Population	% Population Growth 1990-2005
Conway	30,656	55%
Aynor	11,139	35%
Bucksport	5,635	43%
Loris	12,698	26%
North Myrtle Beach	14,976	95%
Socastee	23,586	86%
Stephens Crossroad	9,843	83%
Surfside Beach	20,574	84%
Green Sea/Floyds	5,976	66%
Carolina Forest	7,427	91%

Source: Horry County Memorial Library Comprehensive Facilities Development Plan, 1997

To assess the adequacy of current library resources, capacities can be compared with size, volume, and circulation standards established in *Local Public Library Administration* published by the International City Managers' Association. Standards suggest 0.5 square feet of facility space per person, 2 books per person, and an annual circulation of 7 books per person.

Figure V-46 reflects the percentage of recommended service levels satisfied by each of the existing libraries. The Facilities Plan indicates that the most serious level of service deficiencies exist at the Conway, Socastee, and North Myrtle Beach libraries.

Figure V-46: Horry County Library Level of Service Performance

Library Facility	% of Square Footage Standard Met	% of Volumes/Capita Standard Met	% of Circulation/Capita Standard Met
Conway	58%	87%	55%
Aynor	52%	72%	22%
Bucksport	107%	93%	30%
Loris	67%	83%	50%
North Myrtle Beach	96%	118%	116%
Socastee	56%	72%	37%
Stephens Crossroad	82%	66%	48%
Surfside Beach	70%	56%	70%

Source: Horry County Memorial Library Comprehensive Facilities Development Plan, 1997

Based upon an estimated 1995 population of 175,100, Horry County has one library facility per 21,800 county residents. Assuming a projected 2020 population of 362,388, the county will require a total of 17 library buildings to maintain the current population per building ratio. This figure represents an increase of 7 sites over the 10 existing and proposed facilities identified in the 1997 *Comprehensive Facilities Development Plan*. To satisfy 2020 demand, the library system should also provide approximately 180,000 square feet of facility space. With current and proposed county libraries and the Chapin facility offering a combined total 81,000 square feet, 100,000 square feet must be added to the system.

b. Other Cultural Facilities

Figure V-47 identifies the major cultural facilities located within Horry County.

Figure V-47: Horry County Cultural Facilities

Facility	Location	Description
Horry County Museum	Conway	Archeological and Historic Exhibits
Burroughs-Chapin Art Museum	Myrtle Beach	Art Exhibits
Children's Museum of South Carolina	Myrtle Beach	Science and Technology Exhibits
Hobcaw Barony Visitors Center	Myrtle Beach	Nature Displays and Grounds Tours
Brookgreen Gardens	Myrtle Beach	Wildlife Park and Garden Tours
The Palace Theater	Myrtle Beach	Theatrical and Musical Productions
Wheelwright Auditorium (Coastal Carolina University)	Conway	Theatrical and Musical Productions

2. Statement of Needs and Goals

Library and Cultural Facilities Vision

Maintain a library system with facilities, resources, and technological capabilities sufficient to provide for the cultural enrichment of county residents and to ensure convenient and equitable access to available information.

Need: The physical size, number of volumes, and circulation activity of current library facilities fall below nationally recommended standards.

Goal 1: Improve and expand the existing library system to accommodate the growing service needs of the county population.

N. Key Findings

- Current transportation deficiencies in Horry County include: a lack of bikeways and sidewalks; highway capacity problems; a lack of park-and-ride facilities; a lack of paved roads in rural areas of the county; weak linkage between transportation system and land use.
- A singular emphasis on expansion of the road network will not alleviate future traffic congestion.
- By 2020, the county will require a potable water supply capable of delivering 46 million gallons per day.
- Low oxygen levels in Horry County surface waters may require reductions in treated wastewater discharge allocations.
- Many areas of the county have soil conditions that severely limit the safe use of on-site wastewater disposal systems.
- Flooding, soil erosion, and water quality issues require a comprehensive stormwater management program.

- The generation of MSW in Horry County is growing at an annual rate of 5 percent.
- The amount of solid waste per capita disposed in landfills is increasing.
- Currently, Horry County falls below the recommended national standard for acres of local park space per 1,000 people.
- The county's public safety departments – Fire, Police, and EMS – are experiencing increasing call volumes.
- The Horry County Police Department currently falls below the national staffing ratio of officers per 1,000 residents.
- Student enrollment in the Horry County School System will increase 9 percent by 2002.
- School capacity is limited and additional space for approximately 12,000 students will be required by 2020.
- The Horry County library system falls below recommended national standards in square footage, number of volumes, and circulation activity.

O. Implementation Strategies

The following implementation strategies provide specific actions that support the county's vision for an adequate, sustainable, and efficiently managed system of community facilities:

Overall Community Facilities Strategies

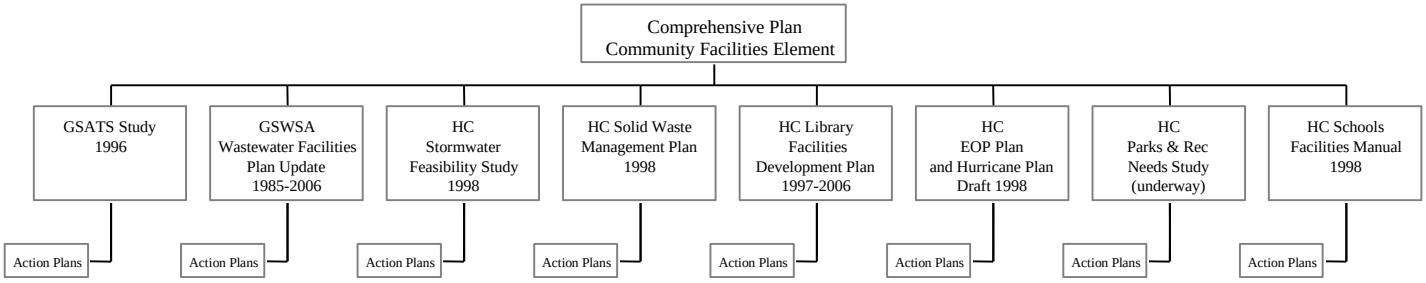
1. **Coordinate the timing, location, and capacity of community facility expansion with desirable patterns of growth. Identify portions of the county in proximity of existing or proposed infrastructure and direct development to these preferred areas.**

2. **Establish design and location guidelines for the development of new community facilities to preserve the natural environment and enhance the aesthetic appeal of county neighborhoods. Evaluation criteria may include:**

    - Land use compatibility
    - Protection of natural resources
    - Use of xeriscape and stormwater Best Management Practices
    - Architectural compatibility
    - Traffic impact study

3. **Facilities development can be conceptualized as a three-tiered planning process as shown in Figure V-48.**

Figure V-48 Community Facilities Planning Framework



The Community Facilities Element offers the broadest and most integrated analysis of service delivery arrangements and infrastructure capacity within the county. Various functional plans narrow the focus to the level of individual service provider. The implementation strategies drawn from the comprehensive plan and functional plans provide the critical link to the next phase of facility planning. Action plans are specific implementation frameworks formed around recommendations for delivery improvements and facility expansion. Action plans should include:

- More detailed technical analysis of delivery arrangements, the nature and level of service demands, and innovative opportunities for service delivery improvement.
- Inventory of available fiscal and organizational resources.
- Identification of stakeholders within the community, as well as public, non-profit, and private agencies involved in direct service provision.
- Prioritization of recommend projects and organizational strategies.

4. Examine funding alternatives to traditional property tax assessments. Typical alternatives to using general revenue include:

- Revenue bonds – income from a revenue generating project is pledged to repay debt
- Increases in the accommodations tax.
- Special assessment bonds – some portion of the debt payment is made by those who benefit directly from a project.
- Creation of a special district – financing is undertaken by an independent authority.
- Lease-purchase agreements – a facility is built by a profit or non-profit corporation.
- Joint financing with another jurisdiction.
- Development exactions – a private developer is required to construct infrastructure to a new development.
- Impact fees – require new development to assume a proportionate share of the costs of infrastructure expansion.
- Tax Increment Financing.
- User fees

5. Develop a systematic approach to the Capital Improvements Program (CIP) planning process. The CIP forms a critical link between the infrastructure requirements identified in the Community Facilities Element and the county's fiscal plan. The systematic planning of capital projects performs a variety of critical roles, including:

- Focusing attention on community goals, needs and objectives.
- Ensuring the timely provision of the infrastructure necessary to support the community's desired growth.
- Guiding future residential and economic development. The CIP can track both short-term requirements, such as correcting current service deficiencies, as well as long-term trends affecting patterns of growth.
- Improving the basis for intergovernmental and regional cooperation.
- Providing consistency among functional plans.
- Maintaining a sound and stable financial program.
- Preserving the quality of public services envisioned in the comprehensive planning process.
- Generating feedback for the development process. The CIP can be used to coordinate land use and zoning decisions with facility planning and establish a basis for future negotiated development exactions or impact fees.

The recommended approach to capital planning is scenario-driven. Rather than creating a financially infeasible wish list of projects, the community instead develops different scenarios involving various assumptions about needs and available revenues. Facility needs can be quantified through level of service (LOS) indicators. LOS measures are specific performance benchmarks that relate existing capacity to present or projected demand. The Community Facilities Element identifies a variety of LOS indicators that may be used to evaluate service functions. The community, however, can also form its own LOS benchmarks through local feedback or the adoption of standards used by other governments, state agencies, or professional associations.

The community then builds capital planning alternatives around a range of levels of service from satisfying the minimum community need to achieving the highest possible LOS standard. The scenario-driven approach illustrates the choices inherent in capital planning, enabling the community to balance a desire for quality of services with its ability and willingness to pay for them.

Developing a systematic CIP process generally involves the following steps:

1. Organize the process, involving local elected bodies, service providers, staff, formal advisory groups and the public.
2. Develop policies that reflect the community's values and vision.
3. Forecast demand using factors such as population, housing units, calls for service, traffic volumes, and school enrollment.
4. Inventory existing capital facilities and develop a capital maintenance plan.

5. Develop level of service standards.
6. Establish a prioritization scheme for selecting among alternative service goals.
7. Assess funding capacity by analyzing past revenues and identifying fiscal trends.
8. Prepare levels of service and revenue scenarios. Test the financial feasibility of a variety of LOS standards to determine an acceptable balance of quality and affordability.

Figure V-49 provides a sample CIP planning framework for Horry County facility expansion. The framework divides projects between short-term (approximately 1-5 years) improvements intended to correct current service deficiencies and long-term expansion (approximately 6-20 years) designed to accommodate expected population growth. Projects were identified through the application of LOS measures and through projected facility needs developed by county service providers.

Figure V-49: Sample CIP Planning Framework for Horry County Community Facilities

Service Area	LOS Measures	Functional Plan	Short Term Projects (1-5 Years)	Long Term Projects (6-20 Years)
Transportation	• Volume-Capacity Ratios	• Long Range Plan for the Grand Strand Area Transportation Study • RIDE Committee	• Conway Bypass • Carolina Bays Parkway • SC 544 • Conway Perimeter Road • Metro Loop • US 501 • Grand Strand Area • Congestion Management Program	• GSATS Long Range Plan • Fire/Water Tower Road • Burroughs Road • Perry Road • Ocean Blvd. • SC 9 • Big Block Road • US 17 • US 701 • SC 410 • Conway Perimeter Road • Pee Dee Road • US 378 • SC 90 • Community Bus System

Stormwater Management	• Compliance with NPDES Requirements • Compliance with Water Quality Standards	• Stormwater Management Master Plan	• Remedial maintenance of drainage system • Burgess Watershed, Collins Creek and Garden City Improvements • Acquisition of properties and easements in critical areas • Best Management Practices for Water Quality	• Prioritized CIP construction
Parks and Recreation	• National Recreation and Park Association Standard of 6.25 acres per 1,000 people	N/A	• Acquisition and development of approximately 600 acres of park land	• Acquisition and development of approximately 1,100 additional acres of park land
Fire Protection .	• ISO Ratings • Call Volume • National Average Turn-out Time	N/A	• Socastee • Carolina Forest #1 • Carolina Forest #3 • Carolina Forest #4 • Lake Arrowhead • Mt. Olive • Little River • Hwy 707 • Oakey Swamp • Nixon Crossroads • Hwy 544 • Hwy 90 South • Hickory Grove • Allen's Crossroads • Iron Spring • 544 & 17 Bypass • Floyds • Greenwood • MI/GCFD in 707 area	• Joint Police/Fire Training Academy • Forest Brook • Backgate • Carolina Forest #2 • Carolina Forest #5 • MI/GCFD in 17 Bypass area

Police Protection	• National Staffing Ratio • Call Volume • Standard Response Time	N/A	• Police substation in Carolina Forest • Detention Center Expansion	• Police substation in Carolina Forest • Police Precinct in Carolina Forest
Emergency Medical Service	• Call Volume • Standard Response Time	N/A	• Carolina Forest Station • Bayboro Station • South Strand Station	• Myrtle Beach Station • Carolina Forest #2 Station • Pleasant View Station • Sweet Home Station
Emergency Preparedness	• Shelter Capacity • Clearance Time on Evacuation Routes	• Horry County Emergency Operations Plan • Horry County Hurricane Plan	• Upgrade of Audio-visual Technology at Emergency Operations Center	
General Government Facilities	• Average South Carolina Staffing Ratio	N/A	• Judicial Center and Administrative Complex • Public Works Facility • Animal Control Facility	• Development of public service "satellite" centers
Libraries	• Local Public Library Administration Standards	• Horry County Memorial Library Comp Facilities Development Plan	• Green Sea/Floyds Library • Coway Library • Socastee Library • North Myrtle Beach Library • Aynor Library	• Surfside Beach Library • Stephens Crossroad Library • Loris Library • Carolina Forest Library

Transportation Strategies

6. Develop a Comprehensive Transportation Plan for Horry County that stresses a multi-modal and regional approach to mobility.

7. Construct additional capacity to mitigate existing deficiencies in the roadway system.

- When possible, implement the recommendations of the RIDE Committee
- Mandate a level of service D on all arterials during average days of the peak season.
- Provide SCDOT with sufficient assistance to ensure that a congestion management system (CMS) is developed for the Grand Strand Area.
- Identify and construct improvements in a timely manner.

8. Ensure the availability of adequate rights-of-way (ROW) to support the needs of the Long-Range Plan.

- Coordinate the adoption of consistent minimum standards for ROW associated with transportation facilities by all local governments.
- Develop a ROW reservation map.
- Assist local governments to create mechanisms that will guarantee preservation of necessary ROW.
- Develop an adequate source of revenue to fund an advanced ROW acquisition program.

9. Use transportation demand management techniques to reduce roadway congestion in the urbanized areas. Examples may include:

- Parking restrictions.
- Rideshare programming.
- Designate special road lanes for transit and high occupancy vehicles.
- Plan and implement remote parking areas to reduce the number of private automobiles in core areas.

10. Actively promote the development and use of alternative modes of travel such as carpooling, the CRPTA network, proposed passenger rail, and bike paths.

- Encourage public and/or private sectors to provide service between the Jetport and local destinations.
- Enhance personal mobility by creating a local mass transit system catering to short-distance tourist trips in most developed cores.
- Coordinate the provision of bike paths with systems under study or development in municipalities.

11. Enhance the safety of pedestrian travel.

- Protect existing neighborhoods from the intrusion of excessive through-traffic volumes as well as the physical impacts of roadway and transit improvements.
- Establish guidelines for the installation of sidewalks. Sample guidelines may include:
  - Arterial streets shall have sidewalks on both sides of the street.
  - All streets within ½ mile of public schools shall have sidewalks.
  - All streets within ¼ mile of public transportation stations or stops shall have sidewalks.
  - All streets serving residential districts with a density greater than 3.0 dwelling units per net acre shall have sidewalks connecting them to the nearest arterial street.
  - For all streets meeting the above criteria and with average daily traffic greater than 2,000 vehicles per day, sidewalks shall be located on both sides of the street.

12. Encourage an inter-jurisdictional approach to transportation planning.

13. Coordinate land use planning with transportation goals. Examples include:

- Use of incentives, such as density bonuses, for the development of transit-oriented facilities, including park and ride lots, transit connections, and pedestrian and bicycle linkages.
- Promote mixed-use development and the clustering of buildings to promote mobility without reliance on the automobile.

14. Obtain community support for multi-modal transportation planning process. Techniques include:

- Use of the media (newspaper, radio, and television) to effectively explain the planning process and solicit public input.
- Employ innovative techniques such as transportation fairs, town meetings, open houses, and mobile displays to communicate the procedures and resulting plans to the general public.

15. Develop a financing scheme that generates adequate revenue while spreading the burden between residents/visitors, automobile, and transit users.

16. Preserve the existing transportation network through a cost-effective, preventative maintenance program. Activities should include:

- Annual infrastructure reviews of pavements, bridges, and transit facilities.
- Require all new transportation facilities to meet minimum design criteria.

17. Integrate preservation of the natural environment with transportation planning.

- Follow the National Environmental Protection Act (NEPA) and the Major Transportation Investment Study (or MIS) procedures wherever practical and necessary to identify the best transportation project with the least negative impacts.
- Include environmental preservation as a factor in prioritizing transportation projects.

Water Supply, Treatment, and Distribution Strategies

18. Use proximity to public water as a land use planning criterion for guiding future development.

19. Require new developments located within 500 feet of a water line to connect to the public system.

20. Work with the GSWSA to determine necessary facility expansions and desired areas for water line extension.

21. Work with the GSWSA to support water conservation activities as a method of reducing water consumption. Examples include:

- Encourage the installation of low-water fixtures in new developments.
- Use of xeriscaping with low-water demand, native vegetation.

22. Where rural water lines are installed, encourage a sizing of lines adequate to provide for fire protection.

Wastewater Treatment Strategies

23. Use proximity to public sewer as a land use planning criterion to guide future development.

24. Require development located within 500 feet of public sewer to connect to the line.

25. Work with the GSWSA to determine necessary treatment facility expansions and identify desirable areas for sewer line extension.

26. Work with the GSWSA to develop safe, alternative methods of wastewater disposal to protect the quality of surface waters. Examples include:

- The use of zoning and subdivision regulations to preserve wetlands as a means of natural water treatment.
- The acquisition of land or the use of easements to secure sites for spray irrigation disposal.

27. Work with the GSWSA and SCDHEC to identify those areas of the county with high rates of septic tank failure and encourage the installation of public sewer infrastructure where possible.

28. Where the installation of public sewer is not practicable, encourage the adoption of BMPs designed to maintain the proper functioning of existing on-site wastewater disposal systems. Examples include:

- Publish educational materials on the safe operation and maintenance of septic tanks.
- Encourage the elimination of the use of garbage disposals as a means to reduce the build-up of solids in tanks.
- Promote the installation of low-volume plumbing fixtures.
- Require the inspection of on-site systems during a change of property ownership.

Stormwater Management Strategies

29. Address the issues and recommendations identified in the 1998 *Stormwater Management Feasibility Study* prepared for the Horry County Stormwater Advisory Committee.

30. Establish the legal and regulatory framework for stormwater management by adopting a Stormwater Management Ordinance.

31. Promote public awareness of the economic and environmental benefits of proper stormwater management.

32. Emphasize development of a regional stormwater management approach linked to a comprehensive system of open space. Coordinate the planning and implementation of stormwater activities with municipalities and adjacent counties.

33. Encourage an area-wide detention study.

34. Link land use planning to stormwater management goals. Examples include:

- Limit impervious surface coverage, particularly in critical areas located near water supply points.
- Require developments to preserve open space and maintain natural vegetative buffers near surface waters.
- Identify portions of the county that are prone to flooding and use zoning to direct development away from vulnerable areas.

35. To reduce soil erosion and non-point pollution, require compliance with BMPs for agriculture and forestry developed by the State of South Carolina.

36. Compile engineering criteria and performance standards in a design manual that may be used to guide the development of stormwater infrastructure.

37. Reduce common sources of non-point pollution by working with the Solid Waste Authority, Inc. to promote used oil and household hazardous waste collections.

38. Lessen the discharge of pollutants through the regular maintenance and cleaning of roadways and bridges.

Solid Waste Disposal Strategies

39. Work with the Horry County Solid Waste Authority, Inc. to promote recycling, waste reduction, and reuse strategies. Examples include:

- The location of recycling collection sites at public facilities.
- The use of recycled products at public facilities.

40. Identify areas of the unincorporated county with a residential density sufficient to support a transition toward curbside collection.

41. Work with the Horry County Solid Waste Authority, Inc. to explore safe, innovative alternatives to landfill disposal.

42. Work with the Horry County Solid Waste Authority, Inc. to examine participation in a regional solid waste disposal strategy.

Parks and Recreation Strategies

43. Address the issues and recommendations identified in the Recreation Needs Assessment study to be completed by 1999.

44. Target recreation expansion toward satisfying high demand for soccer fields, aquatic facilities, and passive parks and trails.

45. Identify the special recreation needs of the county's growing retirement population.

46. As part of the county's Capital Improvements Program, develop a specific plan for the acquisition of open space and park land.

47. Establish guidelines for the dedication of open space and recreational facilities in new developments.

48. Coordinate the provision of recreational facilities with county schools to increase the usage of existing space. Promote the compact design of school campuses as a means of enhancing available open space for community use.

49. Improve access to park space and recreational facilities in the western portion of the county. The county may consider development of "satellite," multi-purpose clusters of public facilities that combine several community functions to better serve rural areas.

Public Safety Strategies

50. Increase fire fighting staffing to accommodate rising service demands. Conduct a risk assessment study based on population density or property values. Establish density and value standards that may be used to assign professional or volunteer coverage to specific portions of the county.

51. Address the projected facility needs identified by Horry County Fire Department and The Murrells Inlet – Garden City Fire District Department, including the improvement and expansion of fire stations at the following locations:

- Carolina Forest

- Socastee
- Little River
- Forestbrook
- Mt. Olive
- Lake Arrowhead
- Greenwood
- 544 and 17 Bypass
- Oakey Swamp
- Nixon Crossroads
- Hickory Grove
- Highway 90
- Iron Spring
- Highway 544
- Backgate
- Highway 707
- Murrells Inlet - Garden City Fire District Station in the Hwy 707 area
- Murrells Inlet - Garden City Fire District Station in the 17 Bypass area

52. Consider the establishment of police "substations" to decentralize the main operations located in Conway and provide for neighborhood-based protection.

53. Increase police staffing to accommodate rising service demands.

54. Address the projected facility needs identified by the Horry County Police Department, including the development of two police substations and a fully self-supporting precinct station in Carolina Forest.

