City of Hardeeville
Comprehensive Plan
2009 Update

September 4, 2009

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Chapter 1
Issues & Opportunities

Introduction
The Hardeeville Comprehensive Plan presents a conceptual framework for the future growth and development of the City. It is a planning document that describes current conditions, defines future goals, and outlines a series of strategies for accomplishing these goals. This Plan is intended to serve as a decision-making tool for guiding development decisions over the next ten years. It is also designed to be flexible, with annual evaluations and reassessments of its goals and strategies, and reviews conducted every five years. Every ten years a new, updated Plan must be developed and adopted.

The Process
The City of Hardeeville contracted with BP Barber to coordinate the preparation of certain elements of the Comprehensive Plan under the guidance of the City's Planning Commission. Other interested citizens, members of Council, and staff joined in the planning process through a series of workshops in which current conditions were presented and needs identified and discussed for each element of the plan. This document is based on the results of those meetings.

Each section includes a specific Plan "element" as required by the South Carolina Local Government Comprehensive Planning Enabling Act of 1994, beginning with a description of existing conditions. Each Chapter then identifies needed improvements, "needs." A "policy" is a long-term end towards which the City is ultimately directed. An "implementation" is a specific intermediate action or program that marks progress towards the goal.

Conformance to State Law
This document complies with the South Carolina Local Government Comprehensive Planning Enabling Act of 1994. The Act consolidates existing planning legislation for local governments into one law and defines a set of requirements that must be met for the planning activities of a local government to be legal. In particular, the Act describes required comprehensive plan elements, defines the implementation roles of the city council, planning commission, and zoning board of adjustment, and outlines the public review process and procedures for adopting comprehensive plans.

Although the Comprehensive Plan was developed in response to the State's mandate, it is also premised on the City of Hardeeville's unique characteristics, historical trends, and current conditions. The goals and strategies presented here are intended to reflect the City's desire to develop a reputation as a growing, vibrant town with a desirable quality of life.
Per the South Carolina Local Government Comprehensive Planning Enabling Act of 1994, the City of Hardeeville passed its Comprehensive Plan in April of 1999. Then in 2005, the city adopted a five-year reviewed and revised plan. This document serves as the ten-year update and meets all requirements added by 2007 state legislation.

Profile of the City of Hardeeville

Location
The City of Hardeeville is located at the southern end of Jasper County, within the Lowcountry Region of South Carolina (see Figure 1-1). The City is fifteen miles south of the Town of Ridgeland, which is the county seat, fifteen miles north of Savannah, Georgia, and 22 miles west of Hilton Head Island. Hardeeville is bisected by Interstate-95, the principal north-south corridor for the eastern coast of the United States, and includes two interchanges along this interstate, Exit 5 and Exit 8. Several major roadways intersect with the City, including U.S. Highways 17, 278, and 321. The CSX Railroad, which parallels US. Hwy. 17 also passes through Hardeeville.

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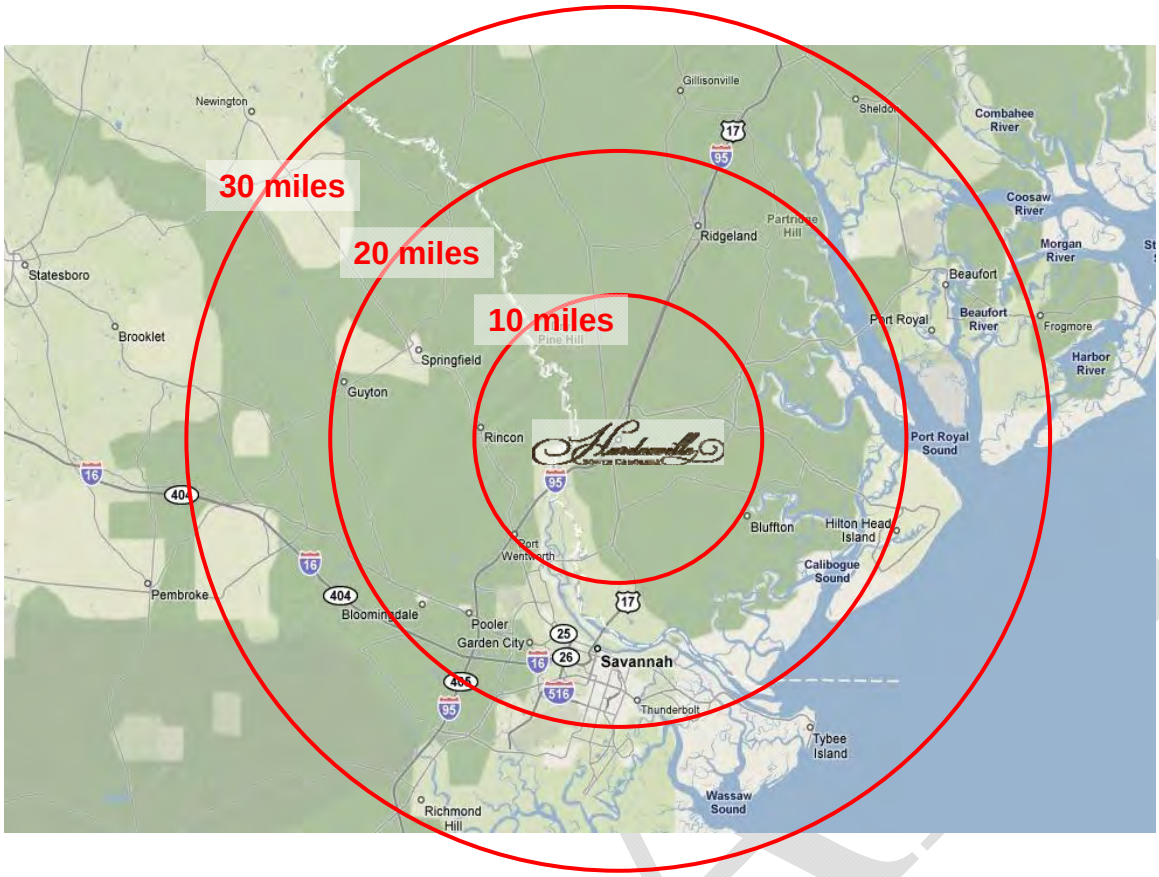

Figure 1.1

Planning Areas

Historically the City of Hardeeville has developed as neighborhoods. With recent annexations Hardeeville has grown from approximately five (5) square miles to about fifty (50) square miles. In Downtown Hardeeville, the neighborhoods, referred to throughout the plan as Planning Areas, include the following (see Figure 1-2):

- Mcteer Street area
- Palmetto subdivision
- Epps Avenue area
- Hutson Town
- Keller Place
- Walsh Drive area
- Pine Arbor Road
- Jenkins Avenue
- Carmoore Acres
- Boyd Street area
- Paynesville Road

New areas that have been annexed over the past few years have developed along the Highway 278 corridor include Tradition, Hilton Head Lakes at Hardeeville, Hampton Pointe, Jasper Commons and Courtney Bend. More detail on these communities will be addressed in the Housing and Land Use chapters.

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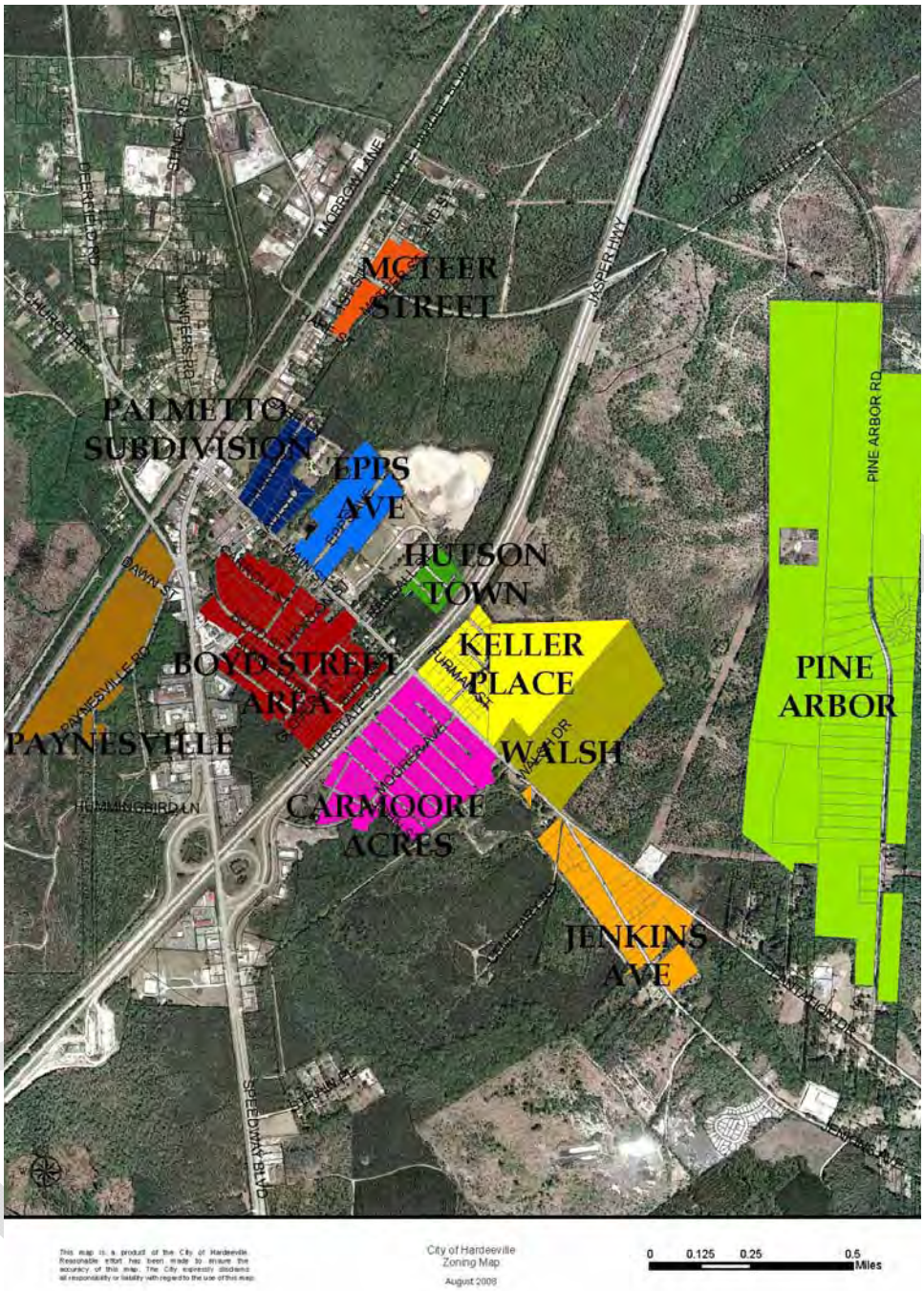


Figure 1-2: Residential Neighborhoods

Analysis of the City of Hardeeville Quality of Life Survey

Introduction

In October 2008, the City of Hardeeville launched a community-wide Quality of Life survey aimed at soliciting feedback on existing conditions in the City and to get initial hints as to what areas of improvement the City can dedicate resources and attention toward.

A nine question survey was released online through the City's website in addition to traditional, form-fill surveys during the City's annual Catfish Festival. During the course of several weeks, the City was able to retain approximately 70 surveys from the community, with the overwhelming majority of participants either living in Hardeeville and/or working in the City. Listed below are the results of that survey.

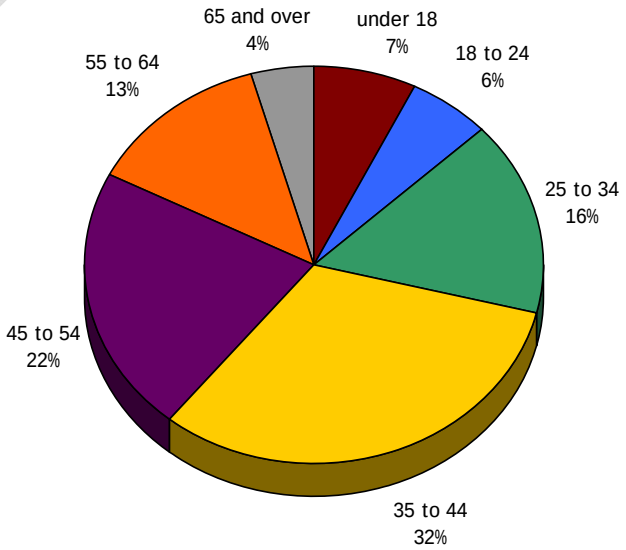
Questions 1 through 4: Demographics

The City was fortunate in retaining the feedback of many long-time citizens, which often can be difficult to obtain in high-growth areas such as the South Carolina Lowcountry. Nearly one-half of all participants have lived in Hardeeville or southern Jasper County for more than 20 years, with nearly three-quarters of participants having lived in the area for at least five years. This statistical abstract is important to highlight when analyzing these results – the answers that are provided are the opinions shared by those who have called the area "home" for many years.

The survey was able to solicit responses from both white and black residents in addition to several Latino residents which represent Hardeeville's fastest growing population group (Latinos are not considered to be a racial group, rather an ethnic group). With regards to age, the City was also fortunate in receiving surveys from a wide range of citizens, providing a very even and balanced view of the City from several generations. Nearly 30% of those surveyed were under the age of 35. A slight majority of those surveyed were between the ages of 35 and 55, while those 55 and older constituted 17% of the sample. 60% of participants were female.

Retired persons made up approximately one-quarter of all respondents. Older participants and males tended to utilize paper forms, where younger participants and females tended to utilize the online survey. 39% of the surveys were completed online.

3a. How old are you?



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Question 5: Importance of Activities

The survey asked participants to rate the importance of certain activities that the City of Hardeeville could endeavor upon in upcoming years. Citizens selected activities on a scale of 1 to 5, with one being ranked as "not important" to five being listed as "very important". The responses indicated that there was a large degree of widespread interest in almost all items listed. However, the four items that received a score of over 4.5 were the following items:

- Improving the quality of K-12 education
- Creating more local jobs
- Helping small businesses grow
- Improving Downtown Hardeeville

The above items should be considered "very important" activities. Elements in the Comprehensive Plan that require a sound plan to address these issues include Economic Development, Community Facilities, Cultural Resources, Land Use, and Priority Investments.

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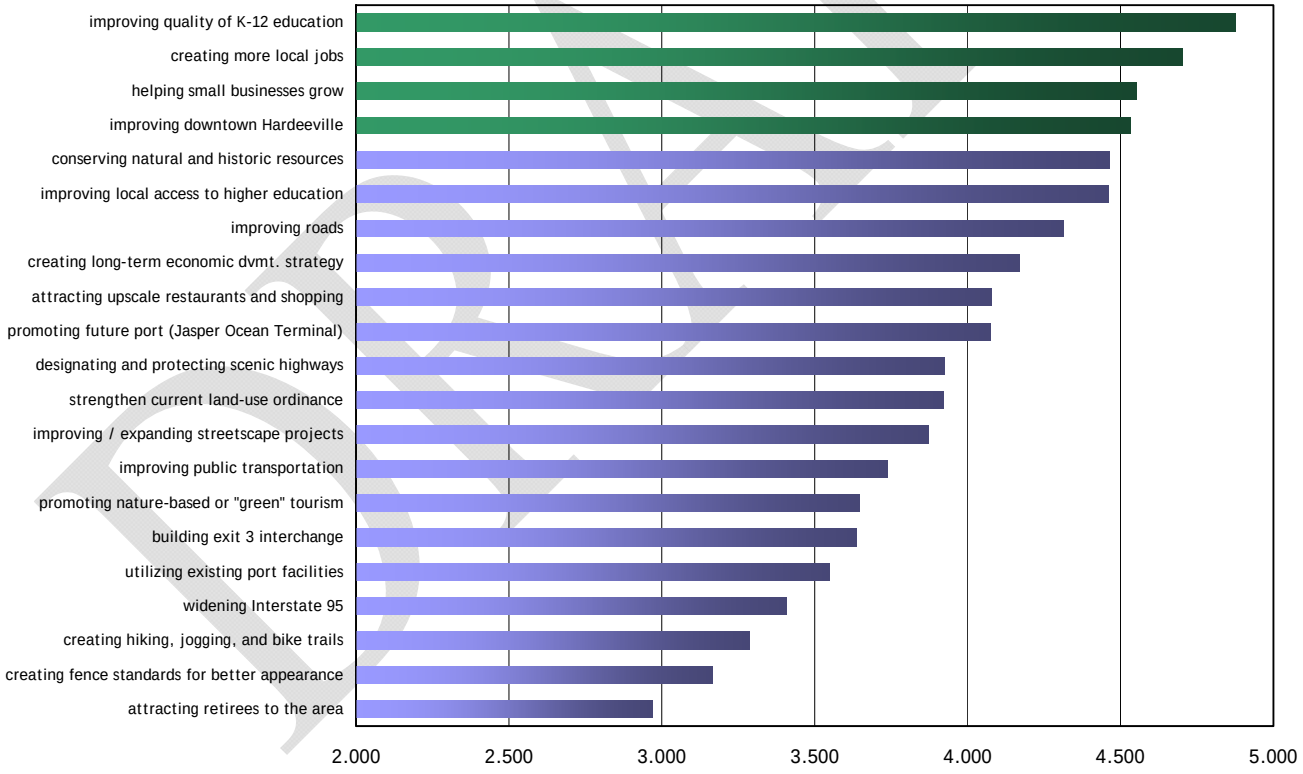
5. How would you rate the importance of the following?