55. Increase EMS staffing to accommodate rising service demands.

56. Address the projected facility needs identified by the Horry County EMS Department, including the development of stations at the following locations:

- Carolina Forest
- Bayboro
- South Strand
- Myrtle Beach
- Pleasant View
- Sweet Home

57. Consider development of a public safety master plan to guide expansion of facilities and better coordinate existing services.

58. Consider the reorganization and possible consolidation of fire protection and emergency medical services to eliminate duplication of effort and enhance operating efficiency.

59. Better coordinate public safety delivery with municipal provision. Examples include the elimination of duplicate street names throughout the county as a means of reducing response times.

Emergency Preparedness Strategies

60. Fully implement the provisions of the 1998 *Draft Emergency Preparedness Plan* and *Draft Hurricane Plan* developed by the Emergency Preparedness Department.

61. Identify any infrastructure deficiencies, such as roadways or bridges, that may impede movement on hurricane evacuation routes and place such projects in the CIP.

62. Upgrade the audio-visual technological capacity of the Emergency Preparedness Center to enhance the efficiency of operations during disaster management.

General Government Facilities Strategies

63. Develop a comprehensive long range plan for accommodating the facility needs of county staff.

64. Begin the next phase of facility expansion with issuance of a bond for construction of a Judicial Center/Administrative Complex, Public Works Facility, a library facility, detention center expansion, and animal control facility.

65. Examine the decentralization of county public service delivery arrangements by clustering multiple customer contact functions in "satellite" facilities located throughout the county. Library services, schools, public health, elder care, and senior services provide a complementary range of activities that can be combined.

Education Strategies

66. Work with the Horry County School System to develop accurate projections of student enrollment levels.

67. Work with the Horry County School System to coordinate school expansion with the provision of essential infrastructure, such as sewer, adequate roads, and sidewalks.

68. Work with the Horry County School System in the land acquisition phase of school expansion. Coordinate school site selection with the county rezoning process to facilitate land acquisition.

Library Strategies

69. Address the issues and recommendations identified in the Horry County Memorial Library System's 1997 *Comprehensive Facilities Development Plan*.

70. Address projected facility needs as identified by the Horry County Library System, including the remodeling or construction of new facilities at the following locations:

- Conway
- North Myrtle Beach
- Socastee
- Green Sea/Floyds
- Carolina Forest

71. Strengthen the technological capabilities of the libraries, including Internet access for system patrons.

P. Benchmarks for a Sustainable Quality of Life

Benchmarks serve as quantitative indicators that when monitored on an annual basis can assist the county in determining its level of progress toward achieving the goals identified in the elements of the comprehensive plan. For community facilities, benchmarks include:

- Volume capacity ratios on existing roads
- Miles of sidewalk constructed
- Rates of septic tank failure
- Number of flood damage complaints in Horry County
- Compliance with water quality standards established for area surface waters
- Rates of recycling
- Tons of waste disposed in Horry County Solid Waste Authority landfill
- Emergency personnel response times
- Average student enrollment size of Horry County School facilities

I. Public Safety and Emergency Medical Services

1. Inventory and Analysis

a. Fire Protection

The Horry County Fire Department provides fire protection services to the unincorporated portion of the county and the Town of Aynor. The Murrells Inlet – Garden City Fire Department operates within a Special Purpose District serving approximately 45 square miles in southeastern Horry County and northeastern Georgetown Counties. The cities of Myrtle Beach, North Myrtle Beach, Conway, and Loris deliver fire services to portions of the county on a contractual basis. The county and municipal departments also augment individual delivery arrangements by participating in mutual aid agreements. County fire service operations are financed through a restricted tax millage.

The department currently operates 25 fire stations and maintains a career staff of 44, including support personnel, and 400 volunteers. Ten stations are staffed, with two providing 24-hour service and 8 offering day-only coverage. The Murells Inlet –Garden City District maintains two fire stations with a career firefighting staff of nine complemented by approximately forty volunteers.
Figure V-28 lists the fire stations, current staffing arrangements, and Insurance Service Organization (ISO) ratings. Figure V-29 identifies station locations. ISO is a private insurance organization that evaluates fire protection capabilities. Ratings criteria include the distance between structures and fire stations, the composition of structures, numbers and types of fire fighting equipment and apparatus, fire stations, and personnel. Lower ratings represent lower premiums assumed by the insurance-holder. Slashed ratings reflect the difference in premiums for structures within 1,000 feet of a fire hydrant and those beyond a 1,000-foot distance.

Figure V-28: Horry County Department and Murrells Inlet – Garden City District Department Fire Stations

Fire Station	Station No.	Staffing	ISO Rating
Socastee	1	Day-time Career	6/9
Little River	2	Volunteer	6/9
Bucksport	3	Day-time Career	6/9
Forestbrook	4	Volunteer	7/9
Wampee	5	Day-time Career	6/9
Mt. Olive	6	Day-time Career	9
Lake Arrowhead	7	24-hour Career	7
Juniper Bay	8	Volunteer	8/9
Antioch	9	Volunteer	6/9
Ketchuptown	10	Volunteer	9
Nixonville	12	Volunteer	5/9
Longs	13	Volunteer	5/9

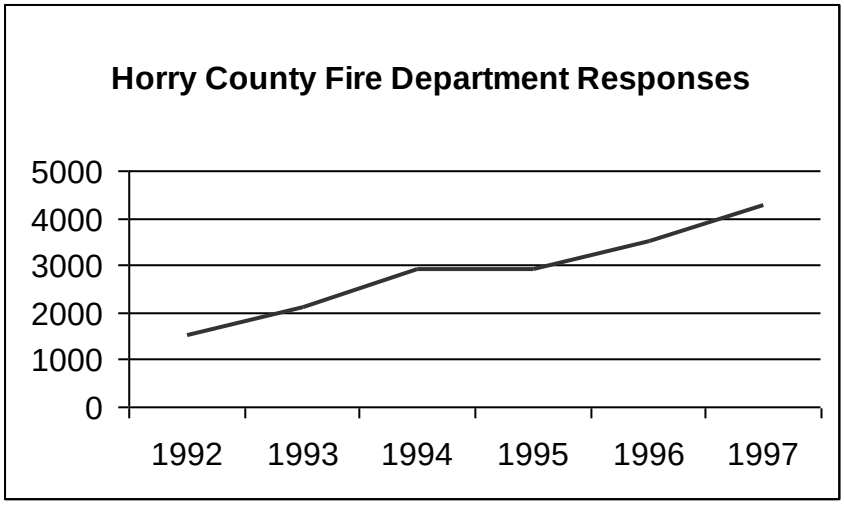
Shell	14	Volunteer	7/9
Bayboro	15	Volunteer	7/9
Cates Bay	16	Day-time Career	7/9
Mt. Vernon	17	Day-time Career	5/9
Brooksville	18	Volunteer	Not rated
Cherry Hill	19	Volunteer	5/9
Maple	21	Day-time Career	7/9
University	23	24-hour Career	Not rated
Aynor City	24	Day-time Career	6/9
Goretown	26	Volunteer	5/9
Allens Crossroads	27	Volunteer	7/9
Joyner	28	Volunteer	7/9
Floyds	38	Volunteer	9
MI/GCFD 1		Career/Volunteer	4
MI/GCFD 2		Career/Volunteer	4

Source: Horry County Fire Department and Murrells Inlet – Garden City Fire District, 1998

Figure V-29: Horry County Fire Department Facilities

Reflecting rapid population growth, Figure V-30 demonstrates the rising call volume handled by the Horry County Fire Department. In 1997, the Department responded to 4,272 calls, an increase of 22 percent over the previous year. The high volume is due primarily to increases in rescue and first response activity, rather than fire suppression.

Figure V-30: Horry County Fire Department Call Volumes, 1992-1997



Source: Horry County Fire Department, 1998

Fire service delivery can be assessed on the basis of turnout time, which represents the elapsed time between the dispatch of a call and the departure of an engine from the station. According to the International Association of Fire Chiefs, the national average turnout time for volunteers is 3 minutes and 6 seconds. In 1996, average turnout time at the county's 23 all-volunteer stations was 7 minutes and 30 seconds between the hours of 8 am to 5 pm. During the hours of 5 pm to 8 am, turnout time decreased to 4 minutes and 20 seconds. The county has since added 19 career firefighters to its staff. Turnout times at stations with professional daytime coverage have been consistently below 1 minute.

b. Police

The Horry County Police Department provides law enforcement services to the unincorporated portion of the county. Municipalities within Horry County also maintain individual police forces. The county participates in mutual aid agreements with the cities and supplements their police services upon request. The Department maintains a staff of 198 commissioned officers, plus 16 non-commissioned support personnel. Delivery arrangements are currently centralized, with the M.L. Brown facility in Conway acting as operational center.

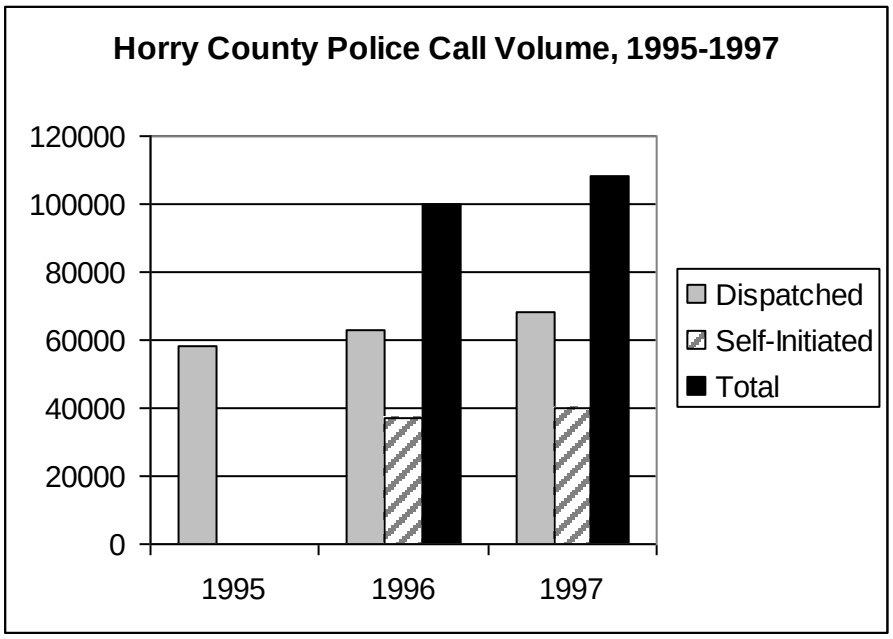
Figures V-31 and V-33 identify Horry County Police Department facilities. Office space reserved in the seven magistrate complexes and the Long Detention Center is used for administrative purposes. The Department also informally contracts with area businesses for workstation space. The county does not currently operate autonomous substations with full-time police coverage.

Figure V-31: Horry Police Department Facilities

Police Facilities	Map No.	Type of Facility
M. L. Brown Public Safety Building (Conway)	1	Main Facility
Mt. Olive Complex (Green Sea)	2	Office Space
Stevens Crossroads Complex (Little River)	3	Office Space
Surfside Complex (Surfside)	4	Office Space
Olin Blanton Complex (Myrtle Beach)	5	Office Space
Conway Complex (Conway)	6	Office Space
W.C. Hucks Complex (Aynor)	7	Office Space
James P. Stevens Complex (Loris)	8	Office Space
J. Reuben Long Detention Center Complex	9	Office Space

Figure V-32 indicates trends in the call volume handled by the Horry County Police Department. Total volume increased by 8.2 percent between 1996 and 1997. Volume information from 1995 does not include data on self-initiated or total response due to a change in dispatch call nomenclature.

Figure V-32: Horry County Police Department Call Volumes, 1995-1997



Source: Horry County Police Department, 1998

Figure V-33: Horry County Police Department Facilities

The level of police service delivery can be assessed along two dimensions – staffing ratios and response times. The national average for police staffing is 2.3 officers per 1,000 persons in suburban communities and a ratio of 2.6 officers to 1,000 persons in rural areas. The national staffing average for all jurisdictions is 2.2 officers per 1,000. The county does not currently approach these national staffing standards. Based on an estimated 1995 permanent population figure of 117,804, the present ratio is approximately 1.68 officers for every 1,000 residents of the unincorporated county. The staffing ratio is even lower when considering the influx of visitors during the tourist season. Standard police response time is seven minutes for priority calls. Priority calls include requests for assistance when a crime is in progress or when there is an immediate and impending threat to person or property. The Department's actual average response time for priority calls is 7 to 8 minutes. All other calls average a response time of 12 to14 minutes.

c. Emergency Medical Services

The county provides direct emergency medical service response to the unincorporated portions of Horry, as well as incorporated areas. Figures V-34 and V-35 identify the Emergency Medical Service (EMS) stations located throughout the county. Each facility is staffed with a least one advanced life support ambulance, an emergency medical technician, and paramedic. The 911 system is maintained on a countywide basis at the Horry County Emergency Communications Center in Conway.

Figure V-34: Horry County EMS Facilities

EMS Sites	Map No.	Average Response Time (in minutes)
Myrtle Beach	9	4.49
Socastee	12	6.54
Mt. Olive	1	9.11
Conway	7	6.48
Lake Arrowhead	8	5.16
Bucksport	11	8.03
Loris	2	7.05
Surfside Beach	13	6.06
Stephen's Crossroad	3	7.18
Aynor	6	8.18
South Myrtle Beach	10	4.34
North Myrtle Beach	4	5.20
Red Bluff	5	8.51

Source: Horry County EMS, 1998

Figure V-35: Horry County EMS Facilities

Eight volunteer-based rescue squads within Horry County provide a supplement to EMS and Fire Department response. However, volunteer rescue activity has recently declined, requiring the county to commit additional staff and resources to call response. After 1995, the EMS Department shed responsibility for routine patient transport. Call volume, however, continued to increase. In 1997, the EMS Department handled approximately ~~25,000~~ 23,000 calls for emergency medical service, a rise of ~~25~~ 2.5 percent in demand over the previous year.

EMS delivery is assessed on the basis of response time. Standard~~s~~ response time ~~for~~ is 4 to 6 minutes for basic life support and 8 minutes for advanced life support. The Department's overall response average was 7 minutes. Figure V-34 also presents average response times by station. Higher response times for sites in the rural part of the county reflect the more geographically dispersed nature of the service population.

d. Emergency 9-1-1 Center

The Horry County Emergency 9-1-1 Communications Center is a vital link between the community and the public safety responders in the area. As the first link in the chain of Public Safety, it is the mission of Emergency 9-1-1 to provide courteous, reliable and professional service to the citizens and visitors of Horry County.

All 9-1-1 calls made in Horry County are answered in the Communications Center. In 2005, the center received 204,195 9-1-1 calls. This resulted in 168,443 police, fire and ambulance dispatches from the communications center. The center dispatches for Horry County Police Department, Horry County Fire/Rescue, Anyor Police Department and Atlantic Beach Police Department. Calls for service from the other municipalities are transferred immediately to them. The projected statistics for call numbers for 2006 and 2007 can be reviewed in figure ### below.

Figure ###

Dispatched Calls	FY 2005	FY2006	FY 2007
Horry County Fire/Rescue (Ambulance)	34,550	31,000	35,000
Horry County Fire/Rescue (Fire)	13,821	15,000	14,000
Horry County Police	113,596	115,000	115,000
Atlantic Beach Police	1,972	2,000	2,000
Aynor Police	2,908	4,000	3,000
Horry County Sheriff	1,596	2,000	2,000
Totals	168,443	169,000	171,000

The 9-1-1 Center has a staff of ### to assist in all needs: emergency and/or non-emergency. The first performance goals of each of these public servants is to work with service providers and planning departments to assure accurate database management, support the mission of the public Safety Division and Horry County Government, and to provide professional and timely customer service. The South Carolina Criminal Justice Academy certifies all telecommunicators. They are trained to provide medical pre-arrival instructions to assist patients before the ambulance arrives. This service allows persons who are directly involved in or related to the emergency to be calmed and possibly assist in the adjustment of a potentially major situation.

Technology has become the interior point of all services of the public, the Public Safety and E-9-1-1 services of Horry County have made it there objective to be at the peak of preparedness as it pertains to the safety and protection of Horry County residents and visitors.

2. Statement of Needs and Goals

Public Safety Vision

Protect the health, safety, and welfare of county residents and visitors through the provision of responsive, adequately equipped and staffed, and highly trained public safety services.

Need: County Fire Department turn-out times at volunteer-staffed stations do not meet national standards.

Goal 1: Increase professional fire fighting coverage at existing stations to decrease turn-out times.

Need: County Police Department staffing is currently below the staffing averages of similarly sized jurisdictions.

Goal 2: Increase police staffing to maintain desired response times and provide adequate police protection.

Need: Eastern areas of the county, such as Socastee and Carolina Forest, are experiencing significant population growth.

Goal 3: Target rapidly growing portions of the county for the expansion of public safety facilities.

Need: All public safety departments are experiencing considerable increases in service demand.

Goal 4: Improve and expand the current public service delivery system to accommodate expected population growth.

Need: The population, particularly in the western portion of the county, is dispersed, requiring public safety personnel to be spread over of a large geographic area.

Goal 5: Examine the establishment of new delivery arrangements, such as decentralization and the development of joint fire/police/EMS facilities, which enable public safety personnel to be more evenly spread across the county.

Need: Though originally designed to provide space sufficient for 10 years, the Brown Public Safety Building, constructed in 1996, is now occupied at capacity.

Goal 6: Provide adequate administrative space to accommodate any growth in public safety functions.

J. Emergency Management

1. Inventory and Analysis

Horry County Emergency Management develops plans and coordinates resources to protect the citizens and visitors of Horry County from the hazards that threaten our communities. The Department also serves as the liaison between the local, county, state and federal agencies in the emergency management network. The Emergency Management Department utilizes the framework of the National Incident Management System for all phases of emergency management: prevention, preparedness, response, recovery and mitigation. When preparing for or responding to a disaster or emergency, the department refers to one of many plans that have been developed. The Horry County Emergency Operations Plan is the governing plan for all operations during an emergency or disaster. Other plans such as the Logistics Plan, Hurricane Plan, and the All-Hazards Mitigation Plan address certain aspects of a disaster or emergency and are used in those instances. Through programs like the Horry County Community Emergency Response Team (CERT) and other public education programs, the Department educates the general public on their roles and responsibilities during a disaster or emergency. The Department also develops and coordinates emergency and disaster training for the many Public Safety and non-profit response agencies throughout the County. While the Department uses an all-hazards approach in planning, there are three main points of focus: natural hazards, technological hazards and training. These issues embrace a wide variety of specialized equipment, response teams, and projects that enhance the department's capability.

a. Natural Hazards

Horry County is vulnerable to a wide variety of natural hazards that threaten life and property. The natural hazards that affect the County are listed below.

-Hurricane	-Flooding
-Tornados	-Severe Thunderstorms & Wind
-Storm Surge	-Severe Winter Storms

-Earthquake	-Wildfire
-Lightning	-Drought
-Tsunami	-Extreme Heat

The Emergency Management Department relies on many types of equipment and technology to monitor and respond to disasters or emergencies caused by a natural hazard. The most recognized software used in the emergency management field is Hurrevac. The Hurrevac software allows emergency management officials to monitor tropical systems and use the applications to plan and prepare for the possibility of an evacuation. The Weather Sentry satellite weather feed can be monitored in the EMD office or at a remote site via the Internet. Some equipment can also be used at public education events for demonstration purposes. The WeatherPak Weather Station can monitor and give readings of wind direction, temperature, humidity, and other helpful information. The Emergency Management Department is having the First Annual Hurricane Preparedness Expo in April of 2006. The purpose of this expo is to educate as many local residents and businesses on how to prepare for the hazards of a hurricane and to be aware of the current public safety procedures used during the threat of a hurricane.

b. Technological Hazards

There are two main types of technological hazards that Horry County is vulnerable to: Hazardous Materials (HazMat) and Terrorism. HazMat can be defined as any item or agent (biological, chemical, physical) which has the potential to cause harm to humans, animals, or the environment, either by itself or interaction with other factors. Terrorism can be executed in many different forms and/or situations. According to the United States Department of Homeland Security Terrorism can be broken down into five categories: Chemical, Biological, Radiological, Nuclear, and Explosive (CBRNE). The Emergency Management Department has received Homeland Security Grants to purchase specialized equipment in response to any terrorist attack. Fortunately, due to the similarities of the HazMat and terrorism categories, most equipment can be utilized in both situations. Rae Detection Four Gas Monitors, Thermal Imagers, and a RAMP Biodefense System can all be used in a HazMat or Terrorist situation. From 2003 to 2005 Horry County received over 2 million dollars of Homeland Security funds to purchase such equipment. Many different specialty teams within the County can utilize this equipment. Horry County is recognized throughout the state for its regional response teams such as the Chemical, Ordnance, Biological, and Radiological Team (COBRA); the County Agro-Terrorism Response Team (CART); and the Explosive, Ordnance, Demolition Team (EOD).

c. Training

The Emergency Management Department provides three different types of training exercises: tabletop, functional, and full-scale. There are many different county departments, private and healthcare industries and Extremely Hazardous Substance (EHS) facilities required to exercise particular plans to meet or satisfy industrial or government requirements. Most exercises will require the same public safety agencies to

respond and participate to meet the basic criteria. Therefore, Emergency Management has taken the role of planning and conducting exercises throughout the year to include the agencies and facilities that need to meet a particular requirement. This not only reduces exercise redundancy but also promotes the partnership of private and government agencies. In 2006 – 2008 the Emergency Management Department will develop and conduct four tabletops, four functional, and three full-scale exercises.

2. Statement of Needs and Goals

Emergency Management Vision

Goal 1: Provide for disaster management that is consistent with recommended federal and state practices and minimizes the threat to life and property.

Need: Horry County is susceptible to Natural Hazards as outlined in the Vulnerability Assessment section of the Horry County All-Hazards Mitigation Plan.

Goal 2: Enhance existing or develop new policies/regulations that will reduce the potential damaging affects of hazards.

Need: Horry County is susceptible to Technological Hazards as outlined in the Vulnerability Assessment of the Horry County All-Hazards Mitigation Plan.

Goal 3: Develop and implement programs that protect the most vulnerable populations, buildings, and critical facilities.

Need: Horry County Government recognizes the National Response Plan and the National Incident Management System operational standards for crisis management.

Goal 4: Improve public safety agencies response to emergencies/disasters through training and exercises under the NIMS guidelines.

VI. HOUSING ELEMENT

A. Introduction

Housing plays an essential role in the community, shaping an area's physical form and overall character. The Housing Element first contains an Inventory and Analysis section which assesses the existing condition of Horry County's residential stock. This section presents historical data, current figures, and projected trends on structure type, age, occupancy, owner and renter status, condition, vacancy, location, seasonal usage, and residential affordability. Rapid population increases and rising development activity in the county indicate a very dynamic housing market. The Inventory and Analysis section also uses population data to quantify these future demands on Horry's housing supply. The element then contains a Needs and Goal section which recognizes current weaknesses in the housing stock and identifies opportunities to improve the quality of life in Horry County neighborhoods. The Implementation Strategies that follow provide specific actions to promote safe, affordable, and attractive housing in Horry County.

B. Inventory and Analysis

1. Housing by Structure Type

a. Number of Housing Units

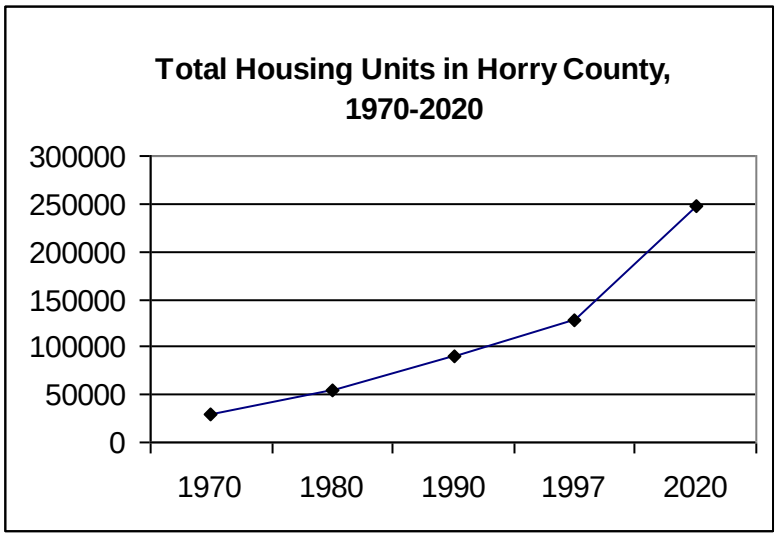
Figure VI-1 demonstrates the steady growth in the number of total housing units in Horry County. During the 1970s, the housing stock increased by 89 percent. Growth in the 1980s dropped to 63.6 percent, with a total of 89,960 units in 1990. Building permit data reflect the continued expansion of Horry's housing market during the 1990s. From 1990 to June of 1998, the County issued residential building permits authorizing 33,595 new units in the unincorporated area. When including residential construction data from the municipalities of Conway, Myrtle Beach, and North Myrtle Beach, the County's estimated housing total for 1997 is 127,412 units, an increase of approximately 41 percent from the 1990 residential base. To accommodate expected population growth, the housing stock is projected to expand to a total of 248,198 dwellings by 2020.

b. Housing Mix

Figure VI-2 displays the housing mix of Horry County and South Carolina in 1990. Relative to the state, the county contained a higher proportion of multi-family units and a lower percentage of single-family dwellings. The larger multi-family component in Horry County is a direct reflection of the County's active seasonal housing market. Though the gap was not as great, Horry also featured more manufactured units than South Carolina overall. Figure VI-3 locates 1990 housing types within the eight County Census Divisions. Figure VI-4 provides an estimate of the total housing stock mix in the unincorporated and incorporated areas of Horry County as of 1997. To arrive at the estimate, building permit data from the unincorporated county and the municipalities of Myrtle Beach, North Myrtle Beach, and Conway were combined with previous Census housing unit totals. The 1997 figures do not include units constructed between 1990 and 1997 in the municipalities of Aynor, Briarcliffe Acres, Surfside Beach, Loris, and Atlantic

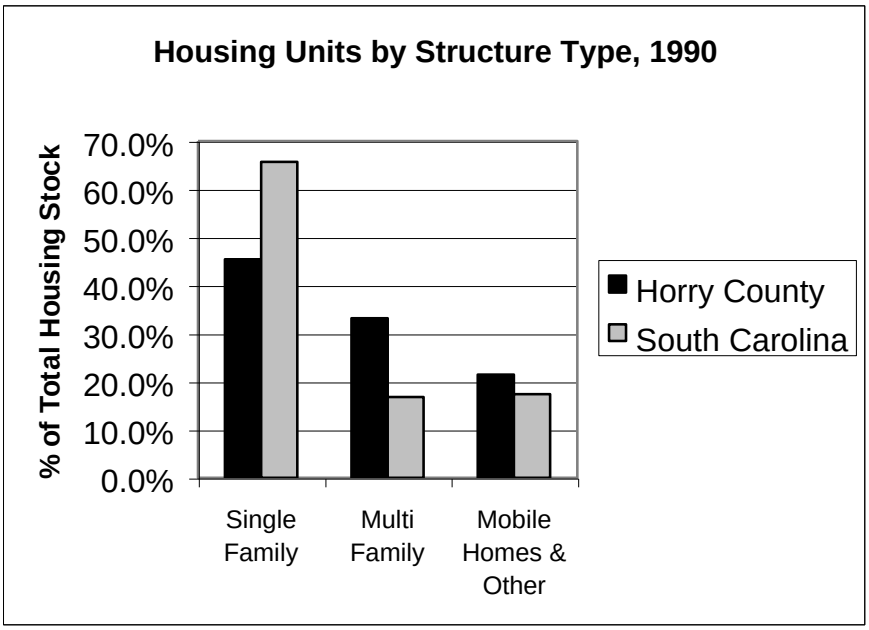
Beach. As Figure VI-4 demonstrates, unincorporated Horry County grew substantially across all dwelling types, particularly in the category of manufactured housing. The sections that follow offer more detailed analysis by structure type.

Figure VI-1: Total Housing Units in Horry County, 1970-2020



Source: US Census Bureau, 1970, 1980, 1990 and
Horry County Planning Department

Figure VI-2: Housing Units by Structure Type in Horry County and South Carolina, 1990



Source: US Census Bureau, 1990

Figure VI-3: Housing Units by Structure Type in Horry County Census Divisions, 1990

	Horry County Census Divisions								Horry County
	Aynor	Conway	Conway East	Floyds	Little River	Longs	Loris	Myrtle Beach	
Single Family	68.8%	64.0%	54.8%	75.0%	41.9%	63.7%	71.2%	35.4%	45.4%
Multi Family	0.3%	10.6%	14.5%	0%	46.8%	0%	3.5%	42.4%	33.2%
Manufactured Home & Other	30.9%	25.4%	30.7%	25.0%	11.3%	36.3%	25.3%	22.2%	21.4%

Source: US Census Bureau, 1990

Figure VI-4: Total Housing Units by Structure Type in Horry County, 1997

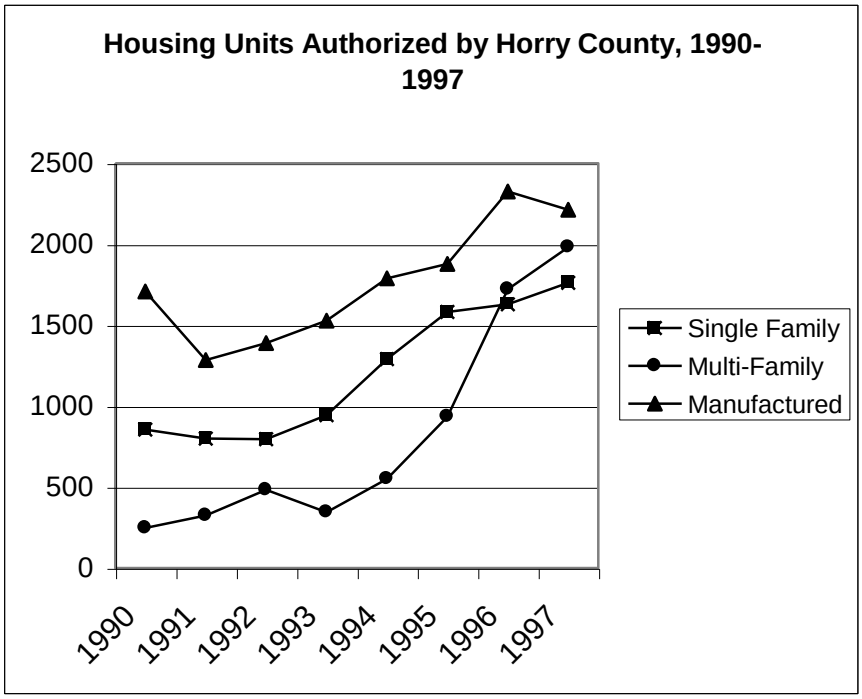
	1990			1997			% Change 1990-1997		
	SF	MF	MH	SF	MF	MH	SF	MF	MH
Unincorporated	24,323	13,152	17,011	34,864	21,078	32,139	43.3%	60.3%	88.9%
Incorporated	16,519	16,674	2,281	18,131	18,260	2,940	9.8%	9.5%	28.9%
Total	**40,842**	**29,826**	**19,292**	**52,995**	**39,338**	**35,079**	**29.8%**	**31.9%**	**81.8%**

Source: 1990 U.S. Census, Planning Departments of Horry County, Myrtle Beach, North Myrtle Beach and Conway

c. Single-Family Housing

Single-family residences constituted the largest component of the county's total housing stock with 44.6 percent of all units in 1990. Over 90 percent of these single-family residences were detached structures. The county's Western Census Divisions of Floyds and Loris had the highest shares of single-family units. The Eastern Coastal Divisions of Myrtle Beach and Little River contained a comparatively low percentage of single-family homes. To track housing activity in the county during the 1990s, Figure VI-5 displays the number of residential units by housing type authorized in the unincorporated area between 1990 and 1997. After the construction slump of the early 1990s, Horry County witnessed a steady increase in the number of building permits issued for single-family units. Single-family residences equaled 31.8 percent of the 30,361 units authorized by the County government from 1990-1997. The new Carolina Forest development, with an anticipated build-out population of 33,000 to 35,000, will add a substantial number of new single-family homes. Approximately one-half to two-thirds of the development's total units will consist of single-family dwellings.

Figure VI-5: Residential Units Authorized in Horry County, 1990-1997



Source: Horry County Planning Department

d. Multi-Family Housing

Multi-family units comprised approximately one-third of Horry County's overall housing stock in 1990. Multi-family residences composed nearly half of the housing stock in the tourist-oriented Divisions of Myrtle Beach and Little River. In contrast, the western Divisions of Aynor, Floyds, Longs and Loris contained virtually no multi-family units. After declining in the early 1990s, the number of multi-family units authorized by the County grew sharply between 1994 and 1997, surpassing the construction of single-family units in 1996. Multi-family structures provided 21.7 percent of all housing units permitted between 1990 and 1997.

e. Manufactured Housing

Manufactured housing formed 21.9 percent of Horry County's total residential stock in 1990. The Divisions of Aynor and Conway East contained the largest shares of manufactured housing. The densest concentrations occur near the Socastee, Bucksport, and Chestnut Crossroads communities. Manufactured housing saw a substantial rise in development activity throughout much of the 1990s. According to building permit data, manufactured homes were the largest component of housing built in the unincorporated county from 1990 to 1997, with 46.5 percent of all newly authorized units. Overall, the county saw growth of over 80 percent in the total number of manufactured units added between 1990 and 1997.

f. Other Forms of Housing

The Census Bureau classifies all persons not living in households as living in group quarters. Two general categories of persons are recognized:

(1) institutionalized persons and
(2) other persons in group quarters

Institutionalized persons include those individuals under formally authorized, supervised care or custody in institutions. Institutions may include correctional facilities, nursing homes, psychiatric hospitals, or group homes. Persons residing in other types of living arrangements are classified as living in "non-institutional group quarters." These quarters may include college dormitories, military facilities, and emergency shelters.

From 1980 to 1990, Horry County experienced a significant increase in the number of persons living in group quarters. The rapid increase in group population during the 1980s was likely the result of growth in the Myrtle Beach AFB. Of the 3,537 persons classified as living in group quarters in 1990, 2,554, or 72 percent, were in military quarters. The base has since been converted to civilian usage.

Figure VI-6: Persons Living in Group Quarters in Horry County, 1980-1990

Persons in 1980	Persons in 1990	Percent Change 1980-1990
1,410	3,537	150.9%

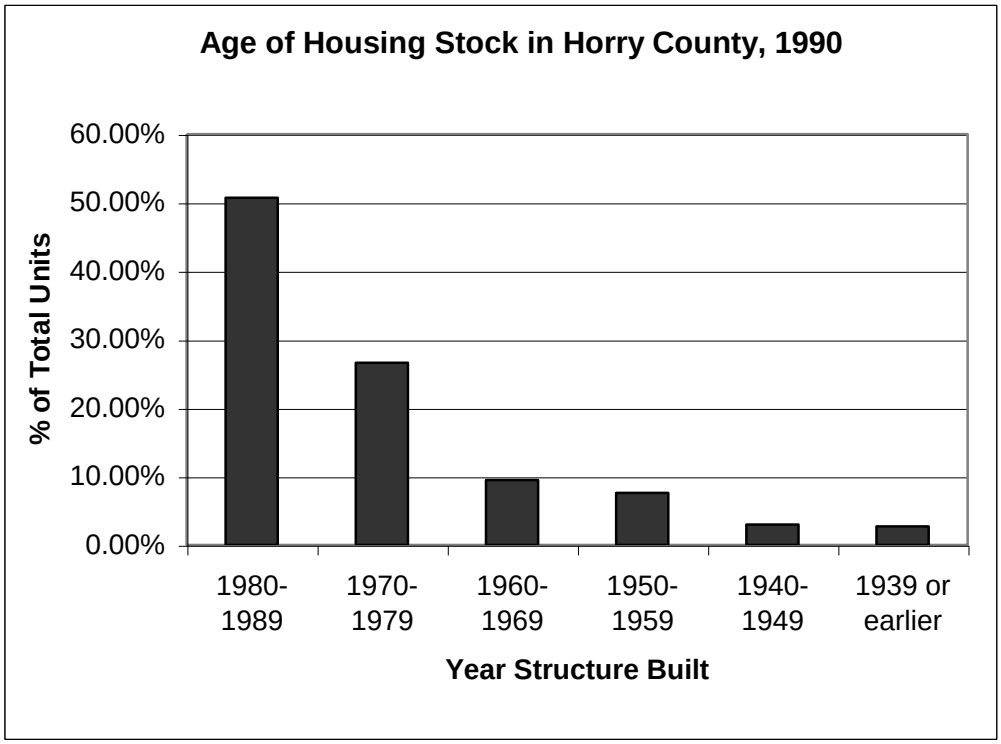
Source: US Census Bureau, 1980 and 1990

2. Housing by Age and Condition

a. Age of the Housing Stock

Overall, Horry's housing stock is relatively new (Figure VI-7). As of the last Census, half of the county's residential structures, or 45,593 units, were built between 1980 and March 1990, the largest such share in the state. In South Carolina overall, only 29 percent of residential dwellings were constructed during the same ten-year period. A median year of 1980 for residential structures built in the county also ranks as the most recent in the state. Less than 6 percent of all county housing units predate 1950. Based on building permit data, approximately 37 percent of the unincorporated county's total housing stock has been added since 1990. Much of the growth has been focused in the coastal Census Divisions, such as Conway East, Little River, and Myrtle Beach.

Figure VI-7: Age of the Housing Stock in Horry County, 1990



Source: U.S. Census Bureau, 1990

b. Condition of the Housing Stock

The younger age of Horry County's overall housing inventory does not necessarily indicate the physical condition of all residential units. The largest concentrations of deteriorated housing in the county occur in the southern portion near Bucksport, the center of the county north of Conway, and eastern areas near North Myrtle Beach and Wampee.

Census data demonstrate the rapid extension of public utilities to residential units throughout the county. In 1980, 39.3 percent of year-round housing units were served by public or private water systems. By 1990, 83.9 percent of the county's total housing units connected to public or private water. In total, 15.9 percent received water from wells. Other sources of water were used for the remaining 0.2 percent or 146 housing units. Since 1991, the Grand Strand Water and Sewer Authority has installed over 150 miles of lines, servicing an additional 2,300 customers.

In 1980, public sewer systems serviced 28.1 percent of year-round housing units. By 1990, 75.4 percent of all county residential units connected to a public sewer system. Another 23.8 percent of units relied on septic tanks, while 0.8 percent used some other form of sewage disposal. In 1995, the Grand Strand Water and Sewer Authority initiated a Rural Sewer program. In three years, the program has laid 65 miles of lines and brought sewer coverage to another 900 customers.

3. Housing by Occupancy and Tenure

a. Occupancy of Housing Stock

As shown in Figure VI-8, Horry County claimed a 1990 vacancy rate of 38 percent, exceeding South Carolina's overall rate of 11.7 percent. The county's vacancy ranked highest in the state. A high vacancy rate typically suggests an excess of housing units relative to demand. However, given the resort-oriented segments of the county's housing market, the rate more likely captures the high proportion of units in seasonal use. Second homes and units built specifically for seasonal rental purposes tend to yield higher vacancy rates. Other coastal, tourist-based housing markets also feature high vacancy rates. Beaufort County, for example, had a 1990 vacancy of 33.2 percent, while 23 percent of Georgetown's residential units were vacant.

A review of vacancy by County Census Divisions (see Figure VI-9) further illustrates the influence of seasonal housing. Coastal Divisions such as Little River and Myrtle Beach display a large number of vacant units, while vacancy rates in the western Divisions of Longs, Loris, Conway, Floyds, and Aynor are actually below that of the state. As Figure VI-10 demonstrates, vacancy is also highest among multi-family units, a common type of seasonal, rental accommodation. There has been some controversy surrounding the Census methodology used to determine vacancy figures. Vacancy is calculated for April 1 of the Census year, prior to the peak of the tourist season. The timing of data collection may contribute to higher vacancy rates. Enumerators may also not have adequately distinguished year-round units from seasonally occupied housing units. Some housing experts in the Horry County area maintain that the local housing market is actually much tighter, with fewer vacant units in the inventory.

Figure VI-8: Total Housing Units by Occupancy in Horry County, 1980-1990

	1980	1990
Total Housing Units	55,003	89,960
Total Vacant Units	20,205	34,196
% of Total Units Vacant	36.7%	38.0%

Source: US Census Bureau, 1980 and 1990

Figure VI-9: Vacant Housing Units by Horry County Census Divisions, 1990

	Horry County Census Divisions							
	Aynor	Conway	Conway East	Floyds	Little River	Longs	Loris	Myrtle Beach
Total Units	2,711	10,369	7,329	1,246	20,171	1,206	4,304	42,624
Total Vacant Units	298	875	944	122	12,357	81	307	19,212
% Units Vacant	11.0%	8.4%	12.9%	9.8%	61.3%	6.7%	7.1%	45.1%

Source: US Census Bureau, 1990

Figure VI-10: Vacancy Rates by Structure Type in Horry County, 1990

Structure Type	Units Vacant	% of Total Vacant Units
Single-Family	7,557	22.1%
Multi-Family	19,563	57.2%
Mobile Home & Other	7,076	20.7%
Total	34,196	100%

Source: US Census Bureau, 1990

The U.S. Census Bureau separates vacant seasonal housing from all vacant households, as shown in Figure VI-11. The Census Bureau defines seasonal vacant housing as:

> For Seasonal, Recreational, or Occasional Use – These are vacant units used or intended for use only in certain seasons or for weekend or other occasional use throughout the year.

Figure VI-11: Seasonal Vacant Units in Horry County, 1990

	1990	% of Total Units
Total Housing Units	89,960	
Total Vacant Units	34,196	38.0%
Vacant Household	14,316	15.9%
Seasonal Vacant	19,880	22.1%

Source: U.S. Census Bureau, 1990

Within the county, 19,880 units, or 22 percent of the total housing stock, are characterized as seasonal vacant dwellings. Of the total number of vacant units in Horry County, 58 percent fall into the seasonal housing category.

As shown in Figure VI-8, the county's vacancy rate increased only slightly between 1980 and 1990, despite strong growth in the supply of housing units. This trend indicates the ability of the area market to absorb recently constructed units.

b. Tenure by Housing Stock

Among those housing units classified as occupied, the U.S. Census Bureau identifies two types of tenure status – owner and renter. As of 1990, 68.5 percent of occupied units were owner-occupied, while the remaining 31.5 percent were rental (Figure VI-12). The rate of homeownership in Horry County was stable between 1980 and 1990, dropping only slightly by 0.3 percent. Homeownership in Horry County is comparable to the state's 1990 rate of 69.8 percent.

Figure VI-12: Housing Units by Tenure in Horry County, 1980-1990

	1980	1990
Total Occupied Units	34,798	55,764
Owner Occupied Units	23,925	38,198
% Owner Occupied	68.8%	68.5%
Renter Occupied Units	10,873	17,566
% Renter Occupied	31.2%	31.5%

Source: US Census Bureau, 1980 and 1990

4. Housing by Location

In 1990, nearly half of all Horry County housing units were located in the Myrtle Beach Census Division (Figure VI-13). Little River and the county-seat Division of Conway also contained higher shares of residential units. The remaining divisions were more sparsely populated, with small percentages of Horry's overall housing stock.

Figure VI-13: Housing Units by Horry County Census Divisions, 1990

Census Division	Housing Units	% of Total County Housing Units in 1990
Aynor	2,711	3.0%
Conway	10,369	11.5%
Conway East	7,338	8.2%
Floyds	1,246	1.4%
Little River	20,171	22.4%
Longs	1,206	1.3%
Loris	4,304	4.8%
Myrtle Beach	42,615	47.4%
Total	**89,960**	**100%**

Source: US Census Bureau, 1990

5. Housing Affordability

According to the U.S. Department of Housing and Urban Development (HUD), affordable housing is that portion of the residential stock that is available for rental or purchase to low and moderate income families at 30 percent or less of their income. According to HUD formulas, very low-income families are defined as those earning 50 percent or less of the area median income (AMI). Low-income families earn between 50 percent and 80 percent of AMI. Families earning from 81 percent to 120 percent of the AMI are classified as moderate income. HUD uses the 30 percent standard to measure the burden of housing expenses relative to family income. Housing costs include money for rent (mortgage), water, sewer, gas and electric services. Total housing costs equal to 30 percent or more of income may indicate affordability problems.

Using Horry County's 1990 median family income of $28,504, Figure VI-14 converts the HUD guidelines into household income ranges. In 1990, South Carolina's median family income of $30,797 was slightly higher than Horry County.