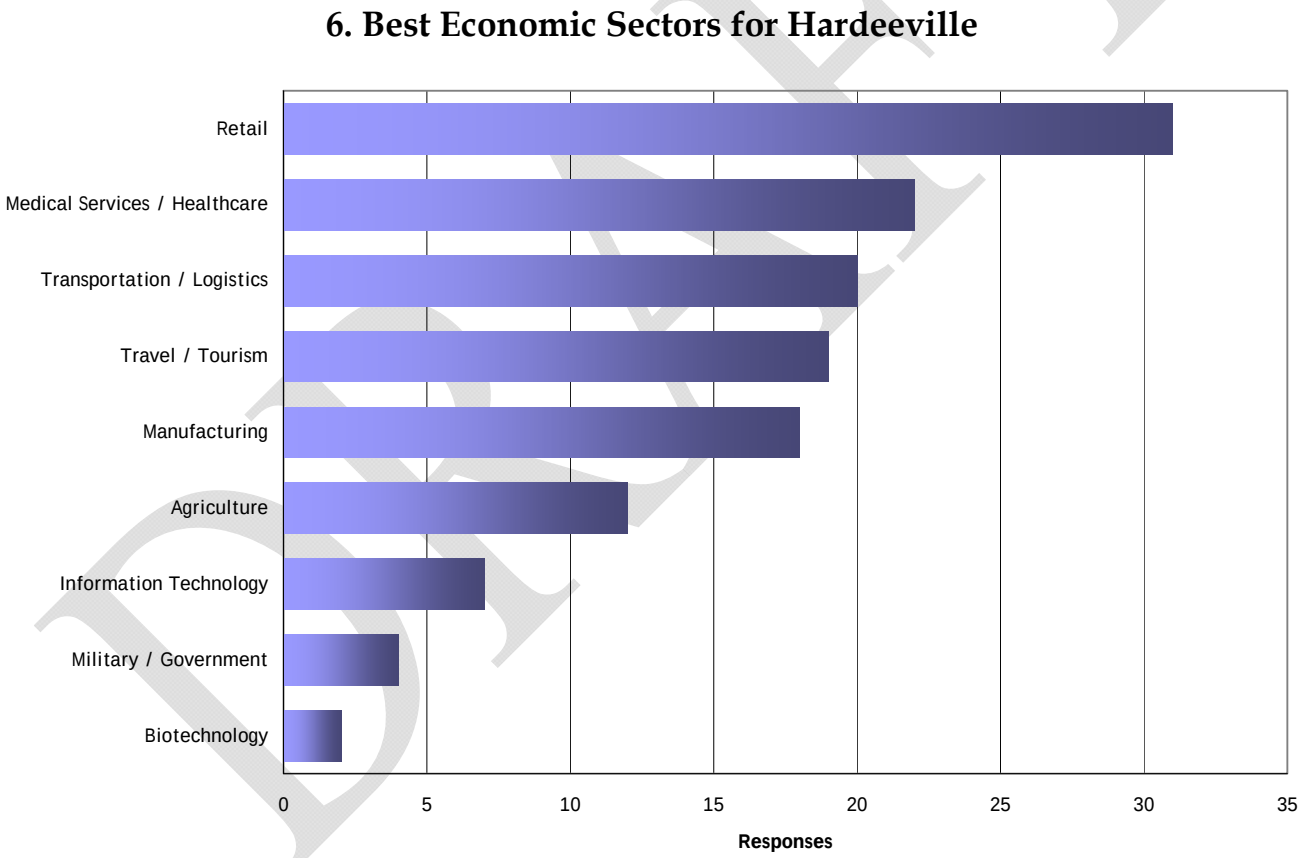


The only activity that received less than score of 3 (somewhat important) was *Attracting retirees to the area*. This score indicates that marketing activities to retirees may not be as desirable when compared to marketing towards economic development activities.

Question 6: Economic Sectors for the Future

The next major issue that the survey focused on was to ask participants their thoughts on what types of businesses are a "best fit" for Hardeeville. The survey asked citizens to identify two sectors of the economy that they felt would be beneficial for the City's future. A heavy plurality of responses indicated that retail is that particular sector, with over 30 responses indicating that choice. Medical Services (Healthcare) and Transportation were next on the list with 20 or more responses, with Travel/Tourism and Manufacturing having 15 or more responses.

The responses so far reflect much of the economic development activities that have already occurred in the City of Hardeeville. The lowest scoring item was "Biotechnology". The Economic Development section of the comprehensive plan will address most of this issue, with portions also to be discussed in the Community Facilities, Transportation, and Land Use elements.



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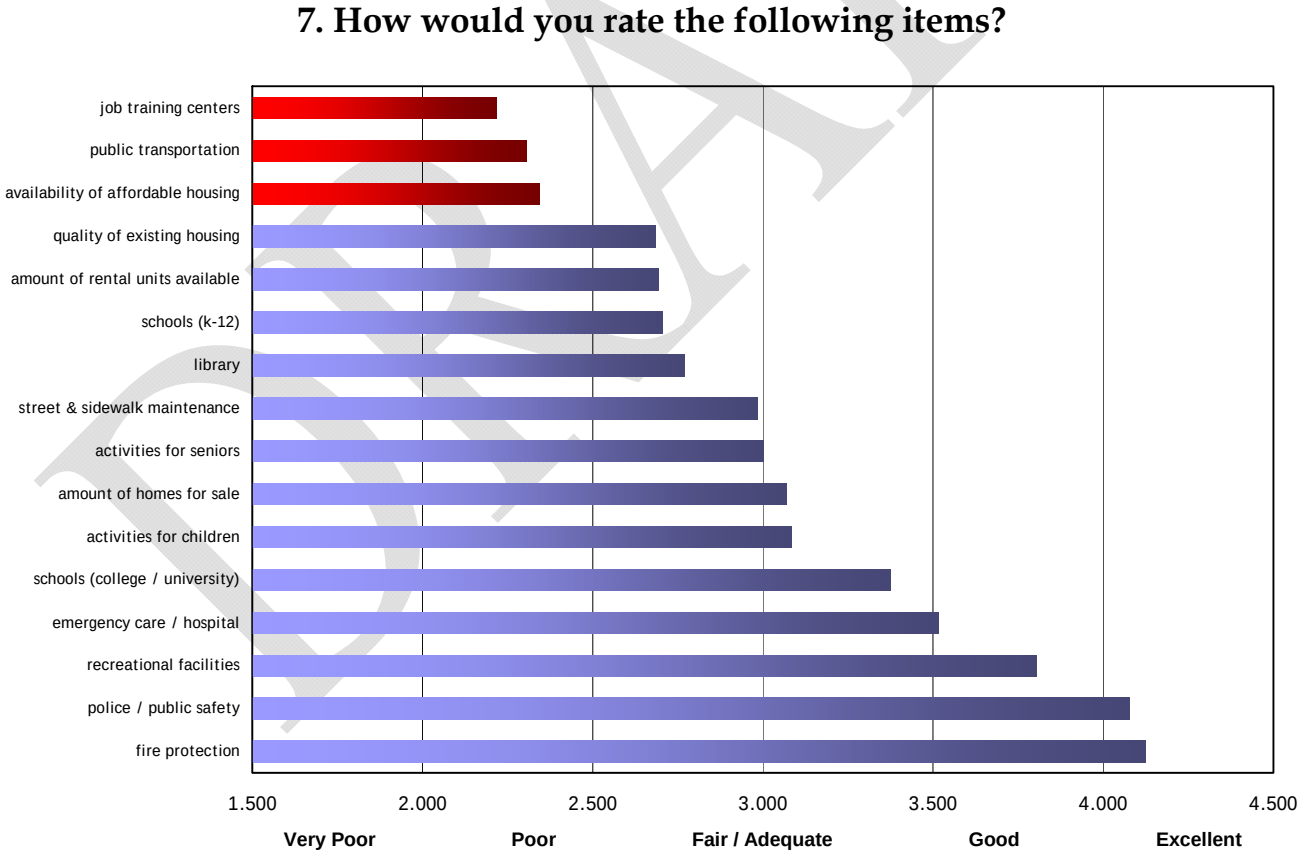
Question 7: Rating Existing Community Assets

The last major issue that the survey identified was an "inventory" style question, in which citizens were asked to rate the condition of existing community facilities or quality of life indicators. As with Question 5, participants were to identify on a scale of 1 to 5 how they felt that each asset was performing or being adequately recognized or addressed by authorities.

The results were not as evenly distributed, indicating there are certain community assets that were highly rated and some that were in need of further evaluation. The top performing assets were the following:

- Fire protection
- Police / public safety
- Recreational facilities
- Emergency care / hospital

The four items listed above all had average scores of 3.5 or higher, indicating a "good" rating or higher on average. The three top items (*fire protection*, *police*, and *recreation*) are services that are largely provided by the City of Hardeeville itself, indicating there is a measure of satisfaction with certain elements of the city's governance and administration.



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The following items were the lowest performing indicators and thus ought to be addressed in the City's comprehensive plan in greater detail. These items received a score of 2.5 or less, indicating the average opinion ranged from "poor" to "very poor".

- Job training centers
- Public transportation
- Availability of affordable housing

Certain assets received a wide range of responses that indicated an average score. Among the assets with the highest degree of widespread opinion was *K-12 schools*. Several other assets received higher scores in the "no opinion / unsure" response, especially in the assets of *higher education*, *activities for seniors*, and *amount of rental units available*.

The City should evaluate all assets regardless of score and develop action strategies to improve upon identified assets that ranked lower than others. Elements in the comprehensive plan that should address those assets include Economic Development, Community Facilities, Transportation, Housing, and Land Use.

Questions 8 & 9: Impressions

The last two questions were open-ended, with participants asked the following questions:

- What should one's first impressions of Hardeeville be?
- What is the best reason to live or work in Hardeeville?

With regards to the first question, a slight majority of participants listed several phrases or variations of "home town feeling" as their answer. This indicates that citizens and visitors should think of Hardeeville as a welcoming and charming community that feels like "home", with many already having that impression. Several responses indicated they wanted people's impressions to be a great place to raise a family and have a home or business. Others gave responses such as "good people", "location" and "future". A small sampling of answers were more sobering, with some listing "dirty" or "needs cleaning up" as one's first impressions.

The second question shared many of the responses that were given in the first question, however the majority of answers this time indicated that "location" was the best reason to live in Hardeeville, followed by "home town feel", "small town", "people", and "climate". A few citizens indicated disappointment in the community, indicating that that there wasn't a good reason to live here and identifying issues such as "crime" and "poor schools" as drawbacks.

The City has taken note of those who were unimpressed or unmoved by the current opinions of the City and these concerns have been addressed in this Comprehensive Plan and will continue to be considered in day-to-day operations. The City should also embrace the idea of "home town feel" and incorporate strategies to preserve that aura for future generations to come. All of the elements in the Comprehensive Plan address these impressions.

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Conclusions

The Quality of Life Survey and the corresponding Charrette meetings have indicated that Hardeeville has many strengths but needs to improve on economic development initiatives and certain community facilities in order to maintain and improve the "home town feel". Listed below are the major findings from the survey:

- Question 5 identified *creating more local jobs* and *helping small businesses grow* as items of great importance to participants, who also identified *job training centers* as an asset that is severely restricted and should be addressed to a greater extent. These centers should focus on the economic sectors identified in Question 6, especially in medical services and transportation / logistics, which require greater skills for professional development.

- Although not considered one of the lowest scores in the assets section, K-12 schools did score on the lower end of the spectrum. Appropriately, Improving K-12 education received the highest amount of importance among survey participants, indicating that regardless of perception, educational improvement is desirable. Additional attention should be given to improve the library and to better promote educational opportunities with local institutions of higher education.

- Though recreational activities were listed high in the assets sections, there were a high number of participants who were unsure of the degree of activities for children or for seniors. This may indicate that recreational and cultural activities should be better supported and advertised by the City and by the community as a whole.

- Supporting downtown redevelopment should revolve around business assistance programs and promoting small business in the area. Given the negative impressions of the current appearance of Hardeeville by some participants, an emphasis should be placed on promoting aesthetic development that is mindful of business growth and opportunity.

Long-range planning efforts should weigh heavily on the above points and should be reflective of the community's desires and existing resources while maintaining realistic and pragmatic aspirations for future growth and economic development.

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Goals and Findings

- Create a vibrant, friendly, and welcoming City Center through revitalization of Downtown Hardeeville.
    - The concept of "home"; a place where residents and visitors feel at home; a place to visit and a place to stay; location being the strongest feature
- Provide higher paying jobs and opportunities in Hardeeville immediately through expansion of existing Industrial Park, support for development of Exit 3 and corresponding roads, and support for future Jasper Ocean Terminal.
    - Creating more local jobs and helping small businesses grow; new job training centers should focus on the specific economic sectors, especially in medical services and transportation / logistics, which require greater skills for professional development.
    - Supporting downtown redevelopment should revolve around business assistance programs and promoting small business in the area.
- Continued improvement of K-12 school and expansion of educational opportunities and collaboration with higher education institutions in the area (USC-B and TCL).
    - Partnering with Jasper County School District, developers, educational institutions and citizens is key to improving the quality of workforce skills and employment opportunities for Hardeeville
- The City and the citizens should work together to promote Hardeeville's history, culture, and natural resources in a way that is not only educational, but also promotional in nature.

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Chapter 2
Population

Introduction

There are many factors that influence trends in population. An increase in population is usually an indicator that a city is prospering and there is interest in moving to or staying in the community. Population increases either result from births or migration. A decline in population, on the other hand, might suggest that current residents are leaving. The significance of anticipating population growth or decline is the ability to provide services and infrastructure necessary to accommodate residents and visitors. This section focuses on the anticipated growth and demographics of Hardeeville and highlights several key observations.

Historical Population Levels & Regional Trends

The most current Census data for the City of Hardeeville is the 2000 Census. Because the census is taken every ten years, actual 2008-2009 population data does not currently exist for Hardeeville through the census. There are estimates available based on projections and analysis of past trends. There are also limitations to Census estimates that would explain the low estimates.

Table 2.1 – Historic Population

Historical Population Levels	1970	1980	1990	2000	% Change 1970-80	% Change 1980-90	% Change 1990-2000	% Change 1970-2000
Hardeeville	853	1,250	1,583	1,793	47%	27%	13%	110%
Jasper County	11,885	14,504	15,487	20,678	22%	7%	34%	74%
Beaufort County	51,136	65,364	86,425	120,937	28%	32%	40%	137%

On a regional level, the Lowcountry has seen a tremendous amount of growth over the last two decades. According to the decennial census, Beaufort County, as a whole, experienced approximately 39% growth from 1990-2000. From 1990 to 2000, Jasper County experienced approximately 34% increase in growth. In addition to the increased population, the amount of available land in Southern Beaufort County has continued to decrease over the last few years and while not the only influencing factor, interest in Jasper County and Hardeeville have increased as a result. Situated in the same region, Hardeeville has more than 50 sq mile of underdeveloped land available to accommodate future growth with access to a municipal level of services and infrastructure. The population increase that Hardeeville will be experiencing over the next few years is more likely to be in keeping with Beaufort County's recent growth.

Since 2005, Hardeeville's land size has increased from about five (5) square miles to approximately fifty (50) square miles. The majority of the newly annexed properties lie within Planned Development Districts. It should also be noted that Hardeeville did not have a planning department prior to 2005 and all planning services were primarily run out of the administrative office at that time.

There are currently more than 52,000 residential units planned over the next 20-30 years based on Hardeeville's Planned Development District documents. This figure is not to say that every unit planned for will be built, but the estimate certainly provides a reasonable idea of Hardeeville's potential and the direction that Hardeeville is headed. Over the last year or so, Hardeeville has added approximately 400 residents based on a

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recent reconnaissance survey of known projects. As of January 2009, there were 75 families in the Hampton Pointe residential community, four (4) in Tradition, 26 in Deerfield Village, and 66 families in the Courtney Bend apartment community. There has been a tremendous amount of interest in the area and Hardeeville is on the radar of many potential residents.

Planned Development Districts

The majority of newly annexed properties lie within a planned development district. More than 52,000 residential units have been planned for over the next 20-30 years. This section highlights the size, timeline, and major components of these developments.

Anderson Tract

- **Term:** 20 Years
- **Acreage:** 2,739
- **Density:** Presumed 3,200, Max through conversions 3,888 Residential Units of which 600 can be Multi-Family (may be increased if fair market value of dwellings is reached); 71 Acres of Commercial/Retail, Minimum 20 Acres of Commercial: Presumed 3,200, Max through conversions 3,888 Residential Units of which 600 can be Multi-Family (may be increased if fair market value of dwellings is reached); 71 Acres of Commercial/Retail, Minimum 20 Acres of Commercial

Argent 2 Tract

- **Term:** 10 Years
- **Acreage:** 1,020 acres including 213 acres of freshwater wetlands
- **Density:** 2,084 Residential Units on Parcels A and A-2; densities for Parcel B shall be consistent with the Mixed Use district of the MZDO; for Parcels C through F shall be as defined under the PDD and Zoning Regulations for Commercial zoning, provided that up to 25% of the total acreage contained in Parcels C through F may be developed as defined in Mixed Use zoning under the MZDO

East Argent

- **Term:** 30 Years
- **Acreage:** 7,500
- **Density:** 12,380 Units – 1320 Acres commercial (this amount can be increased or decreased as deemed necessary by JPR) with a village center, commercial, retail and office. Anticipate 2.2 persons per unit. Most will be single family, with similar limitation on multifamily units as with Argent West. There is an option to increase density if JPR can demonstrate to Council economic viability, public infrastructure (police, fire, parks, etc.) and traffic capacity.

Tradition (Argent West)

- **Term:** 20 Years
- **Acreage:** 5,100 gross acres
- **Density:** 9,500 Units – 175 Acres commercial (this amount can be increased or decreased as deemed necessary by Core) with a village center, commercial, retail and office. Anticipate 2.2 persons per unit. Most will be single family, with approximately 1,000 multifamily units.

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Hardeeville Tract

- **Term:** 30 Years
- **Acreage:** 2,632
- **Density:** 9,874 Units (4369 acres); 1,026 acres of Light Industrial, 517 acres of Highway Commercial, 334 acres of Neighborhood Commercial (Mixed Use).

Morgan Tract

- **Term:** 20 Years
- **Acreage:** 2,632
- **Density:** Presumed 6,700, Max through conversions 7,685 Residential Units of which 1000 can be Multi-Family (may be increased if fair market value of dwellings is reached); 406 Acres of Commercial/Retail, Minimum 150 Acres of Commercial;

Okatie Crossings

- **Term:** 5 Years
- **Acreage:** 282 gross acres, 278 acres upland and 4 acres wetland
- **Density:** Mixed Use and Commercial/Retail Uses as per development standards of PDD; Residential - maximum through conversions 1,000 Units (Multifamily)

Sherwood Tract

- **Term:** 20 Years
- **Acreage:** 1,536
- **Density:** 3,688 Residential Units of which 809 can be Multi-Family, 1,797 Mixed use residential, and 1,082 High Density Single Family Detached; 1028 Acres of Commercial/Retail, 1,165,300 square feet of Commercial Development, 589,000 square feet of Office/Institutional, 2,207,500 square feet of Mall/Retail, 2,900,000 square feet of Big Box Commercial, 330,000 square feet of Neighborhood Development

School, Working, and Retirement Age Groups

The median age of Hardeeville has slightly decreased from 1990 to 2000. Further analysis reveals that although the median age slightly decreased, the number of younger residents has also decreased. A decrease in the younger population may indicate a trend in younger residents leaving the city to seek more or different opportunities that are either limited or unavailable in Hardeeville.

Table 2.2 – Employed Persons by Occupation

Employed Person By Occupation (Industry Group) 2000

Industry Group	Total	% Total
Construction	215	26%
Manufacturing	137	17%
Retail Trade	93	11%
Administrative Support/Waste Management	79	10%
Accomodations and Food Servies	62	8%

Regarding employment opportunities, the top 5 industries in terms of number of employees by occupation were Construction, Manufacturing, Retail Trade, Administrative Support/Waste management, and Accommodations and Food Services respectively. Based on the 2000 Census, approximately 25% of the workers residing in

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Hardeeville work in the construction industry. Construction is a segment that easily fluctuates with the market and can be weak in tough economic times. In addition to the fluctuation of this industry it is often seasonal in nature, spiking in the Spring and Summer and slowing during the Winter months. The second highest employment sector is manufacturing. With access to rail, I-95, the existing Garden City Terminal, and future Jasper Ocean Terminal the manufacturing sector has great potential for expansion.

Employment location is integral to understanding the social make up of Hardeeville. According to census figures, approximately 2/3 of our residents work outside of Jasper County. This trend, not unique to Hardeeville, has been recognized as a regional trend. Many of the residents in Hardeeville seek employment outside of Jasper County into areas like Hilton Head, Beaufort, Bluffton, and Savannah. On the other side there are also employees within Hardeeville that come to Hardeeville to work, but those numbers are difficult to quantify. A recent Economic Development Survey done in conjunction with Business License, Economic Development and the Planning Department will help provide an insight into the climate of Hardeeville's workforce. When residents commute there are social implications related to this. Residents living in Hardeeville and working outside of Hardeeville have longer commute times which have social implications surrounding them. Besides the obvious burden of increase in travel expenses and longer commutes it also mean less time with family and loved ones, and this could adversely affect interpersonal relationships and even school performance in youth. Healthy families make healthy communities and healthy communities reinforce healthy relationships.

Place	2000
In County	271 (33%)
Out of County, In State	387 (48%)
Out of County, Out of State	152 (19%)
TOTAL	810 (100%)

Table 2.2 – Place of Work

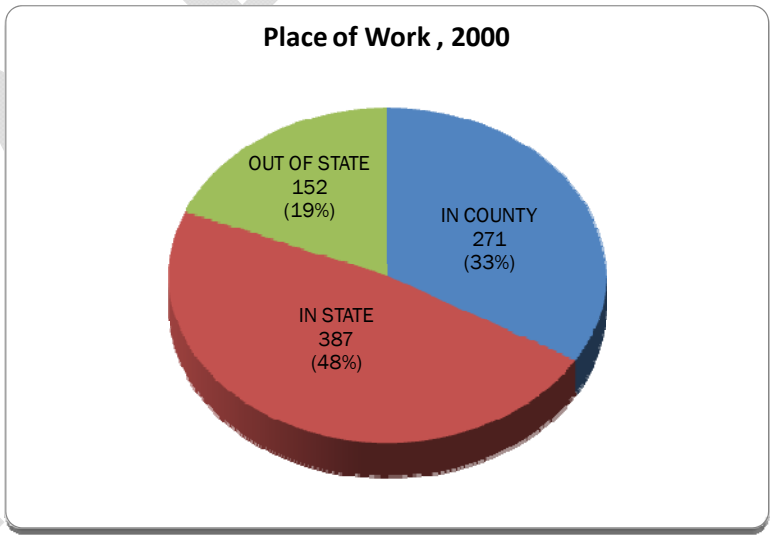

Figure 2.1 – Place of Work

Educational Attainment

The educational attainment table on the following page provides seven levels of educational attainment for Hardeeville's population 25 years of age and older. In 1990, 13% of Hardeeville residents over the age of 25 had not received a 9th grade education. Ten years later in 2000 that percentage grew to 20% of the population. From 1990 to 2000, there was a 7% increase in the number of Hardeeville residents over the age of 25 that had less than a 9th grade education but there was a 12% increase in the percentage of residents that had obtained a high school diploma or equivalent. In both 1990 and 2000, 3% of the population had acquired a bachelor's degree and 2% had acquired either a masters or professional degree. This information might suggest the need for continued improvements to the existing school system, expansion of opportunities to attract an educated workforce, increased support for tutoring programs, and continued collaboration with post secondary educational institutions in the area to train and prepare our existing workforce for existing and future jobs.

Table 2.3 – Educational Attainment

Educational Attainment	1990		2000	
Less than 9th grade	109	(13%)	187	(20%)
9th to 12th grade, no diploma	217	(25%)	233	(25%)
High school graduate (includes equivalency)	353	(41%)	311	(33%)
Some college, no degree	96	(11%)	144	(15%)
Associate degree	51	(6%)	22	(2%)
Bachelor's degree	29	(3%)	25	(3%)
Graduate or professional degree	15	(2%)	22	(2%)
TOTAL	870	(100%)	944	(100%)

Source: US Census Bureau 1990, 2000

During the Planning Charrette, the citizens of Hardeeville made comments about their concerns for the K-12 system. When we look at levels of educational attainment for Hardeeville it reinforces the general sentiment that continued improvement in our K-12 system is warranted. There have been tremendous strides to that end with the implementation of programs like the newly formed Math Science and Engineering Academy at the Hardeeville Middle/High School with representation from City Staff, Council, and local businesses. Although discontinued, similar initiatives should be continued and expanded. Hardeeville Middle/High School also received the 2008-2009 Palmetto Gold Award based on student performance and improvements in state test results.

Census Update

The City of Hardeeville participated in the Local Update of Census Address (LUCA) program in 2008. LUCA empowers municipalities to edit or expand address lists that the Census uses for its decennial Census mailings. The Census Bureau address list is a compilation of all address points that the Census Bureau identified in 2000. New construction or "missed" properties are therefore not listed and need to be added. Having local authorities contribute to this list ensures a more accurate Census count. The City added nearly 600 new address points to the address list provided by the Census Bureau.

In 2009, city staff provided an update of the city limit boundaries to the census bureau to ensure more accurate counts for the 2010 Census. The next stage of this process is the American Community Survey, which is typically done a year before regular census and takes into consideration economic, educational, housing, and other socioeconomic data.

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Summary and Implications

We know that growth is happening and we see the evidence on the ground. Over the next 20 to 30 years based on planned growth, Hardeeville's population could be more than 50 times its current population. It is imperative that Hardeeville continue to stay ahead of the growth and adequately plan for infrastructure and facilities.

When we begin to look at the employment characteristics of Hardeeville's residents, we can see that the majority of the residents actually work outside Jasper County. This observation can have several social implications associated with it due to increased time away from family and loved ones. Most importantly it highlights the need to continue creating employment opportunities in Hardeeville, such as with the expansion of the Hardeeville Industrial Park and support for new commercial projects. This observation shows that we need more jobs here to support the existing residents of our community as well as those interested in moving to the region. There are many opportunities to attract and produce a well educated workforce through increased support for tutoring, mentoring, and internship programs, and continued collaboration with post secondary educational institutions.

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Recommendations

Needs

- Continued improvement in K-12 education system
- Amended update of population element again as soon as additional accurate data becomes available.
- Facilitate Employment diversity & opportunity
- Further development of reliable local data and statistics
- increased support for tutoring, mentor, and internship programs
- Improved collaboration with postal service
- Continued expansion of opportunities to attract an educated workforce
- Continued collaboration with post secondary educational institutions in the area

Policies & Implementation

- Maintain and update critical data and statistics on a local level through collaboration with departments and utilization of surveys
- Work closely with census staff to ensure accurate information is published
- Implement a data collection system that tracks current statistics as it becomes available

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Chapter 3
Economic Development

Introduction

Hardeeville is open for business! The City of Hardeeville stands poised to become the economic crown jewel of both South Carolina and the Southeast over the next two decades. With its close proximity to interstates, workforce population centers, rail lines, international seaports and airports, Hardeeville sits on the brink of an unprecedented period of growth.

- Hardeeville sits right in the heart of the exploding Savannah and Hilton Head Island regions, with a population of nearly 600,000 living within a 20-mile radius of its City Hall.

- Hardeeville has two current exits on Interstate 95 currently in the City (Exits 8 and 5), and will announce a third exit in 2008 (Exit 3). The City also is less than 20 miles from Interstate 16, less than 75 miles from Interstate 26, and is crossed by U. S. Highways 321 and 17.

- Hardeeville has the main CSX Rail Line running right through the City touching most of its industrial and commercial properties.

- Hardeeville is located 12 minutes from the Savannah-Hilton Head International Airport.

- Hardeeville is less than 15 miles away from the Savannah Garden City Port, one of the largest and most successful in the nation. The City is also less than 10 miles from the area where the new Jasper Ocean Terminal will sit when completed.

- Hardeeville is less than 10 minutes from the brand new campuses of the 4-year University of South Carolina-Beaufort and the Technical College of the Lowcountry.

Summary & Implications

It is hard to tell what is more impressive about Hardeeville, the business climate or the quality of life. When you look at our regional map, you can see why all business roads lead to Hardeeville.

Many municipalities have to fight their county or neighbors on business projects. Hardeeville is not in that situation. Hardeeville and Jasper County have governments and populations that are pro-business and have worked together to embrace the growth that is coming and make sure it happens the right way. Jasper County and its municipalities do not allow developer “venue shopping” which assures that only quality developments will survive.

As a result, Hardeeville has been able to make sure that a balanced economy is the foundation upon which the future will be built. With 60,000 residential units approved for development, a minimum of 5 million square

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feet of commercial space in the works, and over 8000 acres of prime industrial land in the beginning stages of development, prosperity is in the forecast for generations to come.

Then there is our quality of life. With Hilton Head Island, Palmetto Bluff and Savannah nearby, the region has family activities, nightlife and lifestyle amenities that run the spectrum. For housing, we have everything from apartments to affordable homes to workforce developments all the way up to some of the nicest resorts in the country.

The City of Hardeeville's Economic Development Department is in the process of collecting basic economic statistics for the City. The purpose of this survey is to get a better sense of our business community and to understand the needs of our citizens.

Comprehensive Economic Development Strategies

Why do cities engage in economic development activities?

Quality of life perspective:

- To increase incomes, and thus the overall economic well-being, of city residents
- To ensure that all city residents seeking employment are able to find jobs
- To ensure jobs for our children
- Reduce "brain drain"/retain intellectual capital

Fiscal Perspective:

- To help preserve and grow the City's tax and revenue base
- To ensure there is adequate revenue to support the municipal services and infrastructure needed by its citizens to work, live, and play in the city

Importance of New Jobs

- Company's new hiring creates permanent jobs: Primary/Direct jobs
- Indirect permanent jobs are produced as a result of suppliers to the primary industry hiring more employees as a result of increased sales and services
- Induced permanent jobs result from increases in household spending by employees in these direct and indirect jobs

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Economic Development Programs

2009 Strategic Plan: Economic Vitality

Through collaboration and partnership with City enterprises, other public entities, private entities, and the military, support economic development efforts that attract, retain and create quality jobs to ensure a diverse economic base, a resilient and growing City tax base, and thriving neighborhoods

New Job Creation

Results from:

- New companies relocating to Hardeeville
- Existing companies expanding

Recruiting new companies

- Economic Development Corporation's primary role
  - Marketing arm of city
  - Target Primary Employer companies
- City is partner on Prospect Team w/
  - Palmetto Electric Coop
  - BJWSA
  - SCANA/SCE&G
  - Jasper County School District
  - USC Beaufort
  - Technical College of the Lowcounty (TCL)
  - Lowcountry Economic Network (LEN)
  - Chamber of Commerce

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City role in recruiting new companies

- Partner to advance business investment/ relocation to Hardeeville
- Ensure businesses have positive interaction with local government
- City coordinates other regulatory agencies
    - State of South Carolina
    - Expedite permitting
    - Rapid Response Team
    - Address utility needs
    - Regional Economic Alliances
- Existing companies expanding
    - City and BJWSA are the primary providers to meet company needs
    - To draw the next "existing business" we must take care of our current business community

Creation of a City Center

- Continuation of Downtown Revitalization
    - Hwy 17 Streetscape
    - Hardeeville Recreation Complex
    - Future Community Development Block Grant (CDBG) projects
- Learning From others
    - National League of Cities
    - MASC

Why Create a City Center

- More Spending in Hardeeville
- Stemming the leakage of sales tax
    - One "big box" locating outside of the city equals 1.5 million dollars lost annually
- Keeps residential population centralized

Characteristics and Resources

Business Assistance Program

Created in January of 2008, the Hardeeville Business Assistance Program is working to help our local businesses succeed no matter what the level of need. The Program is a Partnership between the City of Hardeeville, the University of South Carolina-Beaufort's Small Business Development Center and the National Bank of South Carolina. If you are a Hardeeville business, you now have a "one-stop shop" of access to experienced professionals who can help you strengthen an existing business or start a new one. Whatever goals you have for your business in Hardeeville, there is information, assistance and advice available to help for your business.

- Encourage greater local and regional consumer spending in Hardeeville
- The goal is to match the business community with available services
- Initiated BAP in 2008

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Hardeeville Economic Alliance

When the City finished negotiating the Hardeeville Tract Development Agreement, it obtained a 135 acre park for economic development purposes known as the Hardeeville Commerce Park. The City recognized that it did not want to enter the business of land development.

After a full request for proposals, the park was put under a purchase agreement as part of the Crescent Centre project. Part of the benefit to the City with this project involves the funds from the sale of the property being earmarked for economic development through a new 501 c 3 known as the Hardeeville Economic Alliance.

The alliance will be made up of members of the business community, Jasper County and Hardeeville government officials. The mission of the alliance is to help manage the economic development of the City of Hardeeville and southern Jasper County through new manufacturing investment, expansion of current investment, landing of warehouse and distribution opportunities, commercial investments and to support community development initiatives for the purpose of creating a higher quality of life through new jobs and broadening the City's tax base.

Incentives

South Carolina has one of the lowest state and per capita tax rates in the nation and offers other attractive incentives such as no manufacturer inventory tax and no state real or personal property taxes. A five-year abatement of county property taxes (excluding schools and special use taxes) is available to any business with capital expenditures for new facilities in excess of $50,000. Additional exemptions and abatements are also available.

With larger investments, a special "fee in lieu of taxes" can be negotiated, offering a predictable future tax rate.

- NO Inventory Tax
- NO Local Income Tax
- NO State Property Tax
- NO Unitary Tax on Worldwide Profits
- NO Wholesale Tax
- NO Sales Tax on manufacturing machinery, industrial power or materials for finish

Corporate Income Tax Credit Incentives

Jobs Tax Credit

- A valuable financial incentive that rewards new and expanding businesses for creating jobs in South Carolina. The jobs tax credit for Jasper County is $3,500 per job for a 5-year period.

Corporate Headquarters Tax Credit

- A 20% credit provided to businesses locating or expanding their corporate headquarters facility in South Carolina. The credit is based on the value of the actual portion of the facility dedicated to the headquarters operation or lease costs for the first five years of operation in South Carolina.

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Enhanced Corporate Headquarters Tax Credit

- A credit provided to businesses locating or expanding their corporate headquarters facility in South Carolina. This credit can be applied against 20% of the tangible personal property costs of establishing the headquarters. Tangible property eligibility requirements apply.