Figure VI-14: Horry County Very Low, Low and Moderate Income Ranges, 1990

HUD Income Range	Horry County Household Income
Very Low Income	$0-14,252
Low Income	$14,253-22,803
Moderate Income	$22,804-34,205

Source: U.S. Census Bureau, 1990

Figure VI-15 presents 1989 household income for renter-occupied units in Horry County. The figure also indicates the number of households and the percentage of households in each income category exceeding the 30 percent affordability standard. Overall, 5,776 households or 39 percent of the total rental households surveyed may be classified as burdened by housing expenses. Affordable rental opportunities were particularly limited for households earning less than $20,000 per year. Nearly 90 percent of households with an income less than $10,000 fell above the 30 percent threshold.

Figure VI-15: Household Income and Housing Expense Burden for Renter-Occupied Units in Horry County, 1990

1989 Household Income	Number of Renter-Occupied HH in Income Category	Number of Renter-Occupied HH over 30% Standard	% of Renter-Occupied HH in Income Category over 30% Standard
Less than $10,000	3,034	2,708	89.3%
$10,000 to 19,999	4,283	2,517	58.8%
$20,000 to 34,999	4,629	524	11.3%
$35,000 to 49,999	1,786	23	1.3%
$50,000 or more	1,067	4	0.4%
Total	**14,799**	**5,776**	**39.0%**

Source: U.S. Census Bureau, 1990

Figure VI-16 provides similar household income and housing burden information for owner-occupied units in Horry County. The figure again illustrates the lack of affordable housing for households in the lowest income brackets. However, the data also demonstrate that affordability is less of an issue for the county's homeowners. Approximately 22 percent of surveyed owner-occupied households, or 5,222 households, exceeded the 30 percent standard.

Figure VI-16: Household Income and Housing Burden for Owner-Occupied Units in Horry County, 1990

1989 Household Income	Number of Owner-Occupied HH in Income Category	Number of Owner-Occupied HH over 30% Standard	% of Owner-Occupied HH over 30% Standard
Less than $10,000	2,593	1,711	66.0%
$10,000 to 19,999	4,106	1,490	36.3%
$20,000 to 34,999	6340	1,341	21.2%
$35,000 to 49,999	5,845	430	7.4%
$50,000 or more	5,198	250	4.8%
Total	**24,082**	**5,222**	**21.7%**

Source: U.S. Census Bureau, 1990

Overall, almost 11,000 Horry County households allocated more than 30 percent of household income for housing expenses in 1990.

Generally, housing in Horry County is more expensive than that of the state as a whole. Area housing costs are strongly influenced by the high price of land and construction materials. Figure VI-17 displays median gross rents, monthly housing costs, and median house values in both Horry County and South Carolina. Horry County's 1990 median house value was the second highest in the state behind Beaufort County.

Figure VI-17: Median Housing Costs in Horry County and South Carolina, 1990

	Horry County	South Carolina
Median Gross Rent	$425	$376
Median Monthly Owner Costs	$654	$617
Median House Value	$75,500	$60,700

Source: US Census Bureau, 1990

Figure VI-18 compares the median housing expense burden of Horry County households with state households in 1989. Overall, housing consumes a greater percentage of household income in the county, particularly among homeowners.

Figure VI-18: Median Housing/Income Ratio in Horry County and South Carolina, 1990

	Horry County	South Carolina
Median Gross Rent as % of Renters Household Income	25.5%	24.4%
Median Monthly Costs as % of Owners Household Income	23.0%	19.8%

Source: US Census Bureau, 1990

As Figure VI-19 demonstrates, housing costs are not evenly distributed throughout the county. The highest gross rents and monthly owner costs are found in the urbanized, resort-oriented Divisions of Myrtle Beach and Little River. Less expensive owner housing is located in sparsely

populated, western portions of the county. Gross rents, however, present significant affordability problems in rural County Divisions, particularly in Longs.

Figure VI-19: Gross Rents and Monthly Housing Costs by Horry County Census Division, 1990

	Horry County Census Divisions							
	Aynor	**Conway**	**Conway East**	**Floyds**	**Little River**	**Longs**	**Loris**	**Myrtle Beach**
Median Gross Rent	$244	$307	$443	$217	$465	$368	$275	$459
Rent as % of HH Income	27.6%	26.8%	27.1%	28.0%	22.0%	35.1%	28.6%	25.6%
Median Monthly Costs	$504	$534	$624	$407	$728	$408	$491	$747
Monthly Costs as % of HH Income	21.5%	22.4%	23.4%	16.8%	25.5%	16.5%	22.6%	23.0%

Source: US Census Bureau, 1990

Horry County government is not directly involved in the provision of affordable housing. However, three public authorities within the county promote affordable housing opportunities - the Myrtle Beach Housing Authority (MBHA), the Conway Housing Authority (CHA), and the Housing Authority of Atlantic Beach. The CHA serves the cities of Conway and Loris and unincorporated portions of western Horry County. The MBHA serves the City of Myrtle Beach and eastern Horry County. The authorities offer affordable housing through Section 8 Rental Assistance Program vouchers and publicly maintained housing units. Section 8 offers subsidies to eligible applicants renting units in the private housing market. MBHA supplies Section 8 assistance for a total of 494 units. Most Section 8 housing is located in Myrtle Beach, with other units available in Surfside Beach, Conway, Garden City, Longs, and Little River. MBHA also offers 18 single-family public housing units. The CHA allocates Section 8 vouchers to 359 units, scattered throughout its service area. The CHA also maintains traditional public housing apartment complexes with a total of 260 units. Most of the Conway public housing is located in Huckabee Heights and Darden Terrace. The Housing Authority of Atlantic Beach provides 54 publicly funded units located within the municipal limits of Atlantic Beach.

The non-profit organization, Habitat for Humanity, is also active in the Horry County housing market. Habitat uses volunteer labor and tax-deductible donations of money, land, and materials to build and rehabilitate affordable housing. Since its creation in 1993, Habitat for Humanity of Horry County has constructed 21 homes and rehabilitated 9 additional homes.

Currently, the eastern portion of the county suffers a shortage of emergency housing and long-term affordable housing. The housing market is largely for the more affluent tourist and retirement segments. Existing units command very high rents, limiting affordable housing opportunities for permanent residents and the local service-oriented workforce. The waiting list for Section 8 housing in the Myrtle Beach service area is 6 months for priority applicants and up to 2 years for other residents. Priority applicant status varies across housing authorities. Typically, priority applicants include the elderly, the disabled, or families in which the head of household is employed or attending school within the housing authority's jurisdiction. The western service area of Conway also experiences considerable demand for affordable units, with a 2- to 3-year wait for Section 8 assistance and a 2-year wait for public housing.

6. Seasonal Housing

With its tourist base, Horry County contains a large number of units used exclusively for seasonal purposes. These dwellings cluster primarily along the coast, but some units are located in communities surrounding golf courses and other inland tourist amenities. As of 1990, nearly 20,000 units, or 22.2%, of the county's housing stock was devoted to tourism. Seasonal housing, however, declined as a percentage of Horry County's overall housing inventory during the 1980s, reflecting the growing development of year-round residences.

Figure VI-20: Seasonal Housing Units in Horry County and Percent Change, 1980-1990

	1980	1990
Total Housing Units	55,003	89,960
Seasonal Units	14,497	19,951
% of Total Housing Units	26.4%	22.2%

Source: US Census Bureau, 1980 and 1990

The tourist industry, however, continues to form a critical part of the county's housing market. The Tourism Research Group (TRG) is conducting a census of all rental accommodations in the county. TRG's current estimate identifies 39,800 hotel rooms, 15,000 campsites, and 31,318 vacation rental units in Horry County. Final figures will likely be higher. The occupancy rate for hotel rooms in the Myrtle Beach area is 59.5 percent in 1998, a decrease of 11.2 percent from the 1997 rate.

7. Future Housing Needs

a. Future Housing Units

As detailed in the population element, Horry County has grown rapidly. According to the WRPDC, Horry County will continue to grow over the next two decades, with the 1995 population more than doubling by 2020. The housing stock will naturally have to expand to accommodate these expected population increases. This section uses population data to quantify future housing demand within the County.

Figure VI-21 projects the total 2020 residential dwellings in each of the eight individual County Census Divisions and Horry County as a whole. Calculations begin with the estimated 2020 population for each area. The 2020 Census Division populations are based on 2015 forecasts developed by the WRPDC. To arrive at 2020 projections, the South Carolina Office of Budget and Control Board recommends extending the 2015 figures by half the growth rate of the previous 2010 to 2015 period. Projected population size is then divided by a 2010 persons per household figure to determine the total number of 2020 households in each area. The analysis uses 1990 Census data to extrapolate a 2010 county person per household figure from the Census Bureau's national person per household projection for 2010. To account for vacancy, the projected household figures are then divided by the 1990 vacancy adjustment rates (1.0 – 1990 vacancy rate) for each Census Division. The final figure estimates the total number dwellings required to accommodate the projected residential population of Horry County in 2020. Based

upon these estimates, Figure VI-21 also provides the percent change from 1990-2020 in the housing inventory of the Census Divisions and the county overall.

Figure VI-21: Projected Housing Units in Horry County and Census Divisions, 2020

	Horry County Census Divisions								Horry County Total
	Aynor	Conway	Conway East	Floyds	Little River	Longs	Loris	Myrtle Beach	
2020 Population	10,204	50,172	58,898	1,614	55,761	4,965	15,053	165,722	362,388
2010 Persons per HH	2.43	2.43	2.43	2.43	2.43	2.43	2.43	2.43	2.43
2020 Households	4,199	20,647	24,238	664	22,947	2,043	6,195	68,198	149,131
1990 Vacancy Rate	11.0%	8.4%	12.9%	9.8%	61.3%	6.7%	7.1%	45.1%	38.0%
Vacancy Adjustment	89.0%	91.6%	87.1%	90.2%	38.7%	93.3%	92.9%	54.9%	62.0%
2020 Total Dwellings	4,718	22,540	27,827	736	59,295	2,190	6,668	124,223	248,198
1990 Dwellings	2,711	10,369	7,338	1,246	20,171	1,206	4,304	42,615	89,960
% Change 1990-2020	74.0%	117.4%	279.2%	-40.9%	194.0%	81.6%	54.9%	191.5%	175.9%

Source: U.S. Census Bureau, 1990 and Waccamaw Regional Planning and Development Council

Based on the 1997 estimate of 127,412 dwellings, the county and its municipalities will have to add approximately 122,060 units to existing stock to satisfy anticipated housing demand in 2020. The figure assumes replacement of 1 percent of current housing stock that may be lost through demolition, fire, conversion, etc. Assuming Horry County absorbs approximately three-quarters of new residential growth, the unincorporated area would have to increase its current residential supply by approximately 91,500 units over the next two decades.

b. Future Housing Units by Type

The previous section projects total housing demand within the county by 2020. The following analysis seeks to refine this projection by determining the mix of housing needed to satisfy future residential demand. The calculations rely on the U.S. Census Bureau term "householder." The householder is the "household member in whose name the home is owned, being bought, or rented." The headship rate refers to the percent of the population classified as householders. Since every household contains one householder, the number of householders equals the number of households. The headship rate thus establishes the total number of households in a given population.

Headship rates can also be determined for specific sub-groups of the population defined by such characteristics as age, gender, marital status, and income. These demographically based rates can then be applied to the projected populations of each subgroup, yielding forecasts of households formed by different subgroups. Since age is highly correlated with the tendency to establish a household of a particular structure type, the calculations rely on the age of the householder to project demand. The U.S. Bureau of the Census provided special tabulation data on the age of the county's 1990 householders by units in the structure. Figure VI-22 displays the 1990 headship rates for four age categories within four dwelling types, including single-family detached, multi-family structures with 2 to 4 units, multi-family structures with 5 or more units, and manufactured homes. The headship rates are formed by dividing the total number of households in each structure type by the total population of each age group living in households.

Total population in households reflects the total population of each age group minus persons classified as living in group quarters.

Figure VI-22 clearly demonstrates the strong relationship between age and the preference for detached single-family housing. In 1990, half of county residents over the age of 65 formed households in a single-family unit. In contrast, only 2.5 percent of the population age 15 to 24 chose a single-family structure.

Figure VI-22: Headship Rates by Age of Householder and Structure Type in Horry County, 1990

Age of Householder	Total 1990 Population	Total 1990 Population in HH	Total 1990 HH	Headship Rate	Detached Single-Family Headship	Multi-Family 2 to 4 Units Headship	Multi-Family 5 + Units Headship	Manufactured Home Headship
15 to 24	22,503	20,912	3,394	16.2%	2.5%	3.0%	4.9%	5.8%
25 to 44	47,122	46,357	23,193	50.0%	24.0%	7.3%	6.4%	12.4%
45 to 64	29,951	29,710	16,644	56.0%	34.6%	4.6%	4.6%	12.2%
65 +	18,385	17,445	12,533	71.8%	49.7%	5.5%	5.8%	10.9%

Source: U.S. Census Bureau

Assuming household structure preferences remain constant among the four age groups, the 1990 headship formation rates may then be used to project the mix of the 2020 housing stock, as shown in the last row of Figure VI-23. To calculate this future demand by structure type, the analysis multiplies the 1990 headship rates by the projected 2020 population living in households for each of the four age groups. The 2020 age distribution allocates the total population figure of 362,388 from Figure VI-21 to each of the four age categories based upon the group's proportion of the WRPDC's total 2015 population projection.

To calculate the number of 2020 residential dwellings by structure type, Figure VI-24 multiplies the projected 122,060 new housing units added between 1997 and 2020 by the shares identified in Figure VI-23. The two multi-family structure types have been combined into a single multi-family figure. To determine the total housing mix in 2020, projected units by dwelling type are then added to the existing housing stock. (Figure VI-25).

Figure VI-26 displays the projected 2020 housing composition compared with the county's 1990 housing mix. Expected growth in the county's older adult population is the major demographic trend shaping Horry County's future housing demand. If current market patterns continue, the county will shift toward the state's 1990 housing mix, with an increase in the proportion of single-family units and a drop in the percentage of multi-family structures. Horry County's share of manufactured units, however, is projected to rise slightly.

Figure VI-23: Horry County Housing Demand by Structure Type, 2020

Age of Householder	Total 2020 Population	Total 2020 Population in Households	Detached Single Family Demand	Multi-Family 2-4 Units Demand	Multi-Family 5+ Units Demand	Manufactured Home Demand
15 to 24	58,104	53,968	1,353	1,593	2,670	3,148
25 to 44	114,360	112,489	26,982	8,183	7,213	13,909
45 to 64	76,053	75,439	26,096	3,484	3,484	9,200
65+	48,963	46,441	23,069	2,543	2,690	5,076
% of Total Units	N/A	N/A	**55.1%**	**11.2%**	**11.4%**	**22.3%**

Source: U.S. Census Bureau

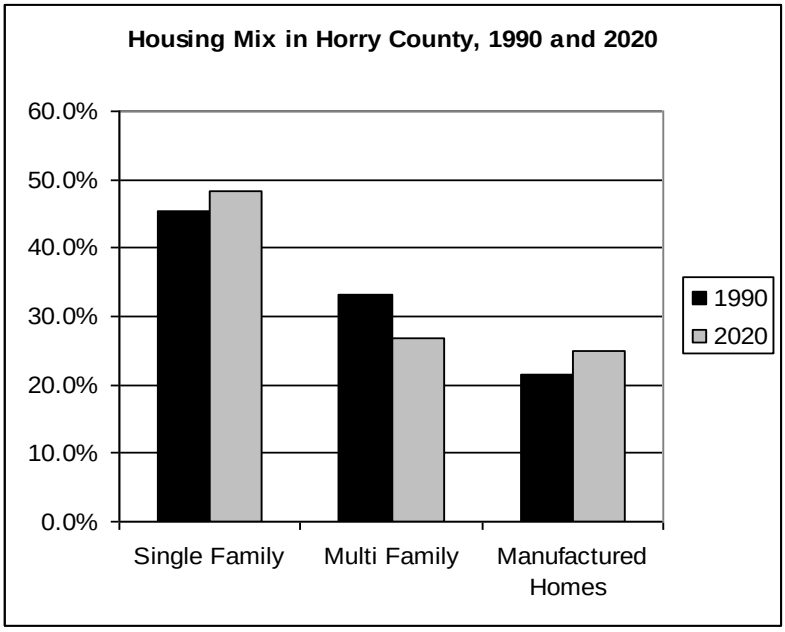
Figure VI-24: New Horry County Housing Units by Structure Type, 1997-2020

Structure Type	% of Total New Units	Number of New Units
Detached Single-Family	55.1%	67,237
Multi-Family	22.6%	27,641
Manufactured Homes	22.3%	27,183
Total	**100.0%**	**122,060**

Figure VI-25: Horry County Housing Units by Structure Type, 2020

Structure Type	% of Total Units	Number of Units
Detached Single-Family	48.2%	120,232
Multi-Family	26.8%	66,979
Manufactured Homes	25.0%	62,262
Total	**100.0%**	**249,472**

Figure VI-26 : Housing Mix in Horry County, 1990 and 2020



Source: U.S. Census Bureau

C. Key Findings

- In 1990, Horry County contained 89,960 housing units, an increase of 63.6 percent from 1980.
- In 1990, the county contained a higher proportion of multi-family units and manufactured homes, and a lower percentage of single-family dwellings than the state.
- From 1990 to June of 1998, the County issued residential building permits authorizing 33,595 new units in the unincorporated area.
- Manufactured homes were the largest component of new housing built in the unincorporated county during the 1990s.
- As of the last Census, half of the county's residential structures, or 45,593 units, were built between 1980 and March 1990, the largest such share in the state.
- Deteriorated housing exists near Bucksport, north of Conway, and eastern areas near North Myrtle Beach Wampee, Socastee, and Longs.
- The county's overall vacancy rate of 38 percent ranked highest in the state. High vacancy is also a direct function of seasonal housing.
- As of 1990, 68.5 percent of the county's occupied units were owner-occupied, producing a homeownership rate comparable to the state.
- Housing in Horry County is more expensive than that of the state as a whole.
- The eastern portion of the county suffers a shortage of emergency housing and long-term affordable housing.
- The county and its municipalities will have to add approximately 122,060 units to existing stock to satisfy anticipated housing demand in 2020.
- As the population ages, demand for single-family housing will increase.

D. Statement of Needs and Goals

Housing Vision

Ensure a safe, affordable, balanced, and attractive supply of housing that accommodates the diverse preferences of the county's present population, including urban, suburban, and rural lifestyle; supports continued residential growth; and reinforces the aesthetic appeal and quality of county neighborhoods.

Need: There is a lack of affordable housing for the local workforce, particularly in the eastern portion of Horry County.

Goal 1: Increase the supply of modestly priced residential dwellings, especially in areas near major employment nodes.

Need: The county currently has abrupt transitions between housing types.

Goal 2: Promote the continuity and cohesiveness of neighborhoods and encourage the development of complementary housing styles.

Need: There are pockets of substandard and deteriorated housing in the western portion of the county.

Goal 3: Encourage infill development and the rehabilitation of blighted residential units.

Need: With its growing population and changing demographic character, Horry County contains a wide variety of housing preferences.

Goal 4: Provide for a balanced, diverse housing mix with a variety of unit types, ranging from condo/high density to low density rural to senior-friendly housing.

Need: Horry County contains a higher than average percentage of manufactured housing units.

Goal 5: Maintain the affordability of manufactured housing, while promoting the attractive integration of units into residential neighborhoods.

Need: Low density residential development strains the existing capacity of roadways, threatens natural resources, and diminishes sense of place.

Goal 6: Promote the development of traditional neighborhoods.

E. Implementation Strategies

The following implementation strategies provide specific actions that support the county's vision for a safe, affordable, attractive and well-balanced supply of housing.

1. **Work with the Manufactured Housing Institute to develop site design standards for manufactured housing. Basic design standard principles include.**

- Establish flexible standards to promote cost-effective design opportunities.
- Promote good design through an emphasis on perimeter buffering and screening, common open space, and landscaping.
- Encourage variety in the exterior design and siting of units.
- Consider the use of cluster developments for manufactured homes as a means of reducing utility and construction costs while preserving natural aesthetic qualities.
- Maintain the consistency of all zoning language with the U.S. Housing and Urban Development's Code on manufactured home construction and safety standards.

2. **Establish guidelines for the use of incentives to promote the development of specialized housing, such as assisted care facilities or small lot single-family homes, that accommodate the needs of the county's growing older adult population.**

3. **Work with the Conway and Myrtle Beach Housing Authorities and the State Housing Finance and Development Authority to develop a comprehensive inventory of available affordable housing programs, funding sources, and incentives.**

4. **Establish guidelines for the use of incentives to promote affordable housing development by the private sector.**

5. **Conduct a comprehensive study on the nature, location, and ownership status of the County's deteriorated housing stock. Work with the State Housing Finance and Development Authority to determine possible sources of housing rehabilitation funds. Determine program eligibility for the direct administration of Community Development Block Grant monies and other affordable housing programs.**

6. **Examine the creation of an affordable housing task force or umbrella organization that coordinates the activities of both public and private housing advocates in the county.**

7. **Promote mixed-use development, combining residential and retail components, in urban portions of the county and near major transportation nodes as a means of reducing traffic congestion and fostering neighborhood identity.**

8. **Encourage the development of denser, affordable housing types near major employment nodes to promote jobs-housing balance.**

9. **Consider the use of density bonuses and other incentives to encourage well-planned residential developments that preserve green space, historic or cultural features, and sensitive natural characteristics.**

10. **Better promote orderly land use transitions through the use of buffering and landscaping.**

11. **Better promote the orderly transitional of residential densities. Densities should be allocated in accordance with available public services, natural features of the land, and existing and anticipated future development.**

12. **Require new planned unit developments to provide adequate ingress and egress, as well as establish transit, bicycle, and pedestrian linkages.**

F. Benchmarks for a Sustainable Quality of Life

Benchmarks serve as quantitative indicators that when monitored on an annual basis can assist the County in determining its level of progress toward achieving the goals identified in the elements of the comprehensive plan.

- Length of waiting list for Section 8 and public housing applicants
- Number of substandard housing units in Horry County
- Balanced growth in housing structure types
- Density of housing

VII. LAND USE ELEMENT

The Land Use Element is the central component of the Comprehensive Plan. It serves as the synthesis of all other elements of the plan and as a mechanism to guide and control future growth in a community. Its overarching intent is to guide the intensity, location, and timing of new development and redevelopment and to ensure compatibility with existing development, future population and economic development trends, community infrastructure, and natural and cultural resources.

The structure of the Land Use Element is designed to meet the requirements of the 1994 South Carolina Local Government Comprehensive Planning Enabling Act. It is presented in four sections:

A. Inventory and Analysis
B. Statement of Needs and Goals
C. Recommended Plan
D. Implementation Strategies

A. Inventory and Analysis

The following provides an inventory and analysis of land use patterns in Horry County and their relationship to environmentally sensitive lands, community facilities and services, and market demands. Various spatial land use forms and projections for future land use are also presented, compiled from the integration of the existing land use inventory; future land use constraints and issues; and population, housing, and economic development trends identified in other elements of the plan. Potential applications of growth management and implementation strategies for guiding future development in unincorporated Horry County are also provided.

1. Existing Land Use

The identification and location of existing land use in Horry County was accomplished with the use of County tax parcel land use records and Geographic Information Systems (GIS). Approximately 300 land use classifications were combined into ten general categories to simplify analysis and allocation of future land use. These categories, along with a brief description and examples, are summarized below.

1. *Single-Family Residential*: Land area used for residential structures with a single dwelling unit that is not attached to any other dwelling unit.

2. *Multi-Family Residential*: Land area used for residential structures which contain two or more attached dwelling units.

3. *Manufactured Home*: Land area used specifically for mobile home parks and subdivisions developed for manufactured homes.

4. *Hotel/Motel/Condos*: Land area used for commercial building(s) with guestrooms for sleeping. Rooms are occupied by transients renting on a daily basis and usually staying less than seven days.

5. *Business/Commercial*: Land area used to conduct businesses, administrative, trade, and professional activities or services. Uses include establishments for retail sale of goods and services, restaurants, and entertainment facilities. Examples include gas stations, barbers, grocery stores, dry cleaners, clubs, liquor stores, sports/tennis shops, furniture, antique and clothing stores, car sales, and tour offices. Uses also include wholesale and retail of goods and services on or off the premises. Examples include law offices, doctor offices, CPAs, landscape offices, real estate offices, construction offices, lumber sales, electric and plumbing equipment, and other building product sales.

6. *Industrial*: Land area used primarily for the manufacturing facilities, processing plants, factories, warehousing, and wholesale trade facilities, mining or mineral extraction facilities, or similar uses.

7. *Public and Civic*: Land area used primarily for private, public, quasi-public, eleemosynary, philanthropic, or other activity undertaken for providing for the social, cultural, educational, health, or physical betterment of the community. Examples include schools, colleges, churches, synagogues, museums, hospitals, parks, and cemeteries.

8. *Agriculture*: Land area used primarily for agricultural purposes, such as cropland, livestock production, pasture, and commercial timber.

9. *Golf Course*: Land area used primarily for private and public golf courses.

10. *Vacant Land:* Land area within designated zoning districts that is not developed for a specific use or assigned a land use classification.

Unincorporated Horry County is primarily rural. Much of the development pattern in the remainder of the county is a mixture of land uses - residential, business/commercial, and public and civic - located in the eastern portion of the county in proximity to the more urbanized Grand Strand and major transportation arterials. This land use mixture provides limited spatial separation for dissimilar land uses, resulting in conflicting and contentious land use issues. Excluding municipalities and associated outgrowth from unincorporated areas, most of the western portion of the county remains undeveloped and in either agricultural or forestland use.

The Intracoastal Waterway has been extremely influential in the general development patterns of unincorporated Horry County, essentially creating a physical barrier to the more urbanized Grand Strand. As such, a large portion of Horry County's unincorporated growth occurs in proximity to the Intracoastal Waterway, along the transportation corridors that provide access across the waterway to the Grand Strand. This is especially apparent where major transportation arterials converge.

The southeast Census Divisions - Conway East, Conway, and Myrtle Beach - are the most developed unincorporated areas of the county. Just east of Conway, a variety of land uses occupy the northern wedge of State Road 544 and State Road 501. To the south, growth continues along State Road 544 and State Road 707 into the unincorporated areas of Buckport and Socastee. Another growth area is at the northeastern edge of the county in the Little River Census Division. Here development extends out State Road 9 toward I-95 and along State Road 90 toward the North Carolina line. The western municipalities – Aynor and Loris – also provide growth opportunities, generally along westward transportation corridors leading out from the Grand Strand.

2. Zoning

Since its inception in 1987, Horry County's Zoning Ordinance and associated zoning designations have provided the framework for existing land use patterns, dictating the density and type of development within a given land use category. The primary purpose of Horry County Zoning Ordinance is to guide a proper balance of land uses such as recreation, conservation, residential, commercial, and industrial. Because several land uses are typically permitted in a single zoning district, established zoning categories or amendments to the Zoning Ordinance that permit several land use categories in a single zoning district may threaten this land use balance, especially if land use compatibility and adequate infrastructure are not addressed.

Horry County's Zoning Ordinance regulates the development patterns for approximately 256,170 acres, or 35 percent, of Horry County's total land area (Figure VII-1). Much of this is in the eastern portion of the county and along some of the major transportation arterials extending into the western portion of the county. Currently, the western portion of the county has no regulated or designated zoning, as it is primarily agricultural.

Figure VII-1: 1998 Current Zoning Districts

Zoning Classifications		Acreage	Percent
Conservation Preservation	CP	11,747.7	4.6
Forest Agriculture	FA	140,310.1	54.8
Single-Family Residential	R-1, R-2, R-4, R-7,	24,172.3	9.4
Single-Family Residential w/ Manufactured Housing	MR-1, MR-2, MR-4, MR-7	7,152.4	2.8
General Residential	GR	11,214.4	4.4
Resort Residential	RR	420.1	0.2
Resort Commercial	RC	2,788.1	1.1
Neighborhood Commercial	NC	439.3	0.2
Community Commercial	CC	142.8	0.1
Highway Commercial	HC	10,624.2	4.1
Amusement Commercial	AC	368.2	0.1
Office Professional	OPI	484.1	0.2
Limited Industrial	LI	2,395.7	0.9
Heavy Industrial	HI	378.7	0.1
Mobile Home Park	MHP	1,563.6	0.6
Destination Park	DP	1,032.5	0.4
Planned Unit Development	PUD	10,657.5	4.2
Heritage Trust Land		3,495.3	1.4
Municipalities		26,782.4	10.5
Total		256,169.4	100.0

Source: Horry County Planning Department

The Forest Agriculture District is the largest district, occupying approximately 140,310 acres, or over 50 percent of the total zoning mix, and permits a variety of low-density uses, including farming, public and civic, residential, business/commercial, and industrial. The second largest category is single-family residential, with approximately 24,172 acres, or 9 percent of the total zoning mix. Permitted uses include one-family dwelling units (excluding manufactured housing), farming, golf courses, and accessory uses.

The zoning categories Conservation Preservation, General Residential, Highway Commercial, and Planned Unit Development each occupy between 10,000 to 12,000 acres, or 4 to 5 percent, of the total zoning mix. A variety of low, medium, and high-density land uses are permitted within each of these categories.

3. Trends in Growth and Land Use

Population trends indicate that Horry County has experienced substantial population growth over the past three decades, resulting in its 1997 ranking of sixth in the state for population size and third for population growth. It is this growth rate that is driving both permanent and seasonal development in the unincorporated areas of Horry County.

As stated previously, the Intracoastal Waterway and the transportation corridors that provide access across the waterway to the Grand Strand have played a key role in the growth of unincorporated Horry County. Growth along the Grand Strand is expected to continue with construction of the Carolina Bay Parkway, while construction of the Conway Bypass is expected to expand growth in western Horry County. Municipal annexation may create additional growth in unincorporated Horry County, as growth moves outward with expanding infrastructure and population.

A review of Horry County building permits over the past decade reflects significant development activity for the unincorporated areas of the county in the residential sector and, albeit to a lesser degree, in the office and retail sectors (Figure VII-2). Overall, the industrial sector experienced a decline in development activity between 1990 to 1997. Over the seven-year period, single-family housing experienced an approximate 106 percent increase in the annual number of building permits issued. Multifamily housing experienced a nearly 326 percent increase, totaling to an additional 6,586 units, while manufacturing experienced a 30 percent increase. Office and retail building permits grew by approximately 125 percent.

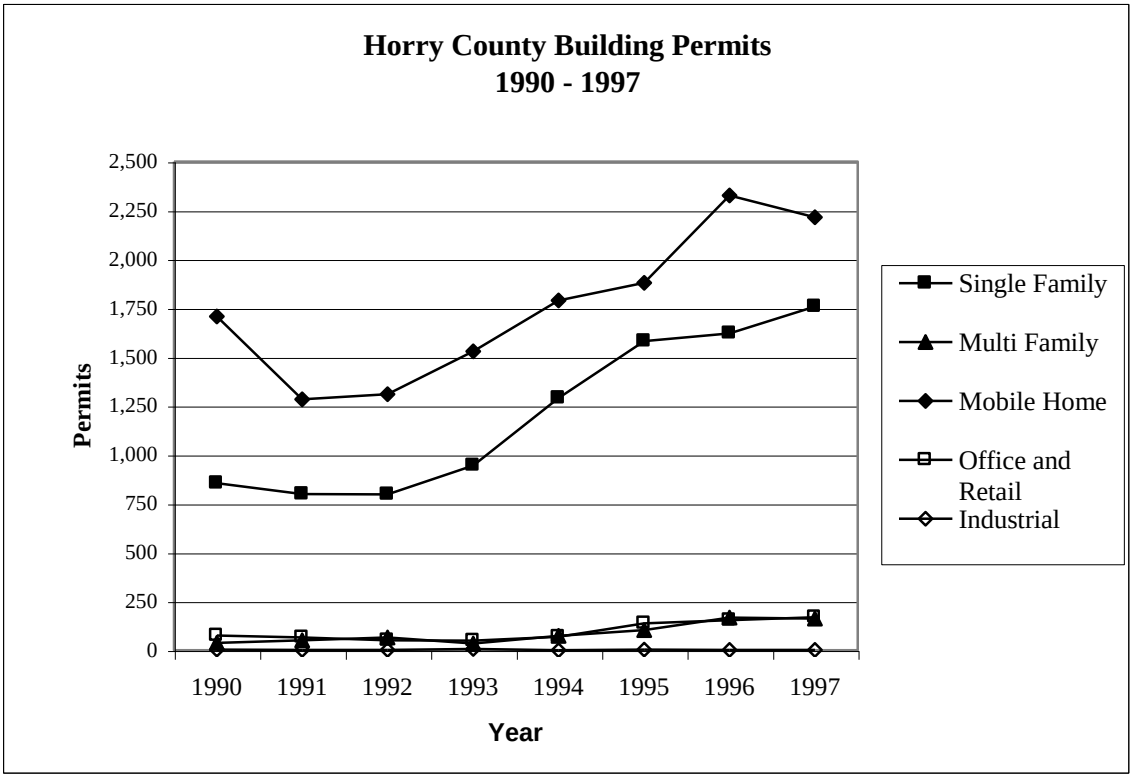
Horry County's most recent and largest mixed-use development, Carolina Forest, is slated to include 37 subdivisions, eight to ten golf courses, and 5 million square feet of commercial space. It is approximately 17 square miles or 10,580 acres, and is expected to reach a population of 50,000 to 60,000 people over the next 30 years, with 50 percent occupancy by 2005.

4. Future Growth Shapers

Market demand, population growth, economic development, community infrastructure, and the environmental suitability of land are the major factors affecting Horry County future land use needs. Also influential are adopted land use goals and implementation strategies. Whether qualitative or quantitative, these factors will play a significant role in guiding the intensity, location, and timing of future growth in Horry County.

The major growth shapers in a community typically involve the availability of community facilities and services such as roads, water and sewer, schools, social and cultural institutions such as libraries, and fire and police. From both a social and market perspective, land that provides access to a network of supporting infrastructure and community facilities has greater development value. As such, the availability of these facilities and services is key in determining land that is fiscally suitable and desirable for urban development.

Figure VII-2: Horry County Building Permits, 1990-1997



As previously indicated, current transportation routes in Horry County play a significant role in the accessibility of land parcels, and thereby the potential for development. As in most communities, extensions of transportation, water, and sewer infrastructure greatly expand the supply of land for urban development. The Road Improvement and Development Effort (RIDE) includes a series of interconnected highway construction and road enhancements. Among the most influential ones will be those on new alignment, including the Conway Bypass and the Carolina Bays Parkway.
In addition, the Grand Strand Sewer and Water Authority (GSWA) is actively extending water and sewer collection lines to major transportation corridors, while municipalities are expanding lines to the unincorporated areas of the county. Other community facilities, including schools and park and recreation facilities, are less important in terms of market demand but very important in creating social use value for community residents. Several unincorporated areas of Horry County are expected to experience substantial growth and increased community facility and service needs in the future. More detailed expansion projects are outlined in the Community Facilities Element.

Also influential to future growth in Horry County are established environmental standards, which have played a more significant role in shaping community growth in the last decade. Recent air and water quality programs at the Federal and State level recognize the connection between land use and environmental quality. At the local level, this is likely to necessitate more sophisticated studies of environmental quality and more precise performance standards for environmentally sensitive lands such as wetlands and floodplains.

5. Urban Sprawl and Compact Development

Horry County is like many other, relatively young counties across the country that is experiencing the phenomenon of low density, auto-oriented growth patterns commonly known as "urban sprawl."

There are three commonly recognized types of urban sprawl:

1) large expanses of low-density, single-purpose development;
2) leap-frog development; and
3) unbounded strip commercial development along major highways.

Strip commercial development and expanses of low-density residential development are probably the most prevalent form of urban sprawl in Horry County today. However, as infrastructure expands, leap-frog development could become perhaps the most costly manifestation of sprawl. Leap-frog development is the premature construction of low-density housing in areas away from existing development. The consequences of this premature development include higher costs of infrastructure. According to a study by the Urban Land Institute (ULI), the costs of providing infrastructure and services to an area that is over 10 miles away from current services is $15,000 more per lot than the cost of providing the same services to a lot close to central facilities and services. In some cases, a community may pay twice for infrastructure and services - once for the infrastructure and services where growth was planned and again where the leap-frog development was permitted.

In addition, the quality and capacity of rural infrastructure may not be upgraded to suburban standards in the short timeframe that motivated the developer to sell houses. Therefore, the lots have to be bigger to accommodate wells, septic tanks, and ditched streets. This means lower "yield" for the developer, but also may cause a lower tax base for the local government to pay the costs of schools and public services. It also reduces the buying power of customers available to the stores and commercial services coming to serve the new area.

Another economic consequence of sprawl is the impact on farming. Leap-frog development invades rural areas which still have an agriculture-based economy. The gradual conversion of the agricultural area to a residential suburb erodes the "critical mass" of cultivated land and farmers buying traditional agricultural products like seed, fertilizer, and other supplies. Consequently, suppliers have a hard time remaining competitive and begin to leave the area. This not only undermines the prosperity of the businesses, but also threatens the entire agricultural base of the economy as the costs of farming go up and more and more farmers consider selling their land for a new cash crop - converting horse lots to house lots.

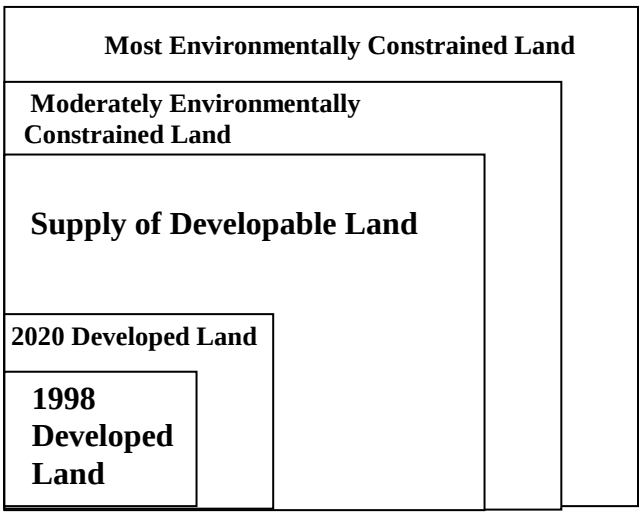
Meanwhile, the premature conversion of rural land to subdivisions on the fringe has a negative impact on established neighborhoods. The new, inexpensive homes being built in the rural areas draw away some families from existing inner neighborhoods and reduce the demand for housing in the inner ring of neighborhoods. This process undermines the value of established neighborhoods for some of the same reasons leap-frog development undermines the "critical mass" for farmers. There are more "for sale" signs with fewer buyers. More houses sit vacant. Neighborhood

confidence slips as the prices of older homes slide down. Buyers of inner ring suburban homes have less buying power and stores see this effect in decreasing sales volumes and profits. Shopping centers start to have empty windows and grass grows in the parking lots. Eventually this neighborhood may need public intervention because of deteriorated houses, streets, and stores, and increasing crime and poverty.

These are some of the characteristics of sprawl in terms of its impact on the quality of development. However, urban sprawl also has an important impact on the quantity of land use available for future generations. Sprawling suburban communities all over the country are finding that with each new wave of growth, the amount of land being consumed by development is increasing at a faster rate than is population. For example, recent studies in suburban Atlanta have shown that for every ten percent increase in population, developed land areas increase by up to fifty percent. We have already discussed how this expansion affects housing and agriculture. However, over the long run, this rapid outward expansion puts a squeeze on the quantity of land that a county has available for its future. Figure VII-3 shows graphically how land within a county is a fixed quantity that can be depicted as a square. On the outside of the square is the land that must be set aside from development because of its environmental sensitivity. At the other corner of the square is the land that is developed for human activity. As the quantity of land required for development expands outward, the residual supply of developable land becomes squeezed tighter and tighter. Eventually, the diminishing supply of developable land drives land prices up to perilous levels, causing the price of housing, and even public facilities, to grow beyond reach.

Given its diminishing supply of developable land, Horry County should incorporate land use planning tools that direct and orient development patterns and economic incentives away from urban sprawl patterns to ones that support compact development. Compact development is not synonymous with higher density. Residential density is often considered a culprit in public land use controversies. Usually the community wants less density and the developer wants more. However, residential density is a shorthand measure of the quantity of development, or number of housing

Figure VII-3: Diminishing Supply of Developable Land



units per acre. However, it is not a reliable measure of many more important, qualitative characteristics, such as the amount of open space, impervious area, building mass, or even the number of residents. These attributes relate more directly to the quality of living within a community, and relate more to the arrangement of uses, types of uses, and site design factors than on the abstract concept of density.

Compact development manages density and intensity of development through design to conserve land, reduce impacts on traffic and stormwater for a given amount of development, and make maximum use of existing infrastructure. It also protects against the negative impacts of urban sprawl by placing varied but complementary land uses in proximity to each other. Compact development promotes a mix and arrangement of land uses that are conducive to pedestrian activity and alternative modes of transportation. With well-designed compact development, more everyday destinations - shops, churches, and schools - are within convenient walking distance.

The primary benefits of compact development include: (1) reductions in land consumption – preservation of open space, natural resources, and farm and agricultural land; (2) lower infrastructure costs; (3) balance of supportive land uses; (4) distinct neighborhoods with more amenities and higher quality of life; and (5) reductions in auto-dependency and promotion of a more pedestrian-friendly environment.

A key component of compact development is a balanced transportation plan that incorporates the principles of land use management, capacity management, and travel demand management (TDM). As stated previously, land use management strategies involve promoting a mixture of compact, transit-oriented land uses. Capacity management assesses the ability of exiting transportation routes to meet current needs of the community, while TDM attempts to modify community travel behavior by reducing the number and length of trips and shifting trips to more efficient modes or less congested routes. The following represent the guiding principles to sustainable mobility through compact development:

- A balance of integrated and complementary land uses;
- Diverse residential areas;
- Commercial and employment core areas in walking distance of surrounding residential areas and at a scale appropriate to a balanced living-working environment;
- Public uses and civic space suitable for the immediate community's needs;
- Natural amenity areas, attractive landscaping interconnected with functional open space;
- Well-designed shared parking areas that are also pedestrian friendly;
- Connected grid street system to distribute traffic evenly;
- Neighborhood residential street design that distribute traffic efficiently and calms internal traffic to residential levels; and
- Driveway and access design standards that move traffic efficiently, direct it away from high-conflict areas, and promote appropriate land uses.

B. Statement of Needs and Goals

As with most communities experiencing rapid growth over a short period of time, Horry County must address the challenges that accelerated development presents, focusing future development in suitable areas and also protecting the county's significant agricultural lands, natural areas, and open space corridors. Growth management strategies offer defensible options for managing the long-term growth and development in Horry County, mainly through techniques that help control the intensity, location, and timing of development.

The Land Use Element Vision, Needs, and Goals are, in part, a result of a series of public workshops held during the course of the comprehensive plan development process with citizens of Horry County. Ideas from sub-area studies and groups throughout the county, as well as surrounding counties, were also important resources in formulating land use needs and goals. The Socastee Neighborhood Coalition Strategic Action Plan, a more recent sub-area study initiative, provides an excellent model for growth management principles discussed throughout the Land Use Element.

Land Use Vision

Horry County will provide for a high quality of life by planning for population growth, public and private development, and redevelopment and by planning the proper distribution, location, and intensity of land uses with adequate levels of services while maintaining and protecting the natural resources, residential neighborhoods, and local character of the county.

Need: As rapid growth in Horry County continues and infrastructure costs escalate, public officials and planning staff must work together to ensure fiscally sound land use decisions.

Goal 1: Direct development into the areas of the county that have in place, or have agreements to provide, adequate community infrastructure and services to accommodate future growth.

Goal 2: Promote more compact development patterns, focusing on principles related to reducing single occupancy vehicle travel.

Goal 3: Promote farmland protection as an investment in rural infrastructure and an element of local economic development.

Need: A joint effort by Horry County public officials and planning staff to promote a land use pattern that protects environmentally sensitive areas and directs development away from the most environmentally constrained land.

Goal 4: Restrict land disturbance in the most environmentally sensitive areas to protect them from the negative impacts of development.

Goal 5: Reduce impervious surfaces and other land disturbance activities that may degrade the environment.

Goal 6: Promote open space conservation in the development process as a value added amenity in development.

Need: A joint effort by Horry County public officials and planning staff is needed to ensure a compatible land use pattern and mix.

Goal 7: Establish adequate land use transitions.

Goal 8: Preserve and protect the character and viability of existing communities and developing new communities.

Goal 9: Maintain the distinction between rural and urban developed areas.