Economic Impact Zone Investment Tax Credit

- Allows manufacturers locating in "Economic Impact Zones" a one-time credit against a company's corporate income tax of up to 5% of a company's investment in new production equipment. The credit value depends on the applicable recovery period for the property.

Child Care Program Tax Credit

- Companies may claim corporate income tax credit for capital and operating costs of establishing and operating a child care program. The maximum credit claimed may equal 50% of the incurred capital expenditure, not to exceed $100,000.

Research and Development Tax Credit

- A tax credit equal to 5% of the taxpayer's qualified expenditures for research and development made in a taxable year in South Carolina.

Tax Rates & Incentives

Corporate Income Tax	5%
Sales and Use Tax Rate	5%
Local Property Tax	Fair Market Value (Real & Personal Property) x Assessment Rate
A. Manufacturers	10.5% (Real & Personal Property)
B. All other businesses	6% (Real Property) 10.5 (Personal Property)
C. Homeowners	4% (Residences)

Out of State Sales

- South Carolina exempts sales tax on gross proceeds of sales of tangible personal property shipped and delivered outside of the state.

Use Tax Credit

- South Carolina provides a credit to the use tax for sales and use taxes on purchases of tangible personal property paid in another state.

Sales Tax Exemptions

- South Carolina supports new and expanding business with a wide range of valuable state and local sales tax exemptions.

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Sales Tax Caps

- South Carolina provides a $300 maximum sales tax cap on the sale or lease of aircraft, motor vehicles, boats, recreational vehicles, motorcycles, and other items.

Property Tax Exemptions

- South Carolina exempts three classes of property from local property taxation, to include all inventories (raw materials, work-in-progress, and finished goods), intangible property and all pollution control equipment.

5-Year Property Tax Abatement

- A South Carolina local incentive that provides 5-year property tax abatement from county operating taxes. The value of the abatement typically ranges from 30-35 %.

20-Year Fee-in-Lieu of Property Taxes

- A South Carolina local incentive allowing the county to negotiate a fee-in-lieu of property taxes agreement with eligible companies that meet certain investment criteria. Eligibility requirements apply.

30-Year Super Fee-in-Lieu of Property Taxes

- A South Carolina local incentive allowing the county to negotiate a fee-in-lieu of property taxes agreement with eligible companies for up to 30-years with an assessment ratio as low as 4%. Eligibility requirements apply.

South Carolina's Enterprise Program-Job Development Credit

South Carolina's Enterprise Program

- Provides companies with funds to assist in offsetting the cost of locating or expanding a business facility in the state by contributing cash contributions to the project that allow the state to lower the cost of investment and positively contribute to the company's bottom line. Eligibility requirements apply.

The Job Development Credit

- Reimburses qualifying companies the cost of eligible capital expenditures (land, building, site development or infrastructure) associated with projects that create new full-time jobs providing healthcare benefits for citizens of South Carolina.

ReadySC

- ReadySC (formerly known as CATT) is a program unique to South Carolina and is an outstanding employment training resource for companies locating or expanding within the state. ReadySC recruits, screens, and provides short-term training of individuals for specific job assignments with new and expanding businesses and industry, typically at no cost to the company. Custom training programs are provided to actively prepare a trained workforce for positions within the facility and are often conducted in close proximity to the facility or on-site at the new facility itself.

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Sites for Business and Industrial Development

Hardeeville Industrial Park

- Gale Contracting
- Star Garage
- Precision Granite and Marble
- Cramer Electrical
- Low Country Metal
- Carolina Metal Castings
- Wildcat Steelworks
- New South Supply
- Prestige Farms
- APAC
- Bulk Bags
- On Site Concrete
- Carolina Specialized
- Palmetto Heating & Air
- Optima Minerals
- Jon-Air
- Jenkins Plumbing
- CYDI
- More

Last Updated: August 2009

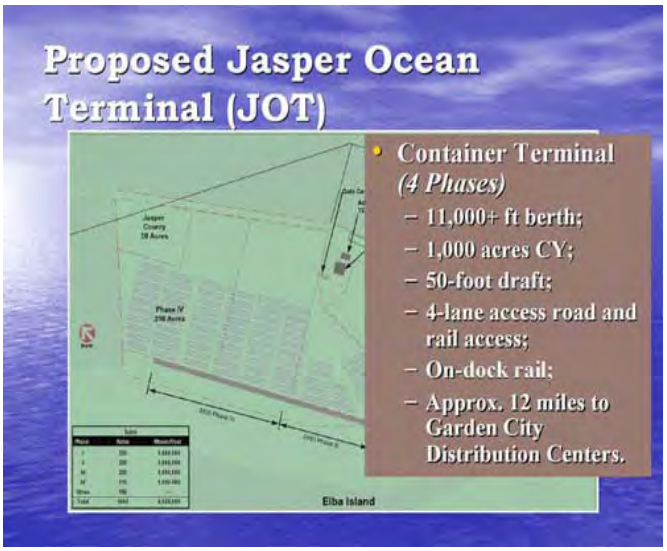
Jasper Port Industrial State Infrastructure Board Application

- Partnership between:
  - Hardeeville,
  - Jasper County
  - The Stratford Companies, LLC
- SIB funds projects of $100 mil or more
- 43% local match will build new Purrysburg Road

Jasper Ocean Terminal

The Jasper Ocean Terminal (JOT) for many years was considered merely the silly fantasy of a small group of dreamers on the South Carolina side of the Savannah River. In 2008 a Bi-State group of key officials started the full process that will lead to the completion of Phase 1 of the new terminal within the next 5-10 years.

The JOT will be just minutes from Hardeeville and will change our City forever. Phase 1 investment alone will be just under 500 million dollars and will bring thousands of industrial jobs to Hardeeville and Southern Jasper County. When all phases of the port are complete, it will be a $2 billion footprint of industrial activity and could be the largest terminal on the east coast of the United States.



The new Interstate 95 Exit 3 in Hardeeville will be a major component of the infrastructure relating to the JOT. In anticipation of this, the City of Hardeeville has several thousand acres of prime industrial property planned for development in that area.

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Recommendations

Needs

- Create City Center
- New job creation
- Preserve and promote small town qualities associated with living in Hardeeville
- Diversify the tax base to reduce tax burden on homeowners.
- Focus retail expansion in the areas with the highest population densities, and in cross routes between major transportation corridors.
- Attract businesses that are compatible with the city's comprehensive plan goals associated with environmental and social issues.
- Direct growth to those areas that can best support it using, wherever possible, existing or planned infrastructure to accommodate new growth.
- Increase public awareness of the types of services provided by the Chamber of Commerce/Economic Alliance and promotes the continued support of these organizations.
- Encourage a coordinated effort amongst the Chamber of Commerce/Economic Alliance and the city to gain consensus in economic development matters.
- Increase area-wide public involvement in economic development initiatives.
- Focus development on currently available economic assets to within the City.

Policies & Implementation

- Promote the expansion and retention of existing businesses.
- Plan, prioritize and implement economic development strategies that promote the development warehousing and light manufacturing to existing industrial property.
- Support efforts to develop a new port in Jasper County.
- Develop linkages with Charleston, Savannah, and Jasper Ports.
- Enhance Interstate 95 interchanges and plan development to take advantage of its economic possibilities.
- Offset costs associated with economic development initiatives through state and federal funds.
- Provide for sufficient infrastructure capacity to accommodate future economic development.
- Increase economic development marketing efforts to help maximize the city's potential, reducing the amount of leakage to other areas.
- Increase public awareness concerning the Chamber of Commerce's services and promote its continued support.
- Promote sense of pride and responsibility to residents to help promote community revitalization including litter control activities.
- Complete infrastructure development I-95 Commerce Center and Exit 3 to accommodate future growth.
- Actively market Hardeeville to prospective businesses and industries to occupy undeveloped parcels in industrial areas and vacant commercial buildings within the City.
- Develop a web site and technology interface that promotes the assets of Hardeeville and links to all of its major organizations and businesses.
- Use GIS system to inventory sites and buildings
- Prioritize by quality
- Have zoning in place for prime sites before recruitment begin

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Chapter 4
Cultural Resources

History

Hardeeville as an incorporated community was founded in 1911, but the true date of importance was 1732, the date of settlement. In that year, King George II of England granted a group of Swiss Huguenots the rights to settle on the eastern banks of the Savannah River in the far southern corner of the South Carolina colony. Led by Jean-Pierre de Purry, the settlement became known as Purrysburg and had attracted several French and German settlers as well. Within three years, the settlement had attracted nearly 450 residents. Purrysburg however did not last long, as a poor site selection, infestation, and competition from the new settlement of Savannah further down the river rendered the settlement as a failure. The original settlers dispersed and moved elsewhere from the swampy lands by the Savannah. Some stayed in what became modern day Jasper County, founding small communities such as Switzerland. Others dispersed to other corners of the American colonies, and some went back to Europe. Today, traces of that settlement exist in small cemeteries, local names, and in commemoration of a pioneering spirit that defined colonial America and South Carolina.

Although the early attempt at settlement failed, the area which Hardeeville now is located upon did grow. Beyond the modern day city limits existed large-scale rice plantations, many which have been actively preserved through cooperation with the current day Savannah National Wildlife Refuge. Many local African-American families are able to trace their roots from these plantations and remained in the region following the Civil War and the abolition of slavery. The development of the Charleston – Savannah railway prompted officials to create a depot before the trestle crossing the Savannah into Georgia. The man who would develop the depot and ran the general store was Issac Hardee, a settler from North Carolina. His son, William Whyte Hardee would continue those endeavors after the Civil War and bring additional development to the depot area. This locale developed the name of Hardee's Station, while the hamlet that grew from that depot became Hardee's Village, or Hardeeville.

Agriculture remained the major trade of the area until the turn of the century, when large scale timbering operations began. Differing from traditional logging practices, the timber operations required swamp logging procedure, an arduous and messy task but one which provided gainful employment and much renown to Hardeeville for its vast expanse of coastal forest. The Argent Lumber Company and associated mill would provide jobs for dozens of men and would construct narrow gauge tracks for miles. Locomotives such as the preserved Engine Number 7 would head out each day and come back with loads of timber, which would be loaded upon freight trains on the standard-gauge rails of the Charleston-Savannah railway and sent to all corners of the continent.

During the 1940s and 1950s Hardeeville welcomed a new wave of development that revolved around hospitality and travelers services. Motor lodges, diners, and service stations sprung up along the recently completed Highway 17 and provided travelers with a dose of southern hospitality. The City adopted its nickname as the Lowcountry Host. This legacy of hospitality continued with the construction of Interstate 95 in the 1960s and 1970s and the continuous development the Lowcountry region through today.

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Today, Hardeeville is faced with new opportunities as it opens a new chapter in its history. The prospects of growth, development, and economic opportunity are upon the City. It is therefore important that the City continue to document its existing historic and cultural resources in order to maintain its historic legacy while preparing for future generations and histories.

Historic & Archeological Resources

Archeological traces of the original Purrysburg (also spelled Purrysburgh) settlement of 1732 are located mostly on private property that is located outside the City Limits. Additional archeological sites dating to the 1800s are likely to be found in the Red Dam area (area once known as Scuffletown), where the City has had some properties become annexed. As required by the City of Hardeeville Municipal Zoning & Development Ordinance, archeological studies are required of all major Planned Development District (PDD) projects prior to development plan review or construction to ensure any historic or archeological artifacts are either preserved or recovered appropriately.

There are currently three cemeteries located within the city limits according to county assessor information. However, there are several dozen family lots and individual burial grounds located inside the city limits. The Jasper County Historic Society has published a book Cemeteries of Jasper County, which provides a listing of historic, ancestral, and ecclesiastical interment sites in the county.

Beyond the city limits, in the immediate southern Jasper County region, nearly 20 additional burial sites exist. The largest site in this region is Purrysburg Cemetery, located off Purrysburg Road near Millstone Landing. Several churches located in the county offer limited burial space for congregation members. Additional interment sites are located in Ridgeland, Bluffton, and surrounding jurisdictions. Capacity issues exist at the majority of the burial sites. Some facilities have opened in recent years to handle additional gravesites, including a 30 acre memorial park in Bluffton and an expansion to the Ridgeland Cemetery.

The increasing demand for burial space is becoming a major land use issue across the United States as a large percentage of its population enters into elderly age. This demographic anomaly will require municipalities such as Hardeeville to actively consider pursuing land for cemeteries, memorial gardens, and perpetual care facilities. Given the anticipated population increase that the City and Jasper County faces from growth, it is imperative to ensure that adequate space be reserved for those who have passed away.

In 1995, Jasper County contracted with Brockington and Associates to undertake a comprehensive survey of the historic resources in Jasper County under a grant from the South Carolina Department of Archives and History, which was completed in 1996. The resulting report enumerated several properties and resources that deserve historic recognition. The properties identified as having historic significance in the City, included but are not limited to Heyward House, Hardeeville Consolidated School, McTeer House and Argent Lumber Co Engine No 7. Locations of some of the historic sites were also identified as they relate to the immediate downtown area. A few of the structures that were identified in the study have since been demolished or renovated, which demonstrates the importance of documenting and preserving the history before it is gone. At present, there are no sites located in the City of Hardeeville that are on the Federal National Register of Historic Places. Additional study is warranted to ensure the accuracy and thoroughness of the original study as well as to recommend further action.

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Cultural Resources

The cultural resources of Hardeeville are reflective in its citizenry. The City is fortunate to have several resources which engage its residents and business community and help define its character and quality of life. Listed below are some of these resources:

Activities & Festivals

The City of Hardeeville conducts several community activities throughout the year. While many are sponsored by the City itself, numerous civic, church, school, and business groups sponsor activities as well, and efforts to collaborate on the events have been rewarded by increased interest and higher attendance. Below is a list of some of the major activities that occur throughout the year:

- Lowcountry Pow Wow and Cultural Festival (March)
- Easter Egg Hunt (March / April)
- Children's Fishing Rodeo (May)
- Relay for Life (May/June)
- Fourth of July Fireworks and Fun (June/July)
- National Night Out (August)
- Catfish Festival (October)
- Christmas Parade, Tree Lighting Festival & Party (December)

Lowcountry Pow Wow and Cultural Festival

Hardeeville celebrates its Native American heritage through the support of the *Lowcountry Pow Wow and Cultural Festival*. The Pow Wow is a cultural enriching festival supported by a number of vendors that provide educational activities, some of which include Comanche Scalp Dancers, basket-makers, storytellers, and drumming, dancing and survival lessons. The event gives the community a chance to come together and celebrate the traditions and culture of the Lowcountry's Native American Population.

Figure 4.1 – Lowcountry Pow Wow and Cultural Festival in 2009

Figure 4.2 –Easter Bunny at Hardeeville Easter Egg Hunt

Hardeeville Easter Egg Hunt

The *Hardeeville Easter Egg Hunt* takes place annually around the Easter holiday and provides a wonderful opportunity for area children to have fun and hunt for eggs behind City Hall. Appearances by the Easter Bunny add to the event's fun-filled atmosphere.

Children's Fishing Rodeo

The *Children's Fishing Rodeo* in May kicks off summer by providing area children (and their parents) the chance to enjoy one of Hardeeville's most favorite outdoor activities. Typically held alongside the pond behind City Hall, the event has been successful in bringing out children of all ages and having old-fashioned fun and a healthy competition to see who can catch the most fish.

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Relay for Life

The American Cancer Society's Relay for Life event is a national activity which promotes cancer research during this overnight event. Held biennially at Municipal Stadium behind City Hall, citizens, volunteers, and cancer survivors stay up all night to walk around the field in memory of those who have passed away from the illness and to raise awareness for cancer research.

Fireworks and Fun

The City typically celebrates American independence through its Fireworks and Fun night, typically held a few days before the 4th of July holiday itself. Fireworks provide the exclamation point for a full day of activities featuring outdoor games, amusements, water slides, inflatables, music, dance, crafts and concessions. National Night Out is organized by the City's Police Department and is the local version of a nationwide effort to bring together law enforcement and community for a night of fun activities. Hardeeville's event includes food and beverages, police demonstrations, fire truck tours, and various other games and demonstrations for folks of all ages.

Figure 4.3 – The car show is a popular event at the Hardeeville Catfish Festival

Hardeeville Catfish Festival

The Hardeeville Catfish Festival is an annual event hosted by the Hardeeville Chamber of Commerce and the Marine Rescue Squadron featuring a full slate of activities ranging from live music and karaoke to a car show. As with other yearly events, food, games, crafts, concessions, and activities for children complement the event as a whole. The event provides an outstanding opportunity for local businesses and groups to interact with citizens and visitors alike. The event annually attracts hundreds of folks.

At the conclusion of the year, the City of Hardeeville celebrates the holidays with several events. The Chamber of Commerce sponsors a Christmas parade to kick-off activities. In the late afternoon, a tree-lighting ceremony is conducted in front of City Hall and is complemented by local choir groups and musicians of every age. Afterwards, Santa arrives to hear Christmas wishes from children and folks of all ages are treated to holiday-themed refreshments.

Additional events are always being added to the calendar and are hosted by various entities, including the Hardeeville Elementary, Junior High, and High schools, the Coastal Carolina Hospital, and some of the larger development communities in the City. As Hardeeville continues to grow, not only is expansion of existing festivals and events is likely to continue, but also new events will inevitably surface to provide additional opportunities for community recreation and interaction.

Hardeeville Museum

Upon the completion of the current City Hall (205 East Main Street, site of the former Consolidated School), the City incorporated a "living museum" concept within the corridors of building. Today, the museum has numerous items, photographs, stories, and memorabilia on display for all visitors to observe. Many of the items have been graciously donated by dozens of residents and businesses, many of which have been associated for Hardeeville for generations.

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Hardeeville Community Room

The Hardeeville Community Room is currently located on the southeast wing of City Hall and was officially dedicated in 2005. The site has hosted numerous City-sponsored, private, and civic events, ranging from the annual Christmas party to business presentations to weddings and family reunions. The facility can host up to 125 and has been very successful and popular with the community.

Hardeeville Community Library

The current library facility is located on 36 East Main Street, across the street from the current Growth Management Building. The library itself was founded in 1977, though the current 1,000 square foot site was donated in 1979 and was officially dedicated in 1983. The library volunteers run several events during the year, several of which are held in the Community Room at Hardeeville City Hall.

Senior Center

In May 2009, the Hardeeville Senior Center (coordinated by the Jasper County Council on Aging) moved to a new facility located adjacent to City Hall. The new facility is greatly expanded from the previous building and provides additional space for various activities while catering to increasing senior population in the City and in southern Jasper County.

Sgt. Jasper County Park

Set among towering pine trees and a 4-acre pond, this popular park and retreat opened in 2005 to stunning reviews and delighted residents. Operated by the Jasper County government, the park is located within the City Limits and provides residents and visitors opportunities for walking, hiking, jogging, fishing, picnicking, and other opportunities available through the recreational center located on site.

Carroll Memorial Park and Old No. 7

Appropriately located adjacent to the Municipal Court building, T.B. Carroll Memorial Park is named after T.B. Carroll, who served in several capacities as a leader in the community. The park is a small refuge in downtown Hardeeville and consists of seating areas, gardens, a fountain, and currently houses the Argent Lumber Company's Engine Number 7 locomotive, a community landmark and reminder of its past.

Figure 4.4 – Old No. 7 at T.B. Carroll Memorial Park

Millstone Landing

This popular landing provides boat access to the Savannah River and has for generations been a popular recreational spot for countless families and friends in Hardeeville and southern Jasper County. The City annexed the property in 2008 and has begun formalizing plans to protect the area and enhance its natural surroundings and recreational opportunities.

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Gullah/Geechee Heritage Corridor

There exists an opportunity to celebrate and cultivate the Gullah/Geechee heritage present in Jasper County and more specifically Hardeeville. Authorized by Congress in 2006, the Gullah/Geechee Heritage Corridor extends from Wilmington, North Carolina to Jacksonville, Florida. Several stakeholder meetings have occurred throughout these communities, including Hardeeville, to gather information and document the rich history of this unique culture. Hardeeville is centrally located along this corridor and has a distinct opportunity to both commemorate the culture and educate residents and visitors through expansion and preservation of historically significant landmarks, artifacts, and documents.

Places of Worship

Hardeeville has several churches located in the City Limits as well as additional houses of worship located just beyond the City Limits.

- Hardeeville First Baptist Church
- Hardeeville United Methodist Church
- Church of God
- St. Anthony Catholic Church
- Abundant Life Tabernacle
- St. Mark's Baptist Church
- St. Stephens AME Church
- Mt. Cavalry Baptist Church
- Red Dam Baptist Church
- St. Philips Baptist Church
- Greater Pentecostal Temple
- First Presbyterian Church

In addition, there are several ministries and smaller religious groups that help contribute to the spiritual life of Hardeeville's citizens. Additional faiths and religious groups have houses of worship located in nearby areas with larger populations, such as Beaufort, Hilton Head Island, and Savannah.

Community Design

The typical architecture of the City is in the mid-20th Century American style. Very few dwellings exist in the city prior to 1900, and the majority of residences and business structures are from the post war period (1945 onward). Architectural styles are generally single to two-story ranch style homes with certain elements of Lowcountry architecture, though not nearly as pronounced as examples in Beaufort or Bluffton.

The layout of the City shows a strong axis along Main Street along with the traditional commercial hub around the site of the former rail depot. The construction of U.S. Highway 17 and Interstate 95 added traveler oriented commercial land uses near the Exit 5 area and have connected to the original business district of the City. More passive commercial activities occur along Main Street, which has retained several residences and civic uses; thus, it can truly be considered a "mixed use" thoroughfare.

Figure 4.5 – Neighborhood design helps define a community for residents and visitors

The Hardeeville Industrial Park is located on the site of the former mill, thus continuing the legacy of Hardeeville's industrial and economic heritage. Most of the industry occurring on site is limited in scope, and additional development opportunities exist in that area.

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Recommendations

Needs

- Updated study on community history and survey of historical places
- Continuous City and community support of annual events and festivals
- Improvement of historical documentation through expansion of museum and greater support of the library
- Support of fledgling groups dedicated to historic and cultural research and education

Policies & Implementations

- Promote better community interaction in areas of history and culture.
- Enlarge museum holdings and solicit donations from various citizens and businesses
- Continue support of the library and local authors.
- Coordination of cultural resource organizations with community facilities

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Chapter 5
Natural Resources

Summary & Implications

Recent annexations and currently proposed private developments, coupled with the prospect of a nearby port and a new interstate interchange have placed the City of Hardeeville in a position to experience significant growth within the near future. In order to preserve the vast cultural, historical, and natural resources and traditional values long treasured by Hardeeville citizens, while envisioning the new horizons presented by these opportunities, plans for growth must be sensitive to these resources. Although natural resources must be protected, and in some cases may pose constraints to development, these same resources can be incorporated into the developments as an asset as well. This chapter provides an overview of existing resources and assesses their role(s) in Hardeeville's anticipated growth.

Geographic Location

Hardeeville is located in the Lowcountry of South Carolina on the Savannah River, with the majority of the City located in Jasper County and some recently annexed properties within Beaufort County. Adjacent counties include Hampton to the northwest, Colleton and Beaufort to the north and east, and Effingham County, Georgia to the west. The Jasper County coastline consists mainly of the Wright River Delta as it joins the Atlantic Ocean, forming several uninhabited islands. As the name would imply, South Carolina's Lowcountry is characterized by relatively flat, low-lying terrain where a network of fresh water rivers meets the marshes and the sea, creating a vital ecosystem that nourishes much of the Atlantic Ocean, as well as wildlife in the maritime forests and savannahs.

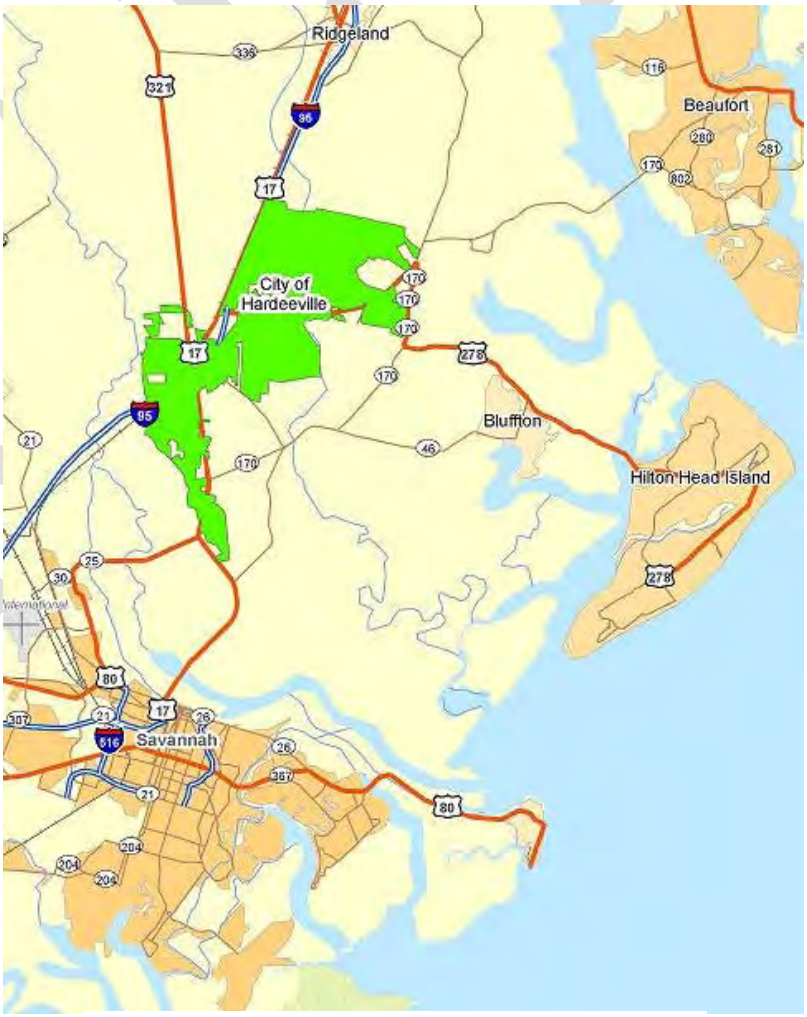

Figure 5.1 – Geographic Location

As shown in Figure 5.1, the City of Hardeeville is located at the northwest point of a triangle formed by itself, Hilton Head Island, and Savannah, Georgia. Hilton Head is a popular resort town located approximately thirty miles southeast of

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Hardeeville and is accessible by US 278. Savannah, Georgia is located approximately twenty miles directly south of Hardeeville along US 17 (ALT), and is not only home to many popular tourist attractions, but also serves as one of Georgia's primary industrial centers and shipping hubs. Other nearby towns and cities include Ridgeland (15 miles north of Hardeeville along I-95), Bluffton (17 miles east of Hardeeville), Hilton Head (20 miles east of Hardeeville), and Beaufort (25 miles east of Hardeeville). Charleston is about 90 miles northeast of Hardeeville and Columbia is less than 140 miles via interstates I-95 and I-26.

The City of Hardeeville enjoys a prime location within South Carolina's Lowcountry with several major water bodies nearby, mainly the Savannah River and New River, with portions of recently annexed properties (East Argent and Okatie Crossings in particular) draining to the Okatie River, which ultimately contributes to the Chechesee River/Port Royal Sound. Major rivers and their watersheds are discussed in further detail within the *Water Resources* section of the Plan. In addition to being located amongst the abundant natural resources provided by these water bodies, the City of Hardeeville is also mutually convenient to neighboring tourist attractions inspired by the beauty of the Lowcountry's landscape.

Climate

Winters in the Lowcountry of South Carolina are typically moderate, and summers are pleasant to hot, with cooling on-shore breezes. The average temperatures for the months of January and July are sixty degrees (60ºF) and ninety degrees (90ºF) respectively, with an average annual temperature of sixty-five degrees (65ºF). Temperatures in August can reach the nineties (90's), and lows in winter may reach twenty degrees (20ºF). When a winter front passes through, the temperatures of Lowcountry South Carolina usually return to the high 60s or low 70s within a couple of days. The average date of the first freezing temperature is October 30, and the average date of the last freezing temperatures is March 31.

According to the State Climatology Office, Jasper County's average annual precipitation is approximately fifty inches (50"). Snowfall is not common within the area, with an average of less than a half-inch (0.5") annually.

Along with the benefits of proximity to South Carolina's coastline comes the possible climatological threat of hurricanes. Approximately nine-hundred square miles of the state's low-lying coastal terrain are especially susceptible to the effects of sea level rise and destructive storm surges from hurricanes and tropical storms. Given today's available means of informing and evacuating coastal residents, advanced warning techniques help to reduce immediate danger associated with hurricanes, although high winds and flooding can cause significant property damage. According to the Federal Emergency Management Agency (FEMA), there are no tidally influenced flood zones within current city limits (see *Flood Plains* Section for further discussion). Given the residential growth projected for the City of Hardeeville, hurricane evacuation should remain a focus when planning the region's major transportation infrastructure maintenance and upgrades, and correspondence should be maintained with the South Carolina Department of Transportation (SCDOT) in coordinating these efforts. Additional discussion on hurricane evacuation and associated transportation improvements is included in Chapter 7 of the Plan.

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Soils

Hardeeville soils are typical of a coastal plain area in that flat, low-lying terrain becomes saturated, particularly during winter months when evaporation does not assist the earth's natural water recycling process. This type of land can still be developed using sound engineering and construction practices, although construction costs will typically be higher than in the "upland" areas of the sand hills. Measures commonly taken to account for poor existing soil conditions include importing suitable fill material in order to provide topographic relief for surface drainage purposes. In addition, larger detention ponds may be used in order to provide runoff storage to account for poor infiltration properties of native soils. Retention ponds (or permanent-pool 'lagoons') can also be used for additional stormwater runoff storage, and to add to a site's aesthetics. Despite restrictions that unsuitable soils may place on development opportunities, incentives for modern engineering and stormwater management practices can be incorporated into the City's Municipal Zoning and Development Ordinance (MZDO) as outlined in the Water Quality Section of this Plan.

There are approximately twenty different types (or series) of soil compositions within the Hardeeville city limits. These series were assigned by the United States Department of Agriculture Soil Conservation Service (now known as the Natural Resources Conservation Service, or NRCS) based on field collections conducted during the 1960's and 1970's, and later published in the early 1980's. Series were assigned based on a soil's physical characteristics, such as grain size distribution, organic content, permeability, shrink/swell capacities, and erodibility. Detailed descriptions for each of these soil series corresponding to the NRCS Soils Map are located in Appendix A.

In order to more easily quantify the numerous types of individual soils, they are divided into four basic Hydrologic Soil Groups (HSGs - A, B, C and D), which are used to classify a soil's typical runoff characteristics, or its capacity to absorb rainfall. Type A soils have a high infiltration rate when thoroughly wetted and tend to absorb stormwater runoff. Type B soils have a moderate infiltration rate, and therefore a moderate rate of water transmission. Type C soils have a slow infiltration rate and generate more stormwater runoff. Type D soils have a very slow rate of infiltration, and chiefly consist of clay soils that have high swelling potential when thoroughly wetted. In terms of development potential, these factors are used to determine the amount of site area that will be required for stormwater detention. Figure 5.2 shows a generalization of the City's soil types divided into the four basic HSGs.

Type B and C soils are more conducive soils to develop and are shown on the exhibit as *blue* and *green*, respectively. The **Anderson Tract** is located along US 278 and bound on the east by the New River within the northwestward limits of Hardeeville, and is mostly composed of Type D soils. Future plans for the Tract include development of Hilton Head Lakes, a potential seventeen (17) phase residential establishment which will include 'The Shops'. According to the initial Master Plan the development will consist of 2,412 single family and residential homes, a relatively large number of lagoons (public water features), and a number of amenity areas. In order to account for the poor infiltration properties of these native Type D soils, the Master Plan incorporates lagoons in order to retain excess stormwater runoff generated by impervious surfaces. These soils retain water, making them ideal for construction of lagoons thus enhancing the aesthetics of the development.

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The **Pulte/Del Webb Tract** is located in the westward limits of Hardeeville and is bound on the south by US 278, the east by SC 170 and the north by SC 442. Development will be primarily residential, and plans also incorporate the use of lagoons for stormwater quality and quantity management. **Argent East Tract** includes plans for residential areas, a maintenance facility, a golf course and an amenity area. The Tract primarily consists of B and D soils. B soils are typically firm, yet well-drained, and are therefore particularly conducive for building structures and open infiltration uses such as golf courses. The D soils will be beneficial for constructing lagoons. There are portions of the **Hardeeville Tract** and **Sherwood Tract** which provide suitable soil types for residential, retail, commercial and industrial land uses. These areas are composed of a well-balanced mixture of A, B, C and D soils. Parking lots, open space and lagoons do not require the same soil strength as that of structures with foundations; therefore with prudent planning, the area's native soils are conducive to various future land uses.

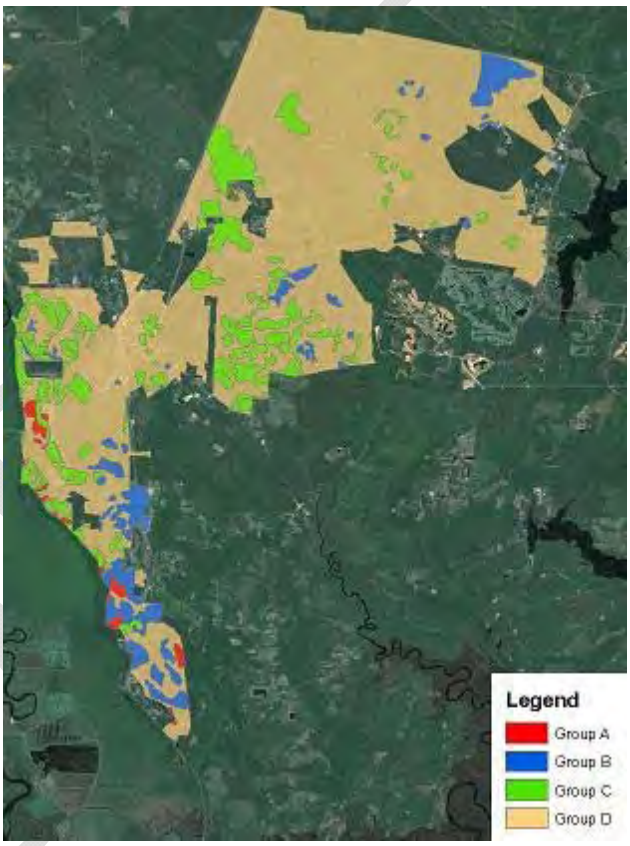

Figure 5.2 – Soil Group locations

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Agricultural and Forested Land

Since the occupation of the Lowcountry by Native Americans and early English settlers, communities have relied on its natural resources both for survival and as a significant source of revenue generation. In particular, the logging industry played a key role during the early development of the City of Hardeeville, as this abundant natural resource supported companies such as the Argent Lumber Company, which at one time made Hardeeville the center of one of the largest logging operations world-wide. Much of the land adjacent to and within Hardeeville is currently or was once owned by timber companies and currently consists of "Upland Planted Pine" as shown on Figure 5.4.