Goal 10: Reduce visual clutter by limiting the amount of and size of billboards and on-site signs.

Need: A joint effort by Horry County public officials and planning staff to coordinate land use and transportation plan so that the transportation system and future land use plan support each other.

Goal 10: Direct transportation system improvements away from environmentally sensitive areas and toward locations where community services can be provided more economically.

Goal 11: Require careful coordination of transportation facility planning and design with land use planning, growth management, and design standards.

Need: To develop a way to manage growth infrastructure problems that cross city and county boundaries.

Goal 12: Promote regional cooperation regarding comprehensive planning.

The realization of these goals is expressed in the Recommended Plan and Implementation Strategies that follow.

C. Recommended Plan

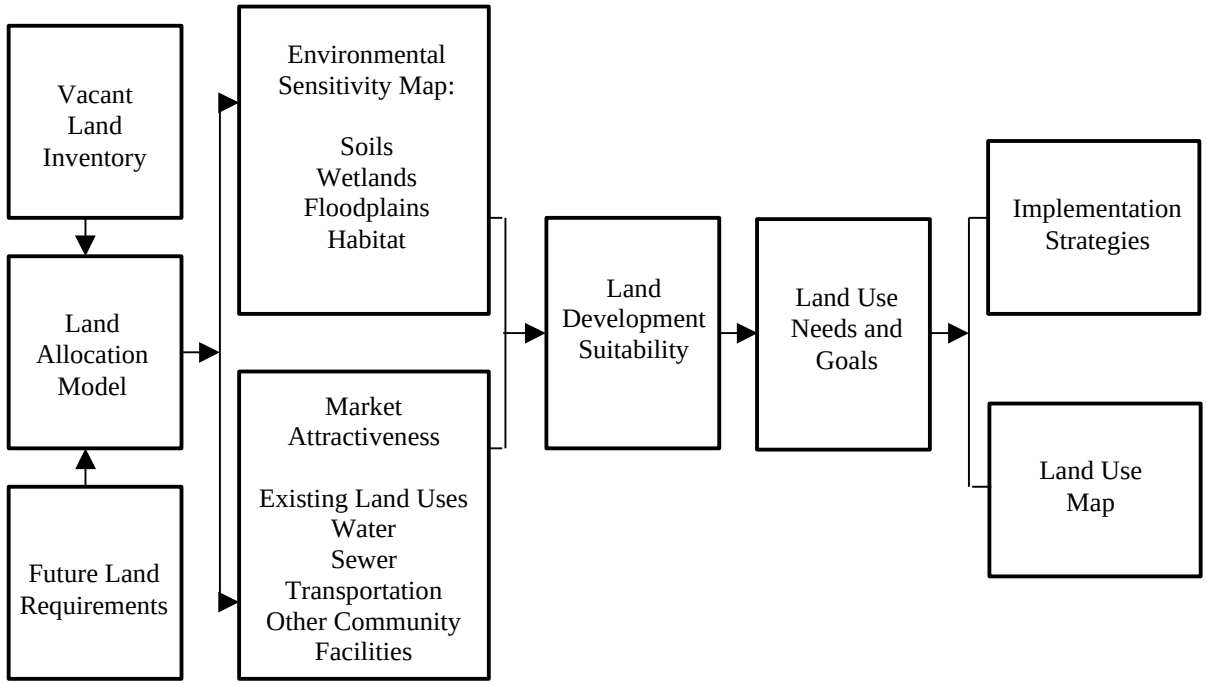
1. The Future Land Use Planning Process

The overarching role of the Land Use Element is to manage and guide the intensity, location, and timing of growth. Determining the availability and suitability of land and future land use needs is fundamental to the growth management and land use planning process. Figure VII-4 illustrates the land use planning process used to determine the development suitability of land in Horry County.

The **land allocation model** is the first step in the development suitability analysis. It seeks to balance land consumption and land availability over a 20-year planning horizon. It begins with a **vacant land inventory** that examines the supply of vacant and undeveloped sites. The next step is to estimate **future land requirements** – the amount of land necessary to accommodate future land use changes related to growth. Then it compares the demand to the acreage of tracts of vacant and underdeveloped land.

Land development suitability analysis involves determining how much of the vacant land inventory is appropriate for development. The first step in this process involves assessing the **environmental sensitivity** of land, considering the presence of sensitive environmental features such as soils, slopes, floodplains, wetlands, habitat, and prime agriculture land. The second step in the process involves the **market attractiveness** of land and considers factors such as access to water and sewer systems, major streets, highways, and surrounding land.

Figure VII-4: Future Land Use Planning Process



Land development suitability maps the market attractiveness of vacant land and compares it with environmental sensitivity maps to identify the areas of the county that are both attractive to the real estate market and relatively free from environmental constraints. These are the areas that are most desirable for higher intensity land use.

The next step in the Land Use Planning process is to interpret the data and maps created in the previous steps to write **land use needs and goals** that suggest the direction that land use and growth management would take in Horry County. The land use goals become the guiding force behind the preparation of a land use plan, comprised of a **land use map** to describe the spatial development and form of the county, and **implementation strategies** that establish programs and allocate necessary resources to implement the plan.

The rest of this section of the Land Use Element summarizes the outcome of this process in Horry County.

2. Future Land Use Requirements

Market demand forecasts are helpful in determining the amount of land necessary to accommodate both residential and non-residential future land uses needs. Based on future population projections outlined in the Population Element and the future housing projection methodology outlined in the Housing Element, unincorporated Horry County will need an additional 25,221 acres of land for single-family housing, an additional 1,379 acres of land for multi-family housing, and an additional 6,999 acres of land for manufactured homes by the year 2020. As depicted in Figures VII-5 through

VII-7, land needs may vary according to several density scenarios. The 2020 unincorporated projected needs are based on an average density permitted for each land use: single-family housing (2 units/acre), multi-family housing (15 units/acre), and manufactured housing (3.5 units/acre). Average densities for incorporated areas are: single-family housing (6 units/acre), multi-family housing (20 units/acre), and manufactured housing (3.5 units/acre). These projections represent gross property yield, including roads and open space developed in the subdivision of land.

Figure VII-5: Future Residential Land Use Needs for Unincorporated Horry County

Average Density Per Acre		2020	
		Additional Land Needs for Single Family Housing	
		Total Housing Units	Total Acres
Scenario 1	1	50,441	50,441
Scenario 2	2	50,441	25,221
Scenario 3	3	50,441	16,814
Scenario 4	4	50,441	12,610

Figure VII-6: Future Residential Land Use Needs for Unincorporated Horry County

Average Density Per Acre		2020	
		Additional Land Needs for Multi Family Housing	
		Total Housing Units	Total Acres
Scenario 1	10	20,689	2,069
Scenario 2	15	20,689	1,379
Scenario 3	20	20,689	1,034

Figure VII-7: Future Residential Land Use Needs for Unincorporated Horry County

Average Density Per Acre		**2020**	
		Additional Land Needs for Manufactured Housing	
		Total Housing Units	**Total Acres**
Scenario 1	3.5	24,497	6,999

Future non-residential land use needs for the economic sector were based on Horry County job forecasts presented in the Economic Element. Additional employees were translated into additional land use needs by calculating the average space requirement for each employee in each SIC sector. Average space requirements were then adjusted for a vacancy allowance of 5 percent and an estimated density. An assumption was made that unincorporated Horry County would supply the land for approximately two-thirds of the total job market, with incorporated Horry County supplying the remainder. As a result, unincorporated Horry County will require an additional 1,336 acres for the manufacturing sector, an additional 529 acres for the retail sector, an additional 1,081acres for the hotel and amusement services sector, and an additional 513 acres for the office sector by the year 2020 (Figure VII-8). This totals to approximately 3,459 acres of additional non-residential land use needs by the year 2020.

Figure VII-8: Future Non-Residential Land Use Needs

Category	2020 Additional Employees			2020 Additional Land Needs (Acres)		
	Unincorporated	Incorporated	Total	Unincorporated	Incorporated	Total
Manufacturing						
Manufacturing	167	83	250	33	16	49
Construction	3,133	1,567	4,700	619	309	928
Transportation & Utilities	1,900	950	2,850	375	188	563
Wholesale	1,567	783	2,350	309	155	464
Total Manufacturing	6,767	3,383	10,150	1,336	668	2,003
Retail	8,933	4,467	13,400	529	265	794
Hotel and Amusement Services	15,397	7,699	23,096	1,081	540	1,621
Office						
F.I.R.E	3,067	1,533	4,600	133	67	200
Service	8,736	4,368	13,104	379	190	569
Total Office	11,803	5,901	17,704	513	256	769
Total	27,503	13,751	41,254	3,459	1,729	5,188

Manufacturing = 1,500 square feet per employee; 8,000 square feet per acre
Retail = 450 square feet per employee; 8,000 square feet per acre
Hotel and Amusement Services = 1,000 square feet per employee; 15,000 square feet per acre
Office = 330 square feet per employee; 8,000 square feet per acre

Figure VII-9 summarizes 2020 Future Land Use for all land use categories. To account for market flexibility, future residential and non-residential land use needs are inflated by 50 percent. The additional acreage permits a more flexible site distribution process, thereby reducing the likelihood of a tight development market with inflated costs due to a shortage of suitable sites. As land use needs increase, the amount of vacant land and agricultural land is expected to diminish. Assuming a 75 percent/25 percent mix between the Urban Service District and Rural Service District, respectively, approximately 37,799 acres of the residential and 7,429 acres of non-residential future land use development will occur within the vacant land inventory. The remaining residential and non-residential development (approximately 12,600 acres of residential and 2,476 acres of non-residential) is expected to occur within the agricultural land inventory. The land area occupied by municipalities is expected to remain fixed, with approximately 26,782 acres, or 3.6 percent, of Horry County's total land area.

Future land requirements for community facilities are based on projections of the physical infrastructure necessary to support expected growth in Horry County. Institutional land includes acreage devoted to transportation right-of-way, schools, libraries, fire, EMS, police, solid waste collection and disposal, and park space. Transportation and park space consume the largest components of community facilities land. Transportation-related land use is a direct function of the level of development in Horry County. Based upon the previous analysis, approximately 60,000 additional acres will be needed for future residential, commercial, and industrial uses. Residential

land use projections include land used for roads. Additional transportation right-of-way will equal roughly 15 percent of the remaining future land area or 1,148 acres.

With the recommended minimum of 6.25 acres of park space per 1,000 residents established by the National Park and Recreation Association, the County will require the addition of approximately 1,775 acres of locally provided recreational area to meet anticipated population growth. The remainder of the institutional land area - 460 acres - consists of library, school, public safety, and solid waste facilities necessary to satisfy expected service demands to 2020. Facility projections are based on an analysis of the existing inventory of buildings and level of service standards developed in the Community Facilities Element. Once facility projections are developed, average site sizes are then used to determine acreage estimates. In total, approximately 3,383 acres of institutional land will be required to support growth by 2020.

Given the enormous golfing industry throughout Horry County, land area occupied by golf courses is expected to increase by 48 percent by the year 2020, with approximately 10,000 acres dedicated to golf course use.

Figure VII-9: Future Land Use Requirements

Land Use Category	1998 Existing Land Use	Unincorporated Net Change From Existing	Incorporated Net Change From Existing	Total Net Change from Existing	2020 Total Land Use
Single-Family Residential	16,826	37,831	4,203	42,034	58,860
Multi-Family Residential	1,964	2,069	517	2,586	4,550
Manufactured Home	9,476	10,499	1,167	11,666	21,142
Commercial	15,297	3,185	1,592	4,777	20,074
Industrial	601	2,004	1,002	3,006	3,607
Public and Civic	8,462	2,255	1,128	3,383	11,845
Golfcourse	6,836	2,461	820	3,281	10,117
Agriculture	565,930	-23,456	0	-23,456	542,474
Vacant Land	52,530	-36,848	-10,429	-47,277	5,253
Total	677,922	60,304	10,429	70,733	677,922

3. Land Development Suitability

A land development suitability analysis is a useful planning tool in that it delineates the supply of developable land – land that is typically in limited supply due to urban development and environmental and infrastructure constraints. As stated previously, land development suitability analyses incorporate a number of factors, including the environmental sensitivity of land, availability of adequate facilities, and population and economic forecasts. The majority of this undeveloped land is in the western portion of the county and is used for agricultural purposes, although there are vacant or underdeveloped properties in the more heavily developed eastern portion of the county as well. The current land use for Horry County based on 1989 data is presented in Figure VII-10.

4. Environmental Sensitivity

The environmental sensitivity of land is based on the resources described in the Natural Resources Element: soil drainage capacity, septic tank suitability, prime agricultural or forest land, wildlife habitat, hydric soils, and floodplains. The areas with the highest concentration of environmentally sensitive land are depicted in the Environmental Suitability Map (Figure III-22). These areas comprise approximately 174,811 acres, or 23.4 percent of Horry County's total land area. Environmentally sensitive areas should be protected from excessive development, as they are the most unsuitable for high intensity development.

Smaller pockets of environmentally sensitive areas can often be protected in the course of development through the application of performance standards, clustering development in upland areas, and open space conservation in subdivision design. The location of this open space on the site will be dependent on the significant resources of the site, such as:

- agricultural land and prime agricultural soils;
- significant wildlife habitat;
- wetlands;
- mature forest stands, particularly native live oaks;
- scenic views; and
- water access.

To protect as much prime agricultural soils, prime forest, and wetland habitat, open space should be identified and houses built around these resource areas. Where open space has been preserved on an adjacent property, every effort should be made to connect open spaces into contiguous tracts.

5. Market Attractiveness

Real estate market value naturally grows with population growth because land is a fixed resource that becomes increasingly scarce over time. Developable land is also constrained by the availability of urban services needed to sustain quality development. Land that provides access to a network of supporting infrastructure and community facilities has greater development value, and thus, greater market potential. The availability of community facilities and services such as roads, water and sewer, schools, and fire and police are the key determinants of a community's land use pattern, ultimately driving the land use planning process and future land use spatial form.

In Horry County, the construction of the Carolina Bay Parkway and Conway Bypass and various other road widening projects is expected to play a key role in shaping future land use patterns. In addition, the GSWSA is actively extending water and sewer collection lines to major transportation corridors, while municipalities are expanding lines to the unincorporated areas of the county.

Figure VII-10 – Existing Land Use

Figure VII-11 illustrates the growth priority areas within the county based on proximity to key community facilities. In the ranking system, land accumulates points in five individual categories of existing and proposed infrastructure access:

- Arterial roads and CRPT bus routes
- Public sewer lines
- Public water lines
- Fire stations
- Public elementary schools
- Parks

The access of land to infrastructure is determined through a defined geographic service area derived from recommended performance standards. The ranking system awards more points to land located near existing community facilities than land with access to proposed infrastructure. The system is also weighted, giving highest priority to transportation access, followed by public sewer provision, schools, and water provision, fire protection, and location near parks.

The scores in the individual infrastructure categories are then summed to form a composite ranking on a 100-point scale. The composite score is then used to sort county land into a range from the lowest to the highest level of market attractiveness, as shown in the legend of Figure VII-11. See Appendix A for the scoring matrix.

As the resulting map demonstrates, the convergence of key community facilities in the eastern portion of the county produces land areas with the strongest market appeal. The attractiveness analysis can thus be used as a tool to guide growth to these areas and maintain an essential link between development and adequate infrastructure support.

6. Future Land Use Map

Future Land Use Maps often are drawn in detail to provide a specific land use classification for every parcel in the community. These maps are similar to the Existing Land Use Map, except that they usually show a land use classification that is consistent with the current zoning for each parcel that is developed, and a recommended use category (such as low density residential or commercial retail) for undeveloped parcels and other tracts that are expected to redevelop during the planning horizon. These maps are commonly used as the master plan for hearing rezoning cases.

Although this system can be useful because of its specificity, it is very time-consuming to create and lacks flexibility. Parcel-specific land use maps also require regular maintenance and updating in fast-growing areas to keep up with ongoing rezoning and development activity. This maintenance-intensive mapping process becomes more efficient once the county has completed the preparation of its Geographic Information System (GIS). GIS enables planning staff to create and maintain a computerized Existing Land Use Map drawn at the parcel level and linked with the detailed parcel characteristics information available in the property assessor's computerized files. This system is well underway for Horry County but is not yet complete.

Figure VII-11: Horry County Growth Priority Areas Map

Although Horry County may find it helpful to make a parcel-specific Future Land Use Map in the near future using the GIS mapping system, it is not feasible to develop this map in working order in time for the County's current schedule. Therefore, rather than use a detailed, parcel-specific land use map, Future Land Use Plan recommendations are based on an updated and enhanced version of the map used in the previous comprehensive plan. This conceptual map can be used along with Performance Standards and the set of Implementation Strategies in this element to form the basis for a more detailed mapping and land data tracking system in the future.

The 1995 Comprehensive Plan for Horry County used a conceptual land use mapping system that established Urban and Rural Service Districts and set development policies for each of these areas. The Service District approach provides a foundation for a Future Land Use Map by differentiating the more urbanized eastern portion of the county from the more rural western portion of the county. The intent of the Urban Service District is to concentrate high intensity land uses in the more developed portion of the county, promoting mixed development patterns that allow people to live and work within the same area. This practice should be continued.

The major elements of the Rural Service District include agricultural use, open space areas, environmentally sensitive areas, hamlets or rural village clusters, and areas suitable for industrial development. The intent of the Rural Service District is to maintain agricultural activity, protect sensitive environmental areas and rural character, and cluster future growth to reduce the effects of sprawl. As such, these areas should not be targeted with the development of public infrastructure.

The Future Land Use Plan map is shown in a draft preliminary form in Figure VII-12 (folded insert). It updates the Service Districts shown in the 1995 Horry County Future Land Use Map, including within the Urban Service District the projected sewered areas of the county based on recent sewer service area plans prepared by the GSWS. It also shows the environmentally constrained areas that are not well-suited for development, and guides the future development of the county based on the combination of two concepts that are presented below – Character Districts and Performance Standards.

7. Character Districts

The spatial form of Horry County land use generally follows established zoning districts identified on the zoning map. Similar to other communities, this process has resulted in segregated, generic land use types and an inadequate transportation network that favors the automobile and long, disconnected commutes, or urban sprawl. In addition, the zoning administration process has led to numerous interpretational problems surrounding zoning districts and zoning amendments. The following section proposes a new approach to the spatial form of future land use that employs compact development, established character districts, and performance- based land use controls.

Figure VII-12: Future Land Use Map

The basic principle is a future land use map that goes beyond the traditional, parcel-by-parcel future land use mapping process; instead, it focuses on a more coordinated, generalized approach to future land use spatial form. The intention is to differentiate areas in a community by their basic function – an individual identity in accordance with an area's size, scale, and intensity.

Character Districts are comprised of six basic spatial patterns of land uses with distinct characteristics that define development patterns more specifically. Each Character District may assume a different character and mix of uses depending on its location within the county, market demands, and the surrounding land uses. The Character Districts come in three categories:

1) ***Centers*** are activity nodes for work, shopping, and living.
2) ***Corridors*** are linear spines that connect centers.
3) ***Wedges*** are the broad, less intensely used areas located between the centers and corridors.

There is a hierarchy of centers based on their magnitude and location:

- Townships are the largest activity centers, with a regional significance. They are often located at the major junctures of the transportation system.
- Villages are intermediate sized activity centers of a community scale
- Hamlets are small nodes located at convenient crossroads in rural areas

Community participation should be a key aspect in developing the specific plan of each District. As new Character Districts are proposed, the County should schedule design workshops to educate the community, local officials and developers on the development principles and to determine the overall vision for the district. Sub-area studies are recommended in defining future Character Districts. Sub-area studies would include community participation to develop a specific implementation plan, including a set of design standards that build on local market trends and land use and development characteristics to guide new growth and infill development.

Centers

A basic strategy of the recommended Future Land Use Element should be to direct as much of the county's growth as possible to planned Centers located within Horry County's Urban Service District. The term ***"Centers"*** refers to a hierarchy of pedestrian-oriented, central places located at major crossroads or traditional community nodes. Centers are comprised of a mixture of civic, commercial, and residential uses in varying proportions and are important in establishing a community's sense of place. The mix of uses will be essential in ensuring the functionality of the designed community – a community where its resident's can work, live, and, play. Recommended development standards for Centers include:

- Clustered and mixed-use centers that promote access to service facilities and minimize infrastructure and environmental impacts.

- Commercial uses in mixed-use centers should be designed to be compatible in massing and architectural character with buildings of residential size, scale and architecture, being composed of a variety of smaller buildings rather than a single "big-box" structure.

- Integrated bike and pedestrian pathways to link public facilities and commercial, retail, and residential development, as well as open space

- Interconnected secondary roads and grid road patterns to promote a fluid connection throughout the community; cul-de-sac streets and large, gated developments should be discouraged.

- A common green space or park should be included to provide an outdoor "living room" and focal point for the community's civic activities.

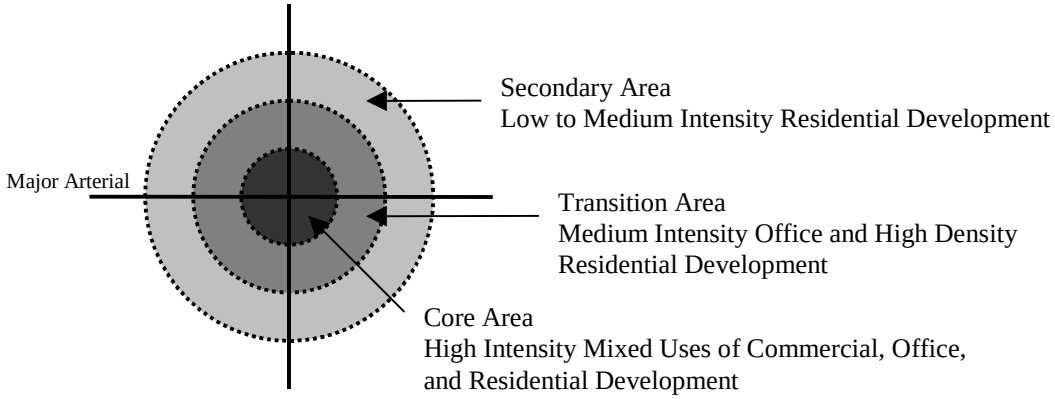
- Landscaping standards, including maintenance of existing, mature trees on site and increased street tree plantings.