Until the recent regulation of the industry and the implementation of more stringent environmental requirements, logging practices were carried out without regard to the impacts on neighboring properties, or even the logging properties themselves. Erosion due to improper logging practices impacted streams and rivers, and hindered future timber production. Loggers now employ Best Management Practices (BMPs), such as low-impact logging roads and machinery, riparian buffers along streams and wetlands (Streamside Management Zones), and long-term harvest/planting planning in order to protect the surrounding environment and to sustain the longevity of their operations. The long-term return from establishing these BMPs, including enhancing wildlife habitat, soil and water protection, and other associated values counters the potential costs of maintaining these valuable areas.

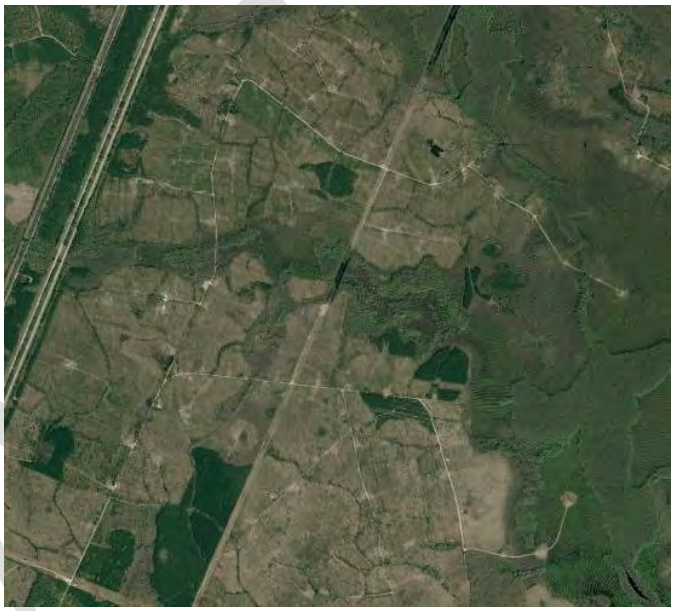

Figure 5.3 – Aerial view of current day logging practices within the recently annexed Argent Tract

Advancements in the logging industry have also lead to the advent of silviculture, which is defined as "the art and science of controlling the establishment, growth, composition, health, and quality of forests to meet the diverse needs and values of the many landowners, societies and cultures." The practice of silviculture not only increases yield and drastically reduces the impacts of logging on surrounding properties, but also serves to sustain the many species of fauna and flora living within the forest.

As the City of Hardeeville continues to grow, timber companies (International Paper in particular) have sold large logging tracts for potential development. The City has annexed these parcels in order to ensure uniform development practices within the region, which will benefit the City of Hardeeville, the developments themselves, and the surrounding local governments.

The South Carolina Forestry Commission is responsible for the protection and stewardship of the state's forests, and works closely with the City of Hardeeville and other local municipalities with regards to natural resource management. As the City of Hardeeville grows and urban areas increase, it is imperative that the City's forestry resources are healthily maintained and replenished to the extent possible where impacts are

unavoidable. The Commission will continue to work collaboratively with the City and developers to improve and maintain the quality of Hardeeville's environment.

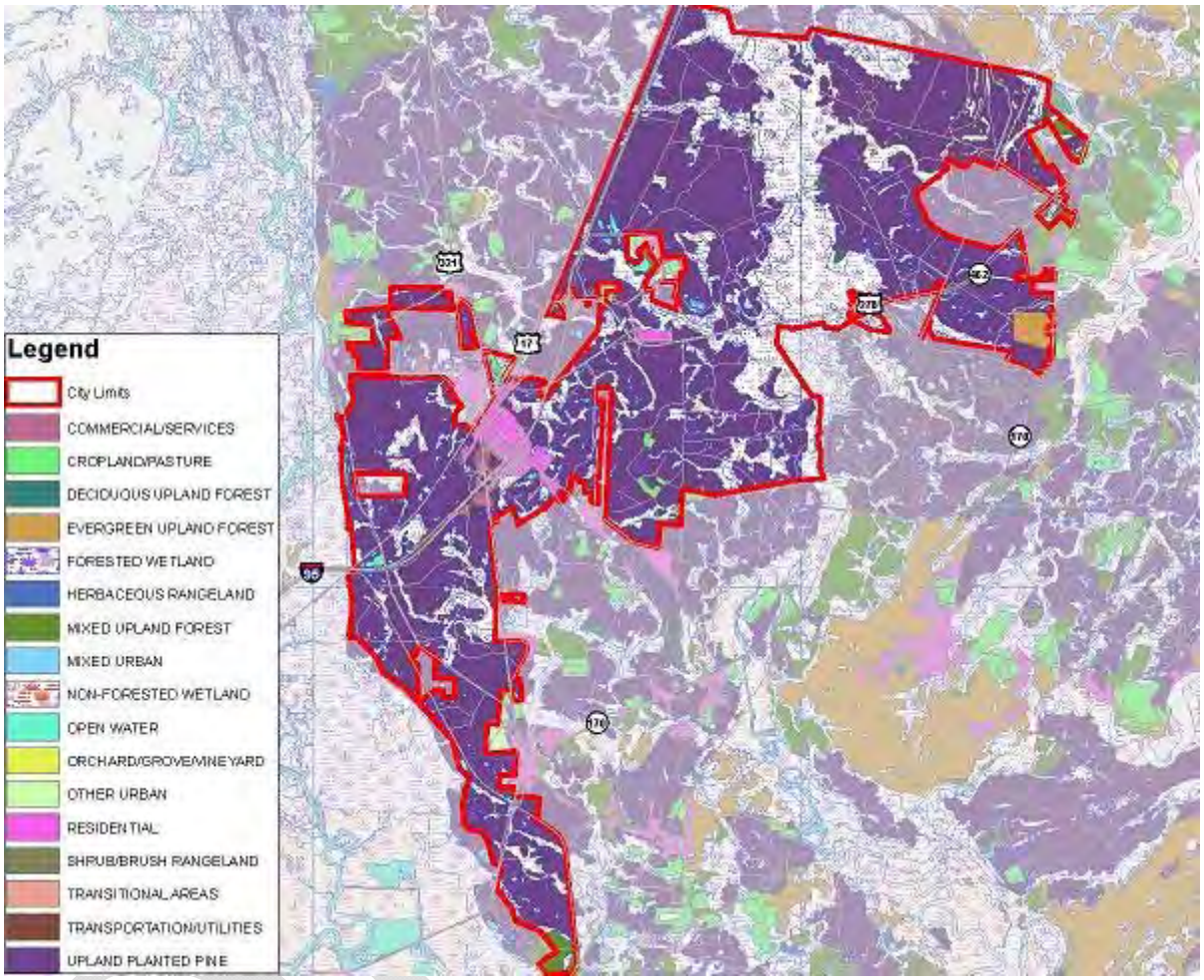

Figure 5.4 – Land Cover Map

Water Resources

Rivers & Watersheds

The City of Hardeeville is bound to the west by the Savannah River, and contains a portion of the New River Watershed to the east. These two rivers ultimately receive the majority of stormwater runoff generated within the City of Hardeeville and discharge through delta and marsh systems and into the Atlantic Ocean.

Figure 5.5 – Savannah River at Millstone Landing

The Savannah River is a major water body within the southeastern United States, and forms the majority of the state border between South Carolina and Georgia, beginning below Lake Hartwell and terminating at Tybee Island in Georgia. Its watershed is nearly ten thousand square miles (6,400,000 acres) in size. The City of Hardeeville is located within the Lower Savannah Watershed (Hydraulic Unit Code 03060109-060), which occupies approximately 117,000 acres of South Carolina's Coastal Zone region. The South Carolina Department of Health and Environmental Control (SCDHEC) operates a Water Quality Monitoring Station (WQMS) SV-191 approximately nine miles south of Hardeeville at the US 17 crossing (see Figure 5.6). The Savannah River is classified by SCDHEC as Class SB Tidal Saltwaters, suitable for primary and secondary contact recreation, crabbing, and fishing, except harvesting of clams, mussels, or oysters for market purposes or human consumption. According to the 2008 Impaired Waterbodies (303d) List, recreational and aquatic life uses are not fully supported at this Station due to presence of fecal coliform and zinc, respectively.

Stormwater generated within the central and eastern portions of the City of Hardeeville flows to the New River, which originates from the Great Swamp and flows into the Atlantic Ocean through a series of marshes and estuaries, similar to the Savannah River. The New River Watershed (Hydraulic Unit Code 0350208-130) is comprised of approximately one hundred square miles (68,000 acres), and is classified by SCDHEC as Class SA Tidal saltwaters at WQMS MD-118 (see Figure 5.6) Class SA tidal saltwaters are suitable for primary and secondary contact recreation, crabbing, and fishing, except harvesting of clams, mussels, or oysters for market purposes or human consumption. Station MD-118 is also on the 2008 Impaired Waterbody List, with usage restrictions for recreation and fish consumption due to fecal coliform and mercury excursions.

The Broad River/Port Royal Sound Watershed (Hydraulic Unit Code 03050208-090) receives stormwater generated by portions of the eastern limits of Hardeeville, particularly portions of the Okatie Crossings and East Argent Tracts, which is conveyed to the Okatie River and then the Colleton River until eventually flowing into the Chechessee River which terminates into the Port Royal Sound. This 420 square-mile (267,240 acre) Watershed is primarily comprised of open water and forested land. WQMS MD-176 (see Figure 5.6) is located in the Colleton River at its junction with the Cheschessee River, and is classified by SCDHEC as Outstanding Resource Waters (ORW), which are freshwater or saltwaters that constitute an outstanding recreational or ecological resource or those freshwaters suitable as a source for drinking water supply purposes with treatment

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levels specified by the Department. This tidally influenced system consists of marsh drainage which is characterized by naturally low dissolved oxygen (DO) concentrations. Recreational uses are fully supported, and the station has shown a decrease in fecal coliform concentrations. Station MD-176 is also on the 2008 Impaired Waterbody List, with usage restrictions for aquatic life due to low levels of DO.

A number of Shellfish Monitoring Stations are maintained within the Okatie River and the New River, the majority of which are on the 2008 Impaired Waterbody List with usage restrictions for shellfish harvesting due to elevated fecal coliform concentrations. Both the Savannah River and New River are currently under a Fish Consumption Advisory due to Mercury concentrations. Although this and the aforementioned impairments do not present an immediate danger to Hardeeville citizens, the City should coordinate efforts with SCDHEC in order to increase public awareness and understanding of these conditions. The City of Hardeeville currently supports and coordinates efforts with several non-profit conservation organizations who work to protect the quality of water resources by providing public education and information to the Lowcountry, including 'Friends of the Rivers' and the Coastal Conservation League.

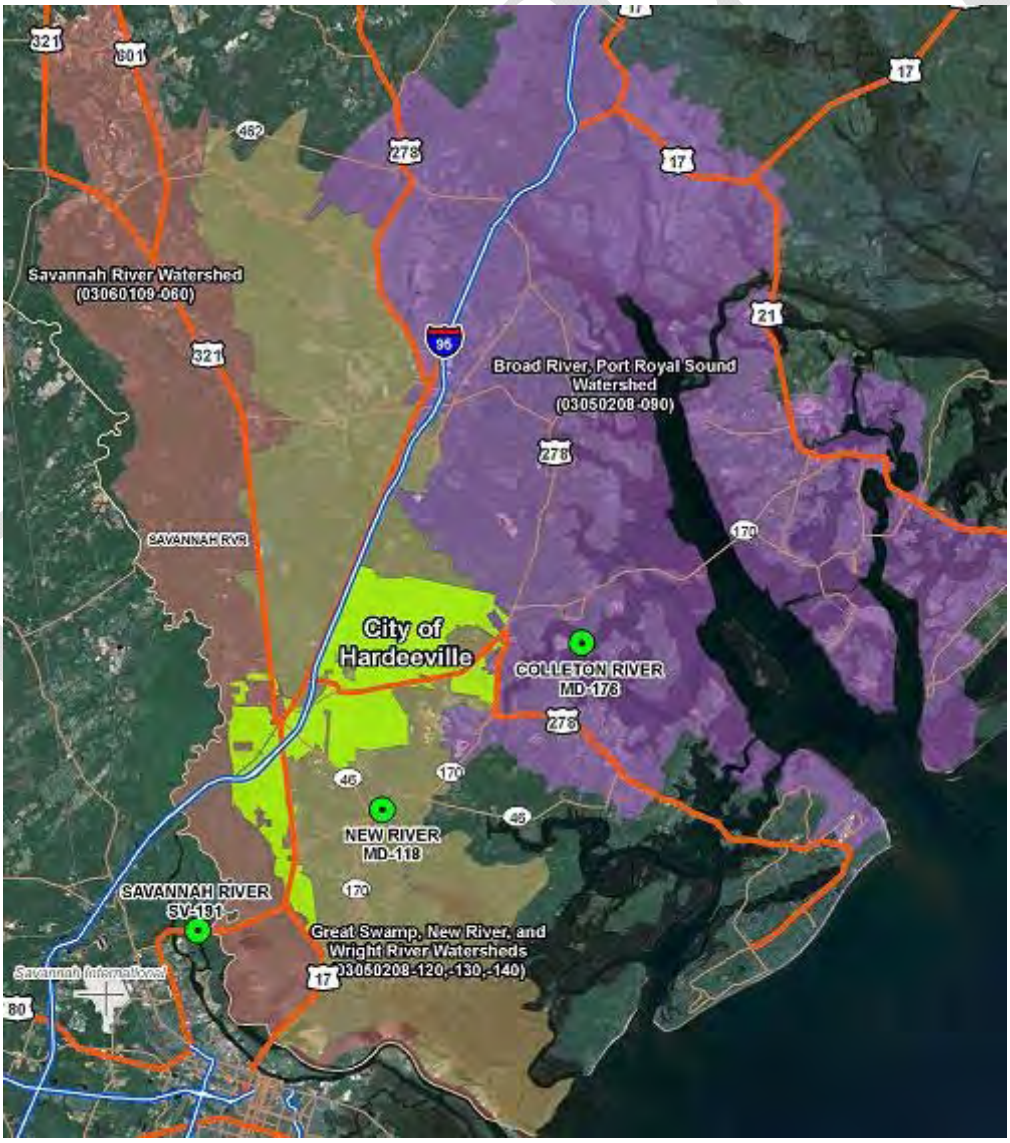

Figure 5.6 - Watersheds

Flood Plains

The topography of the area is relatively flat with elevations ranging from approximately ten (10) to twenty-seven (27) feet above sea level and despite the City's proximity to major water bodies, there are no significant streams near downtown Hardeeville. Stormwater runoff travels through ditches and minor creeks until it reaches wetlands and floodplains, many of which are forested. According to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map, a significant portion of the City of Hardeeville is located within the 100-year flood zone. Those areas designated as 'Zone A' are within the 100-year flood plain as determined by approximate methods; the 'Zone AE' flood plain was determined by detailed methods, therefore Base Flood Elevations are available, but are not analyzed as part of this Plan. Mandatory flood insurance purchase requirements apply to both zones, which is addressed within the City's MZDO.

The City should continue to be mindful of development within these low-lying areas, ensuring that construction of public stormwater facilities complies with regulations set forth by FEMA and the United States Army Corps of Engineers (USACE) for flood-prone areas and Waters of the State (WoS). Public land uses to consider for floodplain development include recreational fields, boardwalks and walking trails, and other low-impact, non-intrusive developments. In addition, the City should maintain updated copies of FEMA Flood Maps and other related information on file for public information and review.

Figure 5.7 – Low-laying areas near Downtown

Figure 5.8 – Moderate to heavy rain can flood many areas of the City.

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Wetlands

Wetland habitats are defined as those areas that are inundated by water with sufficient frequency and duration to support vegetation that is tolerant of saturated soil conditions. The USACE utilizes specific hydrological, soil-type, and vegetation criteria in establishing the boundary of wetlands within their jurisdiction. Wetlands are one of the most valuable assets to a community's ecosystem, in that they provide natural water storage and flood control, and also biologically filter and treat stormwater runoff before it returns to the groundwater system or enters major waterways. In addition, wetlands provide important habitats and spawning grounds for numerous species of flora and fauna, especially for amphibians and birds. Wetlands also provide a means of recreational enjoyment, whether observed from scenic overlooks, or from boardwalks and nature trails.

Figure 5.9 – Forested and non-forested wetlands persist in Sgt. Jasper County Park

The majority of wetlands located within Hardeeville are those immediately associated with the Savannah and New Rivers, although some small, isolated wetlands systems also exist (Figure 5.10). According to the National Wetlands Inventory (NWI), the wetlands within the City of Hardeeville are classified as Palustrine (P), which includes all nontidal wetlands dominated by trees, shrubs, emergents, mosses or lichens, and all such wetlands that occur in tidal areas where salinity due to ocean derived salts is below 0.5 parts per trillion (ppt). The NWI code for New River's wetlands (Code PFO1/2A,C,F) indicates that these are forested (FO) wetlands with predominantly broad-leaved (1) or needle-leaved (2) deciduous trees, and that they are either seasonally (S), temporarily (A), or semi-permanently (F) flooded. Wetlands associated with the Savannah River (Code PEM1A,C and PSS3A) are dominated by either emergent (EM), or non-woody (i.e. non-forested) vegetation consisting of mosses, grasses, and some flowering vegetation, or scrub-shrub (SS) evergreen vegetation.

The natural beauty of wetlands habitats makes them an attractive asset to any property proposed for development; therefore, a balance must be maintained between providing access to these systems while avoiding impacts. The City's MZDO (Section 4.3) allows developers to utilize up to 50% of wetlands for Open Space Credits, and also requires developments to meet or exceed requirements set forth by the USACE, SCDHEC, and SCDHEC's Ocean and Coastal Resource Management (OCRM) Division. As stringent as they may appear, the stipulations of these public agencies do not altogether prohibit the impact of wetlands by development. Depending on the scale of a particular development, wetland preservation and/or restoration mitigation credits may be purchased to allow the developer to impact wetlands within their project boundary and restore them within another system. The City of Hardeeville should provide cursory oversight during the wetland mitigation process, coordinating with the USACE's project manager to ensure wetlands restoration remains within local wetland systems. Newkirk Environmental operates the Sweetleaf Swamp Mitigation Bank north of Hardeeville for this purpose.

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Water Quality

Natural purification systems such as wetlands serve to treat and purify stormwater as it is returned to the natural cycle. However, these delicate natural systems should not be depended on solely for water quality management, but should be preserved and supplemented by Best Management Practices (BMPs) incorporated into new developments and carried out by the City of Hardeeville as part of regional stormwater improvement or management projects. As outlined in the MZDO and further discussed in the *Stormwater Management* portion of this Plan (Chapter 6), the City should hold each new development accountable for the addition of impervious area to a watershed, which increases the amount of stormwater runoff generated and the rate at which it discharges compared to pre-development conditions. Practices that may be used to address stormwater issues without sacrificing site area for large detention pond construction include the implementation of underground runoff storage, 'bioswales' (or bioretention/infiltration ponds), and pervious pavement technologies. The City may also elect to offer incentives to developers for incorporating green-buildings and other environmentally proactive development practices into their site plans.

The City should also remain active in the coordination and implementation of County-wide plans, such as the Jasper Soil and Water Conservation District's (JSWCD's) Natural Resources Conservation Plan. This document should serve as regional guidance for the protection and promotion of Jasper County's bountiful natural amenities, as well as the management of rapidly expanding urban growth and minimizing its impact on the environment.

Regular inspection and maintenance of public and private stormwater facilities, including South Carolina Department of Transportation's (SCDOT's) roadside ditch system, the City's stormwater pump stations and regional ponds, as well as detention (dry) and retention (wet) ponds located within private developments will ensure that they continue to perform as designed, and will prevent such contaminants as litter, oils, and other toxins from entering the natural ecosystem. Routine maintenance and necessary upgrades to these facilities should be implemented in the future as part of the City's Stormwater Utility.

Groundwater

As discussed further in Chapter 6, the City of Hardeeville receives its potable water from Beaufort-Jasper Sewer & Water Authority (BJWSA) surface water plants. Some Municipalities and Public Service providers throughout lower South Carolina draw their water from the Upper Floridan Aquifer, which is one of the most prolific ground water sources in North America, underlying over 100,000 square miles of Florida and parts of Georgia, South Carolina, and Alabama. In Beaufort, Jasper, Hampton, and Allendale counties, ground water is generally located within the upper one hundred feet of Ocala Limestone, and is as much as one hundred feet thick in Southern Jasper County. Groundwater yields as high as 3,000 gallons per minute (GPM) have been reported. However, saltwater intrusion threatens this aquifer, especially in areas nearest to the coast. In the event that ground water is pumped from the aquifer at a rate greater than it can naturally recharge or recover, saltwater from the Atlantic Ocean is drawn in to replace it. The Beaufort Jasper Water and Sewer Authority is actively taking measures to reduce this affect, such as Aquifer Storage Recovery, and using surface water as an alternative, which is discussed further in Chapter 6. In addition, collaborative efforts should be made state-wide and across the state line to Savannah in order to monitor and address the well-being of the Floridan Aquifer.

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Efforts are being made as part of a recent nationwide movement to conserve water through more sound architecture and site development practices. The City of Hardeeville should consider incorporating updated landscaping requirements favoring native vegetation and xeriscaping (i.e., landscaping that reduces or eliminates the need for supplemental irrigation) into the MZDO in order to reduce the percentage of drinking water being used outdoors. These practices not only help to conserve a valuable natural resource, but will also encourage more modern building and landscape design ideals. As previously cited, protecting existing, and even creating new wetlands habitats, will also aid in protecting nature's built-in water-processing cycle.

Wildlife Habitat

General

The Lowcountry's abundance of hardwood and pine forests, as well as forested and non-forested wetlands accommodates the existence and propagation of many diverse wildlife populations that could not flourish elsewhere. Wildlife diversity is most impressive along the wetland areas of creeks, rivers, and streams, as this terrain provides a spawning and nursing ground for fish and amphibian populations, which in turn attract many types of birds, particularly flocks of migratory birds during winter months. The number of different species is among the highest in the state with hundreds of different plant, fish, bird, amphibian, and mammal species residing in the wetlands within or adjacent to the City of Hardeeville. In addition to supporting more delicate species of fauna and flora, Hardeeville and its surrounding area also host a healthy population of wild game, including wild turkey, deer, and waterfowl, making this area a popular hunting and fishing destination.

Figure 5.10 – Red-Cockaded Woodpecker

Figure 5.11 – Short-nose Sturgeon

Rare, Threatened, and Endangered Species

As the Hardeeville area plans for future development and growth, protection of wildlife and species of concern will need to be taken into consideration. Species of concern on the state-wide level are considered to be any plant, fish or wildlife species designated by State agencies as rare, endangered or threatened. A species is generally listed as rare, threatened or endangered due to the reduction of suitable habitats, or because of predation or natural causes. An 'Endangered' species is defined as when the best available evidence indicates that the species is facing a high risk of extinction in the wild (JSWCD Conservation Plan, 2007). Species of concern for the Lowcountry and Jasper County in particular include the

Bald Eagle, Gopher Tortoise, the Red-Cockaded Woodpecker (Figure 5.10), the Short-nose Sturgeon (Figure 5.11), and the Flatwoods Salamander. Several of these species have been documented within the City of Hardeeville or within close proximity to the city limits. A detailed list and corresponding map showing sighting locations of these rare, threatened, or endangered species is included as in Appendix B. Some of the species are listed as state-wide critically imperiled, depicting extreme rarity or because of other factor(s) making it especially vulnerable to extirpation.

Wildlife Management

Although fragmentation and loss of wildlife habitat is often a consequence of development, efforts are being made on the county, state, and federal levels to preserve the habitats of these species. For example, the JSWCD's Natural Resources Conservation Plan outlines a strategy to identify, promote, and protect suitable habitats throughout the County, as well as to restore and create new habitat corridors. It is recommended that the City of Hardeeville and its private landowners become active in the planning and implementation of these strategies.

The USACE requires that a Threatened & Endangered Species (T&E) Study be conducted in conjunction with Wetland Determinations should a public or private development propose impacts to wetlands. A T&E Study typically consists of researching United States Fish and Wildlife Service (USFWS), South Carolina Department of Natural Resources (SCDNR), and NRCS databases for suitable habitat conditions or documented sightings of species currently on the Threatened or Endangered Species List. A certified Wetlands Scientist or Biologist will then conduct field reconnaissance in order to determine whether the site in question possesses the necessary habitat required to support the species. Should the study determine that the site supports these natural habitats, the property owner/developer is required to take necessary preservation measures to ensure that the development will not involve impacts. Similar to wetland mitigation policies, the owner may elect to pursue species relocation or habitat restoration procedures to account for any impacts proposed. The City should also provide cursory review and remain involved in this process as well, and consider updating the MZDO to incorporate protection of suitable habitats where mention is made of wetlands.

Conservation Areas and Open Space

The Lowcountry is home to several nationally important wildlife conservation areas owned and operated by the USFWS's National Wildlife Refuge (NWR) System, namely the Savannah, Pinckney Island, and the Tybee National Wildlife Refuges, all of which are located within twenty miles of the City of Hardeeville. The majority of the western Hardeeville boundary meets the Savannah National Wildlife Refuge, which should be considered an asset to properties along US 17 and SC 170, and carefully evaluated when planning developments through this corridor.

Savannah National Wildlife Refuge (NWR) is located on SC 170 just six (6) miles south of the City of Hardeeville and lies on both the South Carolina and Georgia sides of the Savannah River upriver from Savannah, Georgia. The Refuge was established in 1927 and includes more than 29,000 acres consisting of bottomland hardwoods and tidal freshwater marsh, a 3,000 acre fringe area of upland hardwoods along the eastern boundary, and an additional 3,000 acres forming an impoundment system which is currently managed for migratory wading birds and waterfowl. The Savannah NWR is one of seven refuges (making up a chain of national wildlife refuges) administered by the Savannah Coastal Refuges Complex, which is just a portion of the 550 refuges that make

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up the National Wildlife Refuge System (NWRS). The NWRS is managed by the US Fish and Wildlife Service (USFWS), the world's premier system of public lands and waters set aside to conserve America's fish, wildlife and plants. The chain of Savannah Coastal Refuges cover 100 miles of coastline extending from areas near Hilton Head Island, SC to southward near Darien, GA. The Savannah NWR is the largest in size and is home to a vast diversity of wildlife including: ducks, geese, wading birds, shorebirds and several endangered and/or threatened species including bald eagles, wood storks, manatees and shortnose sturgeon. The refuge also provides nesting areas for wood ducks, great horned owls, bald eagles, osprey and swallow-tailed kites. The Savannah NWR not only provides habitat to a variety of wildlife species but also attracts people from all over the country to take advantage of the prime hunting, fishing and other recreational activities offered by these pristine lands in the heart of the Lowcountry. Hardeeville's close proximity to the NWR is a great benefit and natural asset to the local community, and coordination should continue with the Savannah Coastal Refuges Complex in order to maximize this valuable natural resource.

Figure 5.12 – A meandering path in Savannah National Wildlife Refuge

One of the largest hunting preserves in Jasper County is Okeetee Club, comprising some 50,000 acres and located along the northern border of the city. Originally erected in 1894; this old clubhouse building of cypress shingle construction was a landmark. Its plainness belonged in a singular way to the entire community, for Okeetee was always considered a hunting club, without frills. A profound sorrow was felt by all local citizens when it was destroyed by fire in 1959. Somehow, a bit of the past went with it. The clubhouse was rebuilt, a handsome, 22,000-squarefoot structure of Charleston gray brick. The two-storied central section is flanked by one-storied wings.

Okeetee is an old institution with a conservative membership. It has always been a corporation, in which shares are held by each member. In the agricultural operations, the club leases 6oo to 700 acres of land each year to various persons for growing corn and soy beans. Also, some 300 acres are devoted to grain-strip planting for the birds. The entire area contains 10,000 acres of reforested lands. (Source: *The Moving Finger of Jasper County* – G.F. Perry)

Natural Resource Enjoyment and Education Areas

Several natural resource education facilities exist within close proximity to the City of Hardeeville, and opportunities are available within City Limits to incorporate natural resource education into existing common areas and parks. The JSWCD operates the Blue Heron Nature Center in nearby Ridgeland, which is a 4,200 square foot facility specifically built to fulfill natural resource educations needs of the County. The Center offers public workshops, classrooms, and outdoor education opportunities. Also convenient to Hardeeville is the Tillman Nature Trails at Tillman Sand Ridge.

Areas within the City of Hardeeville to be considered for employing cultural and natural resource educational opportunities include Sergeant Jasper Park, the City of Hardeeville Recreational Park, and Millstone Landing, which was recently host to the annual Lowcountry Native American Powwow. In addition, Hardeeville is home

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to numerous swamp areas including the White Oak Nook Swamp, Fox Pond Swamp, and the Great Swamp, which according to the United States Geological Survey (USGS) Topographic Map is located along the New River between the Argent East and West Tracts. The City should pursue the preservation and promotion of these natural areas as development moves forward, particularly incorporating the Great Swamp into the Argent developments. In addition, the City should coordinate funding and planning of natural resource education facilities with the JSWCD, SCDNR, and the USFWS to incorporate amenities such as bird sanctuaries into existing facilities in order to stimulate environmental stewardship and educational opportunities for both Hardeeville citizens and tourists alike.

The history and natural beauty of local plantations such as the Maureen Plantation, located in the northwest quadrant of SC-46 and SC-170, could also be emphasized as educational opportunities for the City. Encouraging the preservation of these plantations by providing economic incentives may also provide further tourist opportunities. Businesses such as bed and breakfasts, vineyards, and small working, tourable, farms of unique agricultural products like aquaculture, and milk goat farms could also be incorporated into these areas.

Other programs that could be promoted by the City through their website, public information kiosks placed within common areas, and through coordination with other municipal entities include the National Wildlife Federation's 'Backyard Habitat' program, 'Project Wildlife,' or 'Carolina Wildlife Care.'

Public Parks and Open Space

As previously cited, the City of Hardeeville operates the City of Hardeeville Recreation Complex, which provides public recreation facilities such as basketball courts, a football stadium, baseball fields, fishing ponds, and a field reserved for playing frisbee, picnicking, and other recreational activities. Also located within city limits is Jasper County's Sergeant Jasper Park, which offers a picnic area and shelter, observation deck, playground, fishing ponds, nature trails for bikes, hiking and birding, an 18-hole disc golf course (Frisbee), canoe/kayak rental, and an activity center. The City should consider these public facilities a great asset in providing recreational and nature-centered entertainment to its citizens.

Figure 5.13 – Trailhead at Sergeant Jasper Park

Hardeeville operates and maintains Millstone Landing, which provides community access to the Savannah River, serving a variety of fishers with a threshold to what has been called one of the best fishing areas in the South. This facility enhances the quality of life and should be regarded as a valuable recreational asset as it allows boaters and outdoor enthusiasts of all types to enjoy the natural beauty of the Savannah.

Figure 5.14 – Allocated open space areas located in Tradition

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The City's MZDO (particularly Section 4.3) successfully promotes the incorporation of Open Space into new developments and master plans, which is critical in avoiding over-clustered development and preserving wetlands and other existing natural areas. Open space within a development also provides its citizens with the opportunity to enjoy recreation without leaving their community, resulting in decreased roadway congestion and healthier lifestyles in general. The City should continue to advocate this practice, and also consider how developments can be connected via a system of City-owned and maintained natural multi-use pathways (this is discussed further in Chapter 7).

Air Quality

Based on available EPA data, there are only seven facilities with air quality permits in the City of Hardeeville. The air quality in the Lowcountry is generally very good and has some of the lowest concentrations of pollutants in the state.

Background Air Quality

The air pollution emissions from Jasper County contributes the following percentages of the total emissions for the State of South Carolina based on the latest published EPA Emissions Data for 2002.

Table 5-1

Air Emissions for Jasper County

Pollutant	Jasper County		South Carolina
	Emissions (tons/year)	*Percentage of Total*	*Emissions (tons/year)*
CO	32,740	1.79	1,828,371
NO_x	3,690	1.04	354,223
SO_2	655	0.20	324,550
PM_{10}	3,034	0.97	312,702
$PM_{2.5}$	1,045	1.30	80,686
VOC	4,524	1.18	385,007
NH_3	209	0.58	36,308
HAPs	744	0.89	83,27006
TOTALS	46,641	0.40	11,648,853

Based on the 2002 EPA data, Jasper County is 23rd in the State for emissions of criteria pollutants and 32nd in the State for emissions of hazardous air pollutants (HAPs).

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Regulatory Review and Permitting Requirements

Currently Jasper County is in attainment with air quality standards; however it is subject to SCDHEC Regulation 62.5 Standard 7 for Prevention of Significant Deterioration (PSD) increments since baseline data has been established for Jasper County. Permitting requirements in South Carolina and Jasper County generally follow federal requirements. Exceptions are that SCDHEC regulations require Lowest Achievable Emission Rate (LAER) technology for all facilities where emissions of volatile organic compounds (VOCs) exceeds 100 tons per year, regardless of whether the facility is located in an attainment area or not. SCDHEC also requires air dispersion modeling for any facility that emits air pollutants above specified levels. If the total uncontrolled emission rate of particulates, sulfur dioxide, nitrogen oxides, and carbon monoxide are less than 1 pound per hour each, dispersion modeling is not required. For toxic air pollutant modeling exemptions, refer to S.C. Regulation 61-62.5, Standard No. 8. Currently SCDHEC does not have any air quality monitoring stations located in Jasper County. There is one monitor located in Ashton, Colleton County that records Ozone and $PM_{2.5}$ and one monitor in Beaufort County that measures TSP and $PM_{2.5}$. Monitoring data from Savannah is looked at for the remaining pollutants.

SCDHEC anticipates that air dispersion modeling will also be required for $PM_{2.5}$ within approximately 2-3 years. SCDHEC has not proposed a baseline date for $PM_{2.5}$ or determined whether the baseline date will be statewide or by individual county.