In many cases, Centers are located in established community nodes that already have freestanding commercial and residential uses. However, they may be very auto-oriented and the connections between land uses are missing. Redevelopment and "in-fill" development of these areas need to be encouraged with attractive mixed-use zoning within established commercial districts. Design standards for better landscaping and sign control standards can be introduced for future sites. Public action may be needed to create convenient pedestrian and bicycle connections with attractive landscaping where it was previously overlooked. Public uses like libraries and fire stations can be added strategically in these areas to set more attractive patterns and extend needed amenities at the street level. A major result of these efforts would be to transform the unrelated freestanding strip uses into integrated mixed-use centers that offer some of the desirable characteristics of traditional towns and villages.

Centers include three subsets: Townships, Villages, and Hamlets.

Townships are the primary subset of Center Districts and are suitable for job-generating and high intensity uses such as offices; community-serving retail centers; and low, moderate, and high density housing. Townships are recognized municipalities or other major recognized communities in unincorporated areas and encompass a 1/2-mile to 1-mile radius. The center of the Township is located directly on a major transportation artery, providing ample connection to other areas of the county.

Public facilities (e.g., library, hospital, high school, etc.) and services are typically directed in these areas. Townships are delineated by a defined development edge and may be penetrated by natural features. Townships encompass three development intensity zones: high-density commercial at the center core, medium-density office and high density residential housing located outside the center core, and low to medium density residential development on the outside boundary. In existing municipalities, infill and redevelopment should follow Township principles.



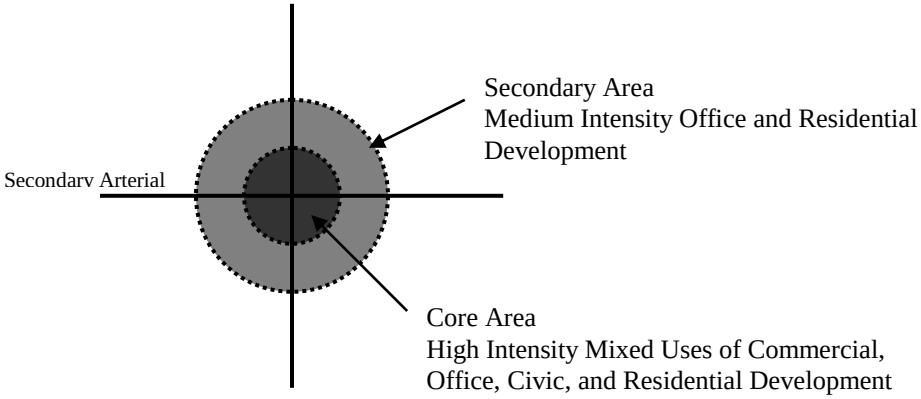
Recommended uses and development standards for core areas within ***Townships*** include:

- Small-scale retail such as convenience stores, dry cleaning, clothing stores, and food markets.
- Small scale office such as law offices, doctor offices, and real estate offices.
- Multi-use complexes limited in size, scale, and design that promote adjacent residential neighborhood character.
- Signage in keeping with the character of adjacent residential neighborhoods.
- Parking lots landscaped with trees and adequate vegetative buffers surrounding the lot.
- Dumpsters should be screened and required to be covered at all times.

Villages are located at the crossroads of secondary routes and are generally smaller than Townships (1/4-mile to 1/2-mile radius). Villages typically encompass two development intensity zones – a core and secondary area.

Villages may be centered on a village green surrounded by public and semi-public buildings (e.g., fire station, library, and elementary or middle schools), shops, and high-density housing. Village greens are mixed-use centers in which non-residential uses are at a small, residential scale, well-

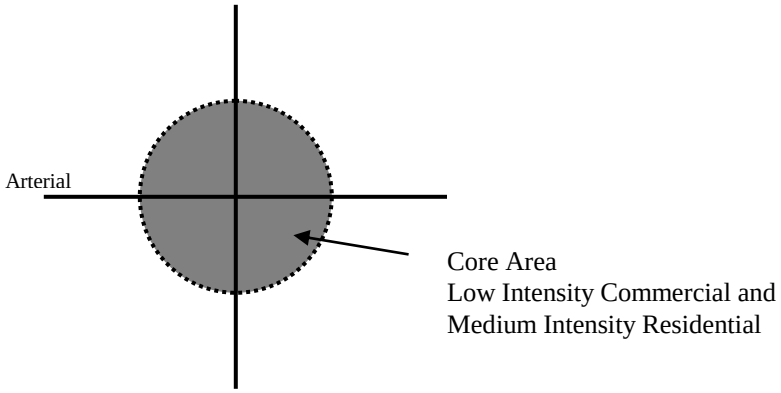
landscaped and related to sidewalks promoting primary pedestrian access. Low to medium density residential housing occur outside the green.



Recommended uses and development standards for core areas within Villages include:

- Medium intensity retail uses such as grocery stores, drug stores, delis, restaurants, gas stations, local hardware stores, and small hotels.
- Medium scale office and professional services, in mixed use areas.
- Direct vehicular, bicycle, and pedestrian access between village greens and surrounding neighborhoods.
- Existing historic structures should be reused and renovated.
- Buildings set close to the street with canopied front entrances oriented to landscaped sidewalks.
- Parking located to the side or rear of buildings.
- Parking lots landscaped with trees and adequate vegetative buffers surrounding the lot.
- Dumpsters should be screened and required to be covered at all times.

Hamlets are the smallest subset of Centers (less than 1/4-mile radius). As such, they are located at lesser crossroads and permit a more traditional rural development pattern which includes a few small shops, a local church or other public buildings, and clustered residential housing with convenient local road and footpath connections. Hamlets are found surrounded by Wedges in the Agricultural Service District, where excessive development is discouraged.



Corridors

Rural and Urban Corridors usually follow major transportation arteries, linking Centers and providing space for auto-oriented activities of commerce and industry. Corridors comprise a ¼- to ½-mile depth along either side of a major highway. An important aspect of Corridors is that they provide a gateway experience as they approach major Centers.

Rural Corridors are less developed than Urban Corridors, which typically follow a more urbanized, strip development pattern. Rural corridors emphasize preservation of the pastoral views of forests, farm fields, and pastures framed by long expanses of wooden fences as seen from major highways that cross rural areas of South Carolina. These areas require little public investment but should be protected by regulation from thoughtless tree cutting in the right-of-way and the incursion of billboards, portable signs, and strip commercial uses. Active tree harvest areas should preserve a dense, naturally wooded buffer along the highway edges. Houses that face the main highway should be set back from the road in a gracious manner, and driveway cuts should be restricted to infrequent intervals.

Many of the more urbanized corridors are likely already effected by commercial strip development. This requires access management standards and sign controls to be adopted along highways to provide special protection against strip development. Newly developed corridors should have boundaries that prevent excessive commercial strip development and have definite edges with transitional buffers separating them from residential uses behind them. Strip development in Highway Corridors would require a transitional land use to buffer adjacent single-family residential areas.

Urban Corridors should be designated as Highway Corridor Overlay Zoning Districts that require access management solutions to common problems along an existing highway. Highway Corridor Overlay Zones require careful coordination of land use and transportation objectives. Some specific elements of a Highway Corridor Overlay Zone include:

- Regulate driveway and spacing, corner clearance, and sight distance.
- Increase minimum lot frontage and setback requirements along thoroughfares and regulate lot width-to-depth.
- Restrict the number of driveways per existing parcel or lot and consolidate access wherever feasible.
- Establish driveway design elements and warrants for use of those design features.
- Promote internal connections between adjacent land uses and encourage unified circulation and parking plans.
- Treat properties under the same ownership and those consolidated for development as one property for the purposes of access control.
- Discourage the location of driveways along acceleration or deceleration lanes and tapers at street intersections or interchanges.
- Restrict flag lots and regulate private roads and access easements.
- Minimize commercial strip zoning and promote mixed use and flexible zoning.
- Require subdivisions along arterials and collectors to be designed with reverse frontage lots.
- Minimize subdivision exemptions and review lot splits to prevent access and right-of-way problems.
- Optimize driveway location and overall access in subdivision and site plan review.

Regional Commercial Centers

Along with the community-scale and neighborhood scale commercial land uses in the Centers, and the lower intensity commercial uses along Urban Corridors, there is a need to accommodate a higher intensity of commercial use that is typically highway-oriented and regional in scale. Regional Commercial Centers attract shoppers and visitors from a larger area of the county and outside of the county. These uses are also more auto-oriented, in larger buildings, and have larger amounts of parking than the commercial areas located in the Townships, Villages, and Hamlets. Regional Commercial Centers are usually located at the principal intersections of the largest highways in the community.

Wedges

Wedges are the irregularly shaped areas of low density between Centers and Corridors. These areas typically have poor land development suitability and are more appropriately used for land-extensive uses (e.g., manufacturing, farms, and forests) and natural resource preservation. Natural resources may include areas of open space, wetland mitigation initiatives, and agricultural or forestry practices. High intensity uses such as retail and commercial should be minimized. Performance standards and voluntary conservation easements are two land use tools that can be used to protect and preserve Wedges from excessive development.

Large lot zoning – at densities of one house per five acres or more – is often instituted in rural areas for the purpose of preserving open space and agriculture in these areas. However, instead of saving open space, it may result in much greater areas being developed. Many larger lots, in the order of 40 to 50 acres, would be necessary to maintain agriculture or commercial forestry. The character resulting from 5-acre subdivisions is not rural, but built-up, and extended trip-making is necessary.

Design and development standards for permitted development in Wedges should better reflect the character of the rural areas. To protect rural character, open space should remain in contiguous tracts and share common boundary with contiguous blocks. Where open space has been preserved on adjacent property, every effort should be made to connect open spaces into a network of greenways.

8. Performance Standards

Performance standards are growing in popularity as an effective way of managing the location and character of development. They can be applied as development controls at the macro (land use plan) level and/or in more detailed standards that replace or supplement zoning, subdivision regulations, and environmental regulations.

Performance standards are different than the typical prescriptive land use controls such as parcel-specific land use maps and zoning standards. They attempt to specify the desired results or impact thresholds of a development with respect to neighboring land uses using feasible means for achieving a given standard or impact rather than directing a specific arrangement as a zoning ordinance would do. Performance standards and regulatory systems based on performance standards have been used by communities concerned with improving the quality of development, linking implementing mechanisms more directly to comprehensive plan goals, and creating an objective system for ranking community objectives and evaluating proposed projects. Performance standards are also intended to allow more flexibility with environmental and development issues.

Performance-Based Land Use Controls vs. Traditional, Prescriptive Land Use Controls

Performance-Based Land Use Controls	Traditional, Prescriptive Land Use Controls
• Accomplishes spatial control of land uses with a minimum of zoning districts, and within those districts control is exercised by making each use pass a series of performance tests.	• Establishes a large number of zoning districts and then lists those uses that may be placed in each zone.
• Basic assumption is that land uses should be separated only to the degree that they create negative impacts on their neighbors. Within districts, the more intense or nuisance-producing uses are required to "buffer" their impacts on adjacent and neighboring uses.	• Basic assumption is that different uses must be physically separate or distant to protect them from one another.
• Takes into account the capability of land resources to support proposed activities and allows development to occur only to the extent that it is consistent with well-defined environmental performance standards.	• A single zone may encompass a variety of environmental conditions with no provisions for reflecting those variations in the requirements.
• Seeks to maximize freedom and flexibility by providing landowners with many options as to how they may develop land.	• Establishes minimum standards that each use must follow, including setback, open space, drainage, parking, and landscape requirements.

How Performance-Based Land Use Controls Work

Objectives

- Performance Standards offer greater flexibility and cost reductions in subdivision design. For example, instead of having the ordinance specify what size storm sewers are required, a Performance Standard is used, which states the amount of runoff permitted. The Performance Standard leaves options open to the developer, including limiting impervious surfaces. The Developer can then chose the least costly option that is acceptable to the community. Drainage standards are maintained while development costs are lowered.

- Performance Standards offer more variety of uses permitted in a particular district.

- Performance Standards set appropriate density and establish development standards in sensitive areas.

- Performance Standards are guidelines for the appropriate location, intensity, and arrangement of land use rather than as an evaluation of a specific zoning or land use category. The intensity of land use is a function of the proposed use, density, impact, and character of development. In other words, multi-family housing is of a higher intensity than single-family housing because it is typically more densely constructed and used than single-family housing. Similarly, commercial and industrial development typically has a higher intensity than multi-family residential development of the same density. However, higher density multi-family and lower density commercial may be of an equivalent intensity measured in terms of their impacts on traffic, water, and wastewater. Mixed-use developments may have an intensity that reflects a composite of the component parts and the degree to which they are interdependent.

Requirements

- A clear connection between community objectives and established Performance Standards.

- A good database, so that appropriate standards can be established and compliance with standards can be measured and enforced.

- Educational effort in the community among planning staff, commissioners, and interested residents. Performance Standards can be phased in by utilizing them in such areas as planned unit development guidelines, industrial districts, and sensitive area overlay zones.

The Horry County Comprehensive Plan introduces the principles of performance standards as a way to evaluate land use decisions in a flexible, but consistent manner. Performance standards can be applied to test rezoning applications against four basic objectives of the Land Use Element of the Comprehensive Plan:

1. Land use intensity should be consistent with the accessibility of a site to appropriate public facilities and services.
2. Land use intensity should be consistent with the available capacity of necessary public facilities and services.
3. Land use intensity and design should be consistent with the spatial patterns of the Land Use Element and the current and future uses of adjacent properties.
4. Land use intensity and site design should respect the environmental suitability of the site.

The following Performance Standards are meant to be illustrative. This scheme, or a variation, may be used along with the "Rezoning Review Criteria" currently used by staff to evaluate rezoning applications. These standards could be used to evaluate any land use development proposals to determine their consistency with the four principles. If desired, the Performance Standards can be combined using a weighting scheme that scores a particular development proposal for comparison with alternatives or with a threshold of a minimum number of points required to gain approval.

Performance Standards for Evaluating Development Proposals

Principle #1: Access to Infrastructure – weight 20 points

Measures:

1. Transportation Access
   a. Classification of nearest street
   - Arterial* - 4 points
   - Collector – 2 points
   - Local street – 0 points

*Access management principles should govern design of direct access to arterials to discourage strip development and inefficient use of highway capacity for local access.

   b. Distance to nearest public transportation boarding point
   - Less than 1/2 mile – 2 points
   - ½-1 mile – 1 point
   - More than 1 mile – 0 points

2. Potable Water System
   Source of potable water
   - Public water within 500 feet– 2 points
   - Public water within 1,000 feet – 1 point
   - Public water more than 1,000 feet – 0 points
   - Well - 0 points

3. Wastewater Treatment System
   Source of wastewater treatment/collection
   - Gravity sewer collection line within 500 feet – 4 points
   - Gravity sewer collection line within 1,000 feet – 2 points
   - Gravity sewer collection line more than 1,000 feet – 0 points
   - Connection to public sewer requires lift station – 0 points
   - Septic Tank – 1 point, if on suitable soils

4. Parks and Recreation
   Distance to nearest park
   - Less than ½ mile - 2 points
   - ½ - 1 mile - 1 point
   - More than 1 miles – 0 points

5. Schools
   Distance to nearest public elementary school
   - Less than ½ mile - 3 points
   - ½ - 1 mile - 2 points
   - 1 –2 miles – 1 point
   - More than 2 miles – 0 points

6. Public Safety
   Distance to nearest fire station with paid firefighters
   - Less than 5 minutes - 3 points
   - 5-10 minutes – 2 points
   - 10-15 minutes – 1 point
   - Over 15 minutes – 0 points, or

   Distance to nearest fire station with volunteer firefighters
   - Less than 5 minutes - 2 points
   - 5-10 minutes – 1 point
   - 10-15 minutes – 0 points
   - Over 15 minutes – 0 points

Principle #2: Infrastructure level of service – weight 20 points
Measures:

1. Transportation Impact
- Daily vehicle trip generation is less than 10 percent of average daily capacity of the largest street with a driveway serving the development – 2 points
- Additional daily traffic added to nearest collector or arterial serving the development is less than 10 percent of remaining daily capacity – 3 points
- Impact mitigation provided by applicant (travel demand management, access management, capacity improvements, operational improvements) - 1-3 points

2. Potable Water System Capacity
- Adequate well or potable water system capacity to supply the development – 2 points

3. Wastewater Treatment System Capacity
- Adequate public wastewater treatment system capacity - 2 points

4. Parks and Recreation
- Nearest park with public facilities at least 50 acres in size – 2 points
- Nearest park with public facilities at least 5 acres – 1 point
- Non-residential development – 1 point

5. Impact on Schools
- Adequate student capacity remains in nearest public elementary school - 3 points
- Non-residential development – 2 points

Principle #3: Land Use Compatibility - weight 30 points

Measures:

1. Consistent with Character District
- Development is of appropriate type, intensity, and design for corresponding Character District – 0 - 10 points

2. Reinforcing Center
- Development is of appropriate type, intensity, and design **and** is located in a **Center** – 0-10 pts.
- Appropriate transition in land use intensity and buffers with respect to adjacent uses (current and proposed) – 0-10 points

Principle #4 Environmental Suitability - weight 30 points
Measures:

1. Land Disturbance Avoids Wetlands – 0-5 points

2. Land Development Avoids Floodplain – 0-5 points

3. Land Development Provides Suitable Stream Buffers – 5 points

4. Property's score on Environmental Suitability Map – 0-5 points

5. Development Employs Open Space Conservation to Protect Natural Resources – 0-5 points

6. Development Employs Wetland Mitigation or Stormwater Management BMPs – 0-5 points

D. Implementation Strategies

The following Implementation strategies are intended to support the various goals presented throughout the plan and to outline specific actions that Horry County should take to achieve its land use goals.

1. **Establish Performance Standards to guide the location, timing, and intensity of development and direct growth to established Character Districts.** Implement Performance Standards to guide rezoning decisions, as described in the previous section. There should be public workshops with the community to discuss the effectiveness of alternative approaches. The implementation would be done by the Horry County Planning Department and Planning Commission.

2. **Perform Sub-Area Studies and complete more detailed future land use map for future growth areas.** Sub-area studies would be needed to detail the development concept for specific Character Districts. Studies should be done in concert with property owners and other affected parties. Some of the Sub-area Studies should include a charette workshop with the community to develop design standards. The implementation would be done by the Horry County Planning Department and Planning Commission.

3. **Establish county-wide zoning and development regulations.** Less than one-third of the county is subject to zoning. Currently, a majority of land in the county is not subject to zoning regulations, but development activity could move into these areas very soon. Consequently, the Planning Commission and County Council need to establish an appropriate level of land use controls before development preempts implementation of the Comprehensive Plan. This includes completing revisions to the existing Forest/Agricultural District that will create a zoning district more in keeping with the needs and requirements of foresting and farming operations. The implementation would be done by the Horry County Planning Department and Planning Commission. Zoning of property existing at the time of the adoption of the Comprehensive Plan shall not be changed by virtue of the adoption or the existence of the Comprehensive Plan. Future zoning of all property in Horry County when recommended by the Planning Commission and approved by the County Council shall automatically constitute a change to and amendment of the Comprehensive Plan.

4. **Establish a Highway Corridor Overlay District for urban corridors.** This strategy would outline the appropriate uses, design and landscaping standards, and access management standards. The overlay ought also to address land use transitions to protect future residential subdivisions that may be constructed behind the highway commercial uses. There should be public workshops with developers and planners to discuss the effectiveness of alternative approaches. The Planning staff would be responsible for implementation.

5. **Establish Open Space Conservation Subdivision design in zoning ordinance.** This zoning amendment would enable subdivision design to transfer density within the development, away from the vulnerable areas and into the areas of a large tract that are most capable of supporting development with minimum impact. Where the development occurs outside the sewer served area, lots requiring septic tanks would avoid unsuitable soils and could be clustered on the more acceptable soils. The open space can also become a value-added amenity and source of identity for the subdivision. Clustering of homes preserves open space; rural character protects environmental quality and can save the developer money:

    - Clustering development reduces the length of subdivision streets, curbing, sidewalks, water lines, sewer lines, drainage lines, and other utilities, consequently reducing development construction and maintenance costs; and
    - Clustering reduces the loss of existing vegetation and reduces impervious surfaces resulting in decreased stormwater runoff and construction costs for detention and piping.

There should be public workshops with the development community to discuss the effectiveness of alternative approaches. This strategy would be implemented by the Horry County Planning Commission and County Council.

6. **Prepare a travel demand management study for Horry County.** This would be a review of alternative approaches to reducing trip generation, trip length, and increasing use of alternative modes of travel using a coordinated strategy of land use planning, development design standards, and brokering ridesharing or public transportation options. The process should focus on a workshop approach, involving municipalities and businesses as well as the County staff. There should be public workshops with the community to discuss the effectiveness of alternative approaches. The planning staff would be responsible for implementation.

7. **Establish compatibility standards for manufactured housing.** Currently, Horry County has more manufactured housing placements than single-family building permits for conventional construction. However, the U.S. Department of Housing and Urban Development has established basic building codes and safety codes that apply nationwide and have preempted local governments from excluding manufactured housing based on locally prepared construction standards and building codes. Local planning bodies may regulate the location and aesthetics of manufactured homes proposed in their community. A zoning ordinance should be amended to establish appropriate location standards and appearance standards for new manufactured housing. Examples include directing their location to individual sites on large lots in the Wedges, or in clustered subdivisions used as transitional buffering behind commercial development in the Urban Corridors. Aesthetic standards could include:

    - requiring a roof pitch on all mobile homes that is equal to roof pitches of conventionally constructed housing in the area;
    - requiring permanent foundations and aesthetically pleasing skirting requiring permanent porches and stoops, specifying appropriate exterior materials and finishes and
    - regulating the minimum width of the manufactured unit or the ratio of width to length.

    The Planning staff would be responsible for implementation.

8. **Establish a landscape and tree preservation ordinance.** A tree ordinance would prohibit clear-cutting lots, require developers to preserve a minimum amount of trees when clearing land for development, and, if necessary, replant trees removed for economical development. A Performance Standard would specify a minimum resulting amount of vegetation and canopy. Developers would receive more credit for saving existing native trees, especially hardwoods, than for replanting new trees. Leaving intact mature forested areas, saving specimen trees, and preserving hardwoods would earn the developer extra credit toward the minimum amount of trees required. There should be public workshops with the development community to discuss the effectiveness of alternative approaches. The ordinance would be prepared by the Planning Department and would require approval of the Planning Commission and County Council.

9. **Develop and apply benchmarks for sustainable quality of life that measure the implementation progress of the Land Use Element.** Potential benchmarks include:

- The proportion of new development occurring in the Urban Service District, and particularly in the Townships, Villages, and Hamlets identified in the recommended Land Use Plan.
- Average amount of land disturbed per new housing unit.
- Vacancy rates for housing and commercial structures.
- Acres of open space preserved.
- Acres of prime farmland preserved.
- Acres of wetlands preserved.

10. **Increase vegetated buffers and screening standards between dissimilar land uses in zoning ordinance.** Where possible, plan land use transitions in a step-down fashion to avoid abutting incompatible uses. However, if it is necessary to allow adjacent land uses or intensities that are incompatible, landscape buffers and screening can provide relief. Buffers should be specified with performance standards that allow flexibility in the technique as long as the result is a continuous, opaque visual screen with adequate attenuation of noise and light. Buffering may take the form of physical barriers, such as berms, hedges, or other landscape cover; opaque walls or fences that are aesthetically designed and landscaped; or dense indigenous vegetation with trees and understory that is densely vegetated or enhanced with additional evergreen landscaping. This strategy would be implemented by the Horry County Planning Department, Planning Commission and County Council.

11. **Establish Agricultural Overlay District.** The Natural Resources Element mapped prime agricultural land in Horry County. Agricultural uses require a critical mass in order to keep land prices affordable for farming and to sustain the market for agricultural products and support services needed to remain viable in the midst of suburbanization. In certain Wedges in the Character District map, an Agriculture Overlay District would be appropriate. The Agricultural Overlay would encourage clustering of farm activities and family compounds in certain areas that would improve viability, prohibit non-compatible activities, and encourage development easements and conservation exemptions, In addition, the location of major public infrastructure would avoid areas in the Rural Service Areas, reinforcing the preservation of agricultural land uses. This action would be taken by the Horry County Planning Department, and require action by the Planning Commission and County Council.

12. **Require and monitor Best Management Practices for forestry operations in Horry County.** These are practices that affect the management of forest resources in conjunction with soil and erosion controls and other practices that protect land and stream habitat and water quality. This strategy would be implemented by the Planning Department in consultation with County and State forestry officials.

13. **Develop a land development tracking system using GIS that enables the Planning Department to track the status of rezoning and development permits.** This system would have both maps and attribute files of rezonings, subdivision plats, and permits in a relational database. It would enable the Planning Department to keep accurate records of what development activity is happening for updating the Land Use Element and evaluating needs for infrastructure**.** The Horry County Planning Department would implement this strategy.

14. **Periodically update the Character Districts** to evaluate how growth patterns are affecting their location, design, and effectiveness. Updates need to be done at least every five years, and more often when building cycles are most intense. The Planning staff would be responsible for implementation.

15. **Create an intergovernmental planning committee in Horry County**. This committee would bring together planners from the municipal governments and adjacent counties, Metropolitan Planning Organization, Waccamaw Regional Planning and Development Council, local school boards, and GSWSA to meet once a month concerning coordination of comprehensive plans. The Horry County Planning Department would implement this strategy.

16. **Carry out a fiscal impact analysis of land use patterns.** The impacts of development vary dramatically with the types of land use, density of development, and the arrangements of land use. Horry County should carry out an in-depth analysis of what form of development is most likely to "pay its own way" and which types do not. The study should provide practical guidelines for evaluating the impact of development proposals and making fiscally sound land use decisions on a long–range basis. It should also identify growth management strategies to build the tax digest wisely and avoid sudden increases in unfunded infrastructure costs. There should be workshops for Planning Commissioners, County Council, and County staff to discuss the effectiveness of alternative approaches. This strategy would be initiated by the Horry County Planning Commission.

17. **Update the Comprehensive Plan every 5 to 10 years.**

VIII. IMPLEMENTATION STRATEGIES

The following section is a compilation of the implementation strategies developed for each element of the comprehensive plan into a planning work program for use by the Horry County Planning Department and Planning Commission in the coming years. It constitutes a step-by-step program for implementing, monitoring, and updating the Comprehensive Plan. The strategies are presented in a work program designed with three phases of implementation; short term 1 to 2 years, intermediate 2 to 5 years, and Long Range 5 years or more.

Also presented are the benchmarks that have been identified for planning areas. Greater detail on the benchmarks is provided in each element chapter.

Work Program

On – Going Activities:

- Continue the development of the geographic information system and fund future efforts to establish the most current and accurate digital demographic database for Horry County.

- Strengthen linkages with the economic development community through the development of an economic council that would include local governments, educational institutions, chambers of commerce, and the business community.

- Coordinate the timing, location, and capacity of community facility expansion with desirable patterns of growth. Identify portions of the county with existing or proposed infrastructure and direct development to these preferred areas.

- Coordinate with local chambers of commerce to promote local initiatives that support the tourism industry in the County, encourage the expansion of the tourist market through the promotion of eco-tourism.

- Coordinate with local governments and private employers, efforts to link educational opportunities with economic development planning and job training.

- Expand County efforts to coordinate the designation of conservation areas through the establishment of a land trust or mitigation land bank

- Form partnerships with local non-profit organizations and conservation groups to secure grants and support environmental public education programs throughout the county with special emphasis within the County school system.

- Promote alternative modes of transportation to include the establishment of a mass transit system and greenway path network for Horry County.

Short Term Work Program Years 1999 – 2001

- Participate in technical work sessions by the Census Bureau and the development of base data for the 2000 Census which includes the development of an accurate address file and accurate base maps.

- Develop a methodology to track the daytime population in Horry County on a countywide basis through coordination with local governments, Chamber of Commerce, and State Department of Commerce – Division of Parks, Recreation, and Tourism.

- Perform Sub-Area Studies and complete more detailed future land use map for future growth areas. Develop special study area plans for the unincorporated areas to identify community needs.

- Carry out a fiscal impact analysis of land use patterns.

- Establish performance standards to guide the location, timing, and intensity of development and direct growth to established Character Districts.

- Establish Character Districts and an Agricultural Overlay District.

- Adopt an Open Space Conservation Subdivision Ordinance.

- Establish County-Wide Zoning.

- Establish an environmental review process to determine the effects of subdivisions and rezonings to ensure mitigation of development impacts on natural resources.

- Establish design and location guidelines for the development of new community facilities to preserve the natural environment and enhance the aesthetic appeal of county neighborhoods.

- Establish compatibility standards for manufactured housing.

- Complete a Horry County Cultural Resource Distribution list to serve mailing list to notify organizations of planning meetings and other county meetings.

- Develop a systematic approach to the Capital Improvements Program (CIP) planning process.

- Develop a Comprehensive Transportation Plan for Horry County that stresses a multi-modal and regional approach to mobility to include the development of a partnership with the City of Myrtle to address possible public transportation options for the County.

- Develop a Right-of-Way reservation map.

- Mandate a level of service D on all arterials during average days of the peak season.

- Establish guidelines for the installation of sidewalks.

- Establish the legal and regulatory framework for stormwater management by adopting a Stormwater Management Ordinance.

Intermediate Work Program Years 2001 – 2005

- Establish a technology jobs forum. The County as part of its economic development effort, should expand linkages to the economic community to include county educational institutions through the establishment of a technology jobs forum.

- Prepare a Travel Demand Management study for Horry County.

- Develop open public spaces plan for residents and visitors in the growing unincorporated areas of the County.

- Develop an economic database for the Horry County that provides an inventory of potential business development sites.

- Establish a scenic vista program that identifies scenic viewsheds throughout the county and promotes the co-management of these areas by local community and conservation groups.

- Develop a scenic landscaped and forested buffer standard along new arterial roads and residential areas in the Rural Service District.

- Develop Highway Corridor Overlay District standards for arterials in the Urban Service Area.

- Establish protection standards for water bodies and promote habitat preservation.

- Develop an official historic preservation policy for adoption by the County Council.

- Compile engineering criteria and performance standards in a design manual that may be used to guide the development of stormwater infrastructure**.**

- Develop a Joint City/County Park and Recreation Master Plan.

- As part of the County's Capital Improvements Program, develop a specific plan for the acquisition of open space and park land.

- Conduct a comprehensive study of the nature, location, and ownership status of the County's deteriorated housing stock.

Long Term Work Program Years 2005+

- Implement a countywide transportation access management and transportation demand management programs.

- Develop a public safety master plan to guide expansion of facilities and better coordinate existing services.

- Establish density and value standards that may be used to assign public safety professional or volunteer coverage to specific portions of the county.

- Coordinate the establishment of an urban forest management plan that promotes the County's reforestation goals.

- Develop a land development tracking system using GIS that enables the Planning Department to track the status of rezoning and development permits.

- Update the Character Districts to evaluate how growth patterns are affecting their location, design, and effectiveness.

Benchmarks for Sustainable Quality of Life

The benchmarks serve as quantitative indicators that when monitored on an annual basis can assist Horry County in determining its level of progress toward achieving the goals identified in the elements of the comprehensive plan. The benchmarks reflect the comments received from the public during five visioning workshops and are directly related to the goals established in the Comprehensive Plan.

The benchmarks are grouped into broad topic areas that encompass three dimensions of the community – economic, environmental, and social components. These benchmarks serve as measurements of local trends and issues that were identified by citizens as key indicators of quality of life in Horry County. Positive trends can be promoted and reinforced while any emerging negative trends can be identified and proper steps taken to address the issue. The implementation of the benchmarking process will require the establishment of committee to guide the process, set goals, and prepare an annual or bi-annual report on the status of the community.

Economic

The majority of economic benchmarks are derived from the Economic Element. These benchmarks are intended to assist Horry County assess and monitor the economic vitality of the community.

- Number of New Jobs Created in Finance, Insurance, Real Estate Sectors
  Data Source: South Carolina Security Commission

- Number of Large Conventions (250 registrants or more) Hosted on the Grand Strand
  Data Source: Local Chambers of Commerce

- Number of Annual Tourist Visits (including off-peak season)
  Data Source: Local Chambers of Commerce and the South Carolina Department of Commerce

- Number of New Businesses Recruited to the County
  Data Source: Horry County PARTNERS and the South Carolina Department of Commerce

- Number of Business Start-ups Related to Eco-Tourism
  Data Source: Horry County business licenses

- Vacancy rates for housing and commercial structures
  Data Source: Real estate industry surveys

Environmental

The environmental benchmarks are intended to monitor environmental quality issues in Horry County. They reflect key land use and development/preservation measures identified in the public workshops.

- The proportion of new development occurring in the Urban Service District, and particularly in the Townships, Villages, and Hamlets identified in the recommended Land Use Plan.
  Data Source: Horry County Planning Department

- Acres of open space preserved
  Data Source: Horry County Planning Department

- Acres of prime farmland preserved
  Data Source: Horry County Planning Department

- Acres of wetlands preserved
  Data Source: Horry County Planning Department and South Carolina Department Natural Resources

- Frequency of compliance with South Carolina Department of Health and Environmental Control (SCDHEC) water quality standards
  Data Source: SCDHEC

- Frequency of official shellfish bed closures by the SCDHEC, Office of Ocean and Coastal Resource Management.
  Data Source: SCDHEC

- Acres of land purchased for natural resource preservation by private, local, State, and Federal agencies.

Data Source: Horry County Tax Assessor and Planning Department

Social/Cultural

The benchmarks for social well being of the community address issues such as education levels, historical and cultural components and housing.

- Increase the number of annual high school graduates by a certain percent .
  Data Source: Horry County Board of Education and Private Schools

- The ratio between permanent residents to the tourist population
  Data Source: Horry County Planning Department, U.S. Census Bureau, Local Chambers of Commerce, and S.C. Department of Commerce

- Length of waiting list for Section 8 and public housing applicants
  Data Source: Local Housing Authorities

- Number of substandard housing units in Horry County
  Data Source: Horry County Planning Department

- The ratio of Single Family to Multi-Family Housing
  Data Source: Horry County – building permits and Tax Assessor

- Number of sites eligible for the National Register of Historic Places according to the South Carolina Department of Archives and History, State Historic Preservation Office added to the Register.
  Data Source: S.C. State Historic Preservation Office

- Number of property owners receiving technical assistance or development incentives for historic preservation projects.
  Data Source: Horry County Planning Department

The benchmarks presented represent the first step toward Horry County linking the community vision and concerns into the traditional planning process. The development of this linkage will help to clarify and prioritize issues. Once the committee is formed, goals and benchmarks defined and the baseline data for the indicators established this information can be used to identify specific initiatives, and funding options that will help the community achieve its desired goals.

APPENDIX

Table A-1: Resource Layer Suitability Weights	
Resource Layer	**Assigned Weight**
Soil Drainage Capacity (0-20)	
Low	0
Low – Medium	0
Low – High	5
Low – Medium – High	10
Medium – High	15
High	20
Septic Tank Soil Suitability (0-10)	
Slight	0
Moderate	5
Severe	10
Prime Farmland (0-10)	
Yes	10
No	0
Prime Forestland (0-10)	
Low	3
Moderate	6
High	10
Hydric Soils (0-25)	
30 % Hydric	10
100% Hydric	25
Floodplains (0-25)	
Areas of 500 Year Flood	5
Areas of 100 Year Flood	15
Coastal Areas of 100 Year Flood	25
Coastal Barrier Resources Act Areas	25

Table A-2: Horry County Board of Architectural Review Survey of Historic Sites		
Site	**Date**	**Tax Parcel ID**
Jenny Hill (Benjamin Lee House)	C. 1827	NA
James Ellis House	NA	131-03-04-001
Cleo Stevenson House	NA	103-00-03-008
Santee Cooper	NA	137-00-01-016
Labon House	C. 1890	137-00-02-030
Boyd Graham	C. 1859	150-00-02-087
Ray Faulk	C. 1860	178-00-01-048
C.B. Cooper Co., Store	C. 1905	179-00-01-044
Sidney Thompson House	C. 1880	169-00-03-052
Old Buck House	C. 1870	183-00-04-071
Glenn Woodward	C. 1900	181-09-05-048
Upper Mill	C. 1828	170-00-04-012
Hebron Church and Buck Cemetery	C. 1848	170-00-04-004
Plantation Square	C. 1888	183-00-03-040
Beverly Homestead	C. 1885	159-00-02-009
Old Waccamaw Pottery Bridge	NA	135-00-04-002
Gaskin Homestead	NA	041-00-01-021
Johnson House	C. 1910	043-00-01-017
A. Bell House	C. 1918	056-00-01-086
Quincy Graham Homestead	C. 1890	028-00-01-066
Floyd Worley Homestead	C. 1890	036-00-01-024
Hezeheah Hinson Mercantile Store	NA	018-00-01-113
Hammonds Homestead	NA	009-00-01-002
Oak Grove Elementary School	C. 1933	010-00-01-016
J.P. Darham House	C. 1890	028-00-01-053
Price Homestead	NA	125-00-02-056
Little River Bridge	NA	NA
Beulah School	NA	086-00-01-011
Green Sea High School	NA	028-00-01-051
Cox Homestead	NA	040-00-01-006
Ebenezer Church	NA	102-00-02-027
Springmaid Villa	NA	186-08-04-001
Bucksville Plantation	NA	183-00-04-071
Allsbrook House	NA	058-00-01-123
Intercoastal Waterway Swing Bridge	C. 1934	NA
Galivants Ferry Baptist Church	C. 1885	041-00-01-015
McDowell Place	C. 1880	190-00-03-059
McDowell Old House	C. 1830	194-00-02-012
Holliday Brothers Farms	C. 1920	041-00-01-012
Irma Causey House	NA	179-00-05-020
J.C. Bridger	C.1850	131-03-01-013

Table A-2: Horry County Board of Architectural Review Survey of Historic Sites (continued)		
Site	**Date**	**Tax Parcel ID**
Louise Stone House	C. 1903	118-15-07-005
Walter Bessant	C. 1905	118-15-07-008
Mary Juel House	C. 1848	131-03-12-008
J.P. and Bertha Dunn	NA	150-00-02-049
Rubin Sarvis/Ike and Jane Ammons Home	C. 1880	179-00-01-024
Socastee Methodist Episcopal Church South	C. 1894	179-00-05-012
Robert Shelly Home	C. 1905	179-00-03-040
Ralph Woodward Home	C. 1905	160-00-03-070
Thomas Beaty Home	C. 1910	NA
S.C. Morris House	NA	169-00-03-016
Bucks Barn	NA	183-00-04-071
Parker Farm	C. 1905	158-00-01-045
Pawley Swamp Missionary Baptist Church	NA	158-00-01-042
Eliza Jane Moore Smart Home	C. 1887	158-00-01-115
W.B. Hucks Home	C. 1887	160-00-04-025
James Alva Smith Home	C. 1900	136-00-02-022
George and Edna May Skipper	C. 1910	135-00-38-146
Old Pee Dee School	C. 1920	134-00-01-35
James Alvie Smith House	C. 1890	135-00-03-055
Johnston House	C. 1910	134-00-01-131
Ben F. Jordan House	C. 1880	120-00-02-005
Willie Tindall House	C. 1910	136-12-06-069
Oak Grove School/ Everett Hyman	C. 1910	120-00-03-023
Holliday/ Barfield House	NA	066-00-01-014
J.C. Hyman	C. 1915	109-00-04-029
Charlie Doyle Station/ Leverne and Shelvy Jean Carroll	NA	081-44-47-002
Holliday House/ Robert Peavy House	C. 1910	053-00-01-004
Mill Swamp School	C. 1928	054-00-01-110
Ruth Marie Small Ham House	C. 1927	034-00-01-015
Joe Dixon Cox Home	C. 1890	092-00-05-008
Myrtle Moore Home	C. 1914	110-00-01-009
Bakers Chapel Missionary Baptist Church	C. 1911	083-00-01-040
Yvonne Strickland Lewis	NA	045-00-01-014
G.L. Strickland House	C. 1893	045-00-01-009
Stricland/ Perritt Home	C. 1870	NA
E.C. Strickland Home	C. 1928	036-00-01-032
Jim Floyd House	NA	027-00-01-067
U.T. Floyd House	NA	036-00-01-016
Strickland Home	C. 1890	036-00-01-029
Hinson Store	NA	NA
McDaniel House	C. 1925	035-00-01-009
Billie Smith Home	C. 1920	021-00-01-096
Floyd Home	C. 1890	027-00-01-124
Floyd/ Battle House	C. 1910	014-00-01-087

Table A-2: Horry County Board of Architectural Review Survey of Historic Sites (continued)		
Site	**Date**	**Tax Parcel ID**
Floyd Methodist Church	C. 1930	014-00-01-022
Old Lize Hooks/ Cooper House	NA	014-00-01-128
Hammond Home	C. 1910	005-00-01-002
Ollie Hammond Home	C. 1910	006-00-01-004
Bailey Homestead	C. 1915	005-00-01-037
Hammonds Homestead	C. 1868	009-00-01-002
Powell/ Floyd House	C. 1898	009-00-01-055
Oak Grove Elementary School	NA	NA
McGaugan/ Lovett House	C. 1890	028-00-01-062
Willie H. Reaves House	C. 1898	126-00-01-002
Parker House/ Collins Home	NA	126-00-01-011
Old Holliday House	C. 1910	NA
Holliday House	C. 1890	NA
McCorsley House/ Abbey Green Restaurant	C. 1910	NA
Lewis Home	C. 1900	113-00-02-035
Boyd Home	C. 1890	099-00-04-028
Hardee Homestead	C. 1890	097-00-03-085
Don Holmes Home	NA	NA
Stevens Home	NA	098-00-01-005
Gore House	C. 1890	085-00-01-065
Sam Rabon House	C. 1923	097-00-03-029
Hughes House	C. 1914	086-00-03-031
Waites Island	C. 1888	132-00-01-001
Green Sea High School	C. 1928	028-00-01-051
Aubrey/ Steve Jackson House	C. 1928	029-00-01-112
Prince House	C. 1911	049-00-01-003
Little River United Methodist Church	C. 1894	118-15-07-013
Gore Homstead	C. 1875	061-00-01-001
Cox House	C. 1880	089-00-03-026
Hardee House	C. 1908	102-00-01-054
Gore/ Barnette House	C. 1919	102-00-01-053
Conway Railraod Station	NA	102-00-01-053
Green Sea-Floyds Elementary School	NA	NA
Kings Highway	C. 1730	NA
Butler, Calhoun House Butler, Hardee House	C. 1880	NA
Butler Cemetery	C.1850	NA
Bryan Cemetery	NA	NA
Green Sea Baptist Church Cemetery	C. 1870	NA
Green Sea Elementary School Teacherage	C. 1940	NA
Floyds School	C. 1935	NA
Chester Floyd House	C. 1900	NA
Pee Dee Academy	C. 1910	NA
Floyd Home	C. 1920	NA

Table A-2: Horry County Board of Architectural Review Survey of Historic Sites (continued)		
Site	**Date**	**Tax Parcel ID**
Salem A.M.E. Church	NA	NA
Stalvey House/ Baskerville Hall	C. 1900	NA
Klondike School	C. 1935	NA
Bucksport Landing	NA	NA
Long – Brown Tenant House	C. 1920	NA
Johnson House	C. 1935	NA
Dew Cemetery	C. 1900	NA
Beverly House	C. 1915	NA
Brownway Elementary School (Martin's Grocery)	C. 1910	NA

Table A-3: **Market Attractiveness Factors and Weights for Growth Priority Areas Map**	
Roads & Mass Transit Routes (0-30)	Assigned Weight
in 1/2-mile buffer of existing road and in 1/2-mile of CRPT Route	30
in 1/2-mile buffer of existing road and out of 1/2-mile of CRPT Route	25
in 1/2-mile of proposed road and in 1/2-mile of CRPT Route	20
in 1/2-mile of proposed road and out of 1/2-mile of CRPT Route	15
in 1/2-mile of CRPT Route only	10
Sewer (0-25)	Assigned Weight
in 500-foot buffer of existing sewer	25
in 500-foot buffer of proposed sewer	20
in Urban Service Area only	15
Water (0-10)	Assigned Weight
in 500-foot buffer of existing water	10
in 500-foot buffer of proposed water	5
in Urban Service Area only	5
Schools (0-15)	Assigned Weight
in 1/2-mile buffer of existing school	15
in 2-mile buffer of existing school	10
in 1/2-mile buffer of future school	10
in 2-mile buffer of proposed school	5
Fire Protection (0-10)	Assigned Weight
in 2.25-mile buffer of existing station	10
in 2.25-mile of proposed station	5
Parks (0-10)	Assigned Weight
in 1/2-mile buffer of existing park	10
in 2-mile buffer of existing park	5
in 1/2-mile buffer of proposed park	10
in 2-mile buffer of proposed park	5