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Recommendations

Needs

- Current congestion problems along US 278 and SC 170 limit the Highways' throughput capacity, and slow the hurricane evacuation process.
- Whether temporary or long-term, impairments to the Savannah and New Rivers may present health hazards to those who consume fish from the Rivers.
- The preservation of wetlands and their associated threatened or endangered species needs to be coordinated on the County and State levels.
- Accumulation of sediment, oils, and other debris within the City and SCDOT's drainage systems affects their performance and leads to the degradation of wetlands and large water bodies.

Policies & Implementation

- Continue to coordinate with Jasper County and the SCDOT in implementing transportation upgrades to facilitate hurricane evacuation.
- Coordinate with SCDHEC and other local non-profit conservation agencies in keeping the public informed of water conditions and restrictions imposed on local water bodies.
- Continue coordination with FEMA and USACE to ensure all developments within floodplains comply with regulations, and also maintain most current Flood Maps on file for public information.
- Remain involved and provide cursory review to the wetlands mitigation process.
- Evaluate offering incentives for developers to incorporate 'green' building and site design practices, which will decrease the amount of drinking water used outdoors. In addition, the City should become familiar with and evaluate ways of attracting these types of communities.
- Coordinate with the JSWCD and assist in the implementation and public understanding of their Natural Resource Conservation Plan.
- Develop strategy to maintain public drainage ways and structures in order to keep them functioning at optimum capacity and prevent degradation of wetlands and large water bodies. Work with SCDOT in promoting Adopt-A-Highway programs.
- Consider updating MZDO with more progressive landscaping requirements including use of native vegetation and 'xeriscaping,' which will reduce the percentage of potable water being used outdoors.
- Update MZDO to stipulate measures to be taken regarding threatened or endangered species when a project involves wetland impacts.
- Pursue the preservation and promotion of natural habitats as development moves forward, particularly incorporating the Great Swamp into the Argent developments. In addition, coordinate funding and planning of natural resource education facilities with the JSWCD, SCDNR, and the USFWS.
- Consider planning and incorporating natural, City-wide multi-use pathways connecting residential developments between themselves and retail and commercial destinations.

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Chapter 6
Community Facilities

Introduction

Community facilities include a wide range of services provided by a local government, as well as some provided by other governmental agencies or private entities. They include: boards and committees, utilities, stormwater management, water and wastewater systems, fire and police protection, solid waste and recycling services, recreational facilities, and governmental facilities. Identifying current gaps in service and planning for future needs is vitally important for the city. This section will review existing conditions and identify goals and strategies for Hardeeville to pursue in the provision of community services.

Community Facilities Strategy

Without adequate community facilities and services, growth and development cannot be sustained; therefore, careful infrastructure planning is a key component in realizing the City's long-range development goals. The best approach in planning for community facilities lies in managing public investment in infrastructure wisely. Through the identification and prioritization of community facility needs, the City can work toward meeting both existing deficiencies and long-term demands in a timely and efficient manner. To do this, the City of Hardeeville should develop a five-year infrastructure investment plan (also called a Capital Improvements Program, or CIP) that establishes realistic goals for infrastructure development. The purpose of a CIP is to anticipate the City's community facility needs and provide those facilities at a reasonable cost. Elements of a CIP include:

- An inventory of public facilities, existing capacities, and current deficiencies
- A five-to-ten year projection of future service demands and maintenance/ replacement needs
- Policies governing the use of financing arrangements for various facilities
- A list of priority projects
- A capital improvements budget, listing the timing, location, and financing arrangements for projects.

Items commonly included in a CIP include municipal buildings, police and fire equipment, solid waste disposal, roads and sidewalks, water and sewer lines, treatment plants, and parks. Once completed, the CIP will not only give the City a realistic plan for meeting community facility needs, it will also serve as a valuable tool in evaluating future annexation and development proposals.

Boards and Committees Inventory

- City Council
- Planning Commission
- Board of Zoning Appeals
- Municipal Election Commission
- Accommodations Tax Committee
- Building Board of Appeals
- Economic Development Alliance
- Public Facilities Corporation

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Public Facilities

The provision of basic public facilities is not only essential to the health, safety, and welfare of the citizens of the City of Hardeeville, but it is a key determining factor in the location and intensity of growth in our community. Public facilities include water and wastewater collection and treatment, electricity, natural gas, solid waste, telecommunications, and stormwater management. Future development typically follows transportation corridors and the density of that development is dependent on the available capacity of public facilities. It is critical that the City of Hardeeville have adequate public facilities in place and functioning at an acceptable capacity to ensure reliable service and quality are available for planned development to occur. Conversely, development can be controlled in particular areas of the City by restricting the expansion of public facilities to those areas.

The City of Hardeeville stands on the threshold of exponential expansion. The population per the 2000 Census was 1,793 and within the past few years with the sell and annexation of large timber tracts nearby, the City of Hardeeville has expanded the city limits from a land area of approximately five (5) square miles (approximately 640 acres) to over 50 square miles (approximately 18,860 acres). As an example, with the annexation of these large timber tracts, mainly along the US 278 corridor, local developers have completed Planned Development Districts and Master Plans (i.e. West Argent, Argent East, Anderson, Morgan, etc.) which will provide over 33,000 new residential units, over 1,500 acres of commercial/retail property and over 1,000 acres of light industrial property.

The following sections provide an overview of public facilities within the City of Hardeeville, capacity of those facilities, and ownership/maintenance responsibilities.

Water

Figure 6.1 – The Savannah River is main water source for the City

The Beaufort Jasper Water and Sewer Authority (BJWSA) provides domestic and fire protection water supply to the residents and businesses of the City of Hardeeville (fire protection service provided by Hardeeville Fire Department, see Public Services Section). This water is provided from both surface and groundwater sources. The majority of the water provided is from the Savannah River, while groundwater wells are only used during times of high demand. In addition, to the Savannah River, BJWSA operates four permanent production wells, one emergency standby well, and two Aquifer Storage and Recovery (ASR) wells. The ASR wells are used as part of seasonal recharge and during recovery cycles. Prior to entering the distribution system, ASR water is blended with distribution system water in a storage tank. With this system, the BJWSA can store up to one billion gallons of water and the water can be recovered at seven million gallons per day (MGD) during the summer months.

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In November of 2001, the BJWSA acquired the City of Hardeeville's water and sewer utility. **Map 6-1** illustrates BJWSA service area within the limits of the City. The BJWSA water distribution system is divided by the Broad River and two Water Treatment Plants – Chelsea and Purrysburg.

The Purrysburg Water Treatment Plant currently produces 15 MGD of drinking water for Southern Beaufort and Jasper Counties, including the City of Hardeeville. The primary source of water for the Purrysburg Water Treatment Plant is the Savannah River, which is located approximately one (1) mile from the plant. The plant is fed either from the Savannah River directly or from its 180 MG dedicated reservoir. The plant was designed for an expansion potential to 45 MGD and BJWSA plans are to have the plant up to this full capacity level in the next 20 years. According to the Water and Wastewater Master Plan (2005), water demands are estimated to double over the next 20 years to as much as an average of 56 MGD and a maximum daily demand of 96 MGD. BJWSA is currently permitted to withdraw 100 MGD from the river. While safe yield of the Savannah River appears to be adequate over the next 20 years, it is important that the quality of the water provided to the citizens of the City of Hardeeville remains high.

Threats of Water Sources:

Groundwater:

BJWSA pumps groundwater from the Floridian Aquifer to supplement water supply from the Savannah River during higher periods of demand. Due to the increase in groundwater pumping from BJWSA and other utility providers, concerns have risen regarding Saltwater Intrusion into this aquifer. The ASR systems described above also hinders any additional encroachment by seawater.

Surface Water:

Of special interest is the presence of tritium in the local surface water source, the Savannah River. Tritium is a radioactive isotope of hydrogen, and may exist from natural processes in the atmosphere, or possibly fallout from atmospheric nuclear weapons testing, and the operation of the Savannah River Site (SRS). SRS currently monitors groundwater on-site for tritium. Levels of tritium in the Savannah River test below the Environmental Protection Agency (EPA) maximum allowed levels of 20,000 picocuries per liter (pCi/L) of water and appear to be declining with each year. The current levels are approximately 1/20th of the allowable drinking water maximum standards. SRS is located 90 miles upstream of BJWSA's water intake station, allowing approximately 78.5 hours of river travel time. BJWSA and the City of Savannah collect tritium samples at the Highway 301 Bridge, approximately 60 hours river travel time to the water intake station. BJWSA provides updates on the levels of Tritium in their Annual Water Quality Report distributed to their customers.

Water System Testing:

The entire water system is regularly tested by both BJWSA and the South Carolina Department of Health and Environmental Control (SCDHEC). Samples are taken from the plant, distribution system, and at water taps. BJWSA, in conjunction with the City of Savannah, has also prepared the Savannah River Basin Source Water Assessment to locate potential sources of contamination. This information

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will aid in the development of zoning ordinances to prohibit certain businesses and industries from locating in the surface water protection area. A copy of the Source Water Assessment Report is available for review at the BJWSA Administration Office or at www.scdhec.net/water.

Even with the saltwater intrusion and tritium concerns, both of BJWSA's water plants have received the Phase III Director's Award from the Partnership for Safe Water (PSW). BJWSA is one of only six utilities in the State to achieve this accomplishment. From the website "The Partnership is a voluntary cooperative effort between the U.S. Environmental Protection Agency (EPA), American Water Works Association (AWWA) and other drinking water organizations, with more than 200 surface water utilities throughout the United States. The goal of this common sense cooperation is to provide a new measure of safety to millions of Americans by implementing prevention programs where legislation or regulation does not exist. The preventative measures are based around optimizing treatment plant performance and thus increasing protection against microbial contamination in America's drinking water supply." By participating in the PSW and achieving the status, BJWSA ranks among the leaders in the industry.

Wastewater

The Beaufort Jasper Water and Sewer Authority (BJWSA) also provides wastewater collection services to the residents and businesses of the City of Hardeeville. The BJWSA operates three wastewater treatment plants – Hardeeville Wastewater Treatment Plant, Cherry Point Water Reclamation Facility and the Port Royal Island Water Reclamation Facility. The Hardeeville Wastewater Treatment Plant and Cherry Point Water Reclamation Facility serve the City of Hardeeville. **Map 6-2** illustrates wastewater infrastructure within the City of Hardeeville. As is typical in the Lowcountry, there are many pump stations and gravity lines which collect and convey wastewater to either the Hardeeville Wastewater Treatment Plant or the Cherry Point Water Reclamation Facility.

Figure 6.2 – BJWSA Wastewater Operations

Wastewater service to the east of the City and I-95 will be directed to the Cherry Point Water Reclamation Facility and wastewater service to the west and south of the City will be directed to the Hardeeville Wastewater Treatment Plant, which is in the process of being permitted for an upgrade from the current permitted capacity of 1.01 MGD to 4 MGD. The plant currently operates at approximately 60% of that capacity and once the plant reaches 80% engineering design will begin. The Cherry Point Water Reclamation facility has a capacity of 7.5 MGD, with long term plans to upgrade to 18 MGD. **Map 6-3** provides an illustration of the major developments that will contribute wastewater to the two facilities. As these developments move forward, both the need for plant expansions and additional water reclamation infrastructure will increase.

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Water Reclamation:

In the first residential water re-use program for BJWSA and the State of South Carolina, BJWSA has partnered with the Tradition Hilton Head to provide all irrigation requirements within development with stormwater runoff and treated wastewater from BJWSA. This water re-use program saves valuable drinking water supplies for drinking water while making use of stormwater runoff and safely treated reclaimed water from the wastewater treatment plant. This alternative irrigation system will assist in lowering the peak demands of the drinking water system during the summer months.

Figure 6.3 – Tradition Reclaimed Water Holding Tank

The Cherry Point Water Reclamation Facility uses advanced technology to turn wastewater into "reclaimed" water suitable for irrigation and landscaping purposes. The water passing through this system has met all SCDHEC biological standards under permit regulations. BJWSA performs additional monitoring to verify that the ecosystem continues to thrive. Any future residential and/or commercial developments and golf courses within the City of Hardeeville can re-use this treated water to irrigate their properties. Currently, BJWSA serves twelve golf courses with either treated wastewater or reclaimed water.

Electric Service

Electric service within the City of Hardeeville and adjacent properties along the municipal boundary is the responsibility of two different providers: Palmetto Electric Cooperative; and South Carolina Electric and Gas (SCE&G). Hardeeville is divided into three service areas: SCE&G, Palmetto Electric, and undedicated service areas. The service areas are depicted on **Map 6-4**. Both providers have established franchise agreements with the City of Hardeeville that detail their particular responsibilities to the citizens of Hardeeville and their distinct areas of service. Some locales are restricted to one provider or the other, while other areas allow customers to choose which provider they prefer.

Figure 6.4 – An electrical transmission line serving the City and surrounding areas

The SCE&G territory (18,750 acres) is mainly located in the northeast portion of the city limits; the unassigned areas (1,800 acres) are located to the west of I-95; and the remainder of the City is within the Palmetto Electric Cooperative service territory (12,700 acres).

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SCE&G:

SCE&G is the principal subsidiary of SCANA Corporation, a $10 billion Fortune 500 energy-based holding company whose businesses include regulated electric and natural gas utility operations, telecommunications and other non-regulated energy-related businesses. SCE&G serves close to 307,000 natural gas customers in a service area more than 23,000 square miles in central and southern South Carolina. They also generate, transmit, distribute and sell electricity to approximately 650,000 retail and wholesale customers throughout South Carolina.

SCE&G's Jasper generating plant represents the latest in clean-burning, gas-fired technology. The 875-megawatt facility reinforces the company's belief that the most reliable way to operate its system is by owning its own generation, meaning that SCE&G owns and operates enough power plants to produce enough electricity to successfully serve its customers. The Jasper Generating Station is capable of producing enough electricity to serve more than 280,000 homes. SCE&G has also forecast a need for baseload electric generation around the 2016 timeframe. This forecast includes the anticipated growth in and around Hardeeville, SC. The company, in partnership with Santee Cooper, has selected nuclear power as its first option to fill that need. Two new nuclear units are to be located at the V.C. Summer Nuclear Station site near Jenkinsville, S. C. and will allow SCE&G to meet the future electric needs system wide.

Palmetto Electric Cooperative:

Palmetto Electric Cooperative, the Touchstone Energy ® Partner is part of the South Carolina customer-owned utility companies. Palmetto Electric has purchased electricity from several sources to meet the growing needs of its members. In 1949, it began buying electricity generated by Santee Cooper from Central Electric Power Cooperative. Central, which today represents fifteen electric cooperatives from Newberry County to the coast, purchases electricity at reasonable rates for its member cooperatives. The Cooperative offers innovative programs that can assist in rate reductions, enhance the safety and convenience of electricity, and fund community services to nearly 65,000 customers in Beaufort, Jasper, and Hampton counties. SCE&G, Palmetto Electric Cooperative and City of Hardeeville need to continue coordination and communication to ensure long-range plans and goals are consistent.

Energy Conservation Opportunities:

Palmetto Electric Cooperative has committed to energy conservation with several new public campaigns. One program is the CFL (compact fluorescent light) program. This is a ten year plan to place 7 million bulbs in cooperative homes statewide. Palmetto Electric Cooperative will provide each residential consumer two (CFLs) in the mail, which will save a home $60 or more in energy costs of the life of the bulb. In addition, these two bulbs will eliminate over 900 pounds of greenhouse gas emissions and if all Palmetto Electric Cooperative customers used them that would prevent 50 million pounds of greenhouse gas emissions.

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GreenPower is another program offered by Palmetto Electric Cooperative to its customers. In conjunction with Santee Cooper, members are offered a chance to buy energy produced by renewable resources such as methane gas from landfills.
SCE&G's new Jasper Generating plant contains the latest clean-burning, gas-fired technology. The Jasper plant is the largest on SCE&G's system and will help meet the energy needs of customers into the next decade. To preserve the environment, the plant has several systems in place. Each unit has a steel exhaust stack 190 feet tall with analyzers that continuously measure the amount of pollutant gases in the exhaust system. Low-NOx Combustion systems control nitrogen oxide emissions. SCR (Selective Catalytic Reduction) further reduces NOx emissions. Sulfur emissions are controlled by limits on sulfur content in the fuel.

The plants cooling system is closed-cycle, drawing make-up water from the BJWSA adjacent canal. Cooling tower blowdown and boiler blowdown are returned to the canal via holding ponds. It is then mixed with effluent from the nearby BJWSA water plant. Return water is carefully monitored with on-line instrumentation to ensure its purity.

Renewable Energy Opportunities:

Palmetto Electric Cooperative also offers a pilot program for net metering for members who wish to install their own renewable energy generation facilities, such as solar systems in their homes. Net metering allows consumers who produce more electricity than they can use to sell the excess to the cooperative. Palmetto Electric Cooperative has also partnered with nearby Hilton Head Middle School to become the state's first Solar School. This program provides hands-on education for students to learn about renewable energy and its importance in our futures.

Green Building Opportunities:

As the development of the City continues to increase, the City may wish to look to encourage home builders and developers to be sustainable in their construction practices. This "green" building practice will continue to meet the needs of the citizens while also preserving the environment in the present and future. These communities will encourage recycling, water conservation, using renewable resources, and conserve natural resources.

Natural Gas

SCE&G is the sole provider of natural gas service to the City of Hardeeville. The locations of the natural gas lines within the City are illustrated on **Map 6-5**. The primary gas lines are located along SC 170, US 278, Traditions Boulevard, May River Road (SC Road 46), Red Dam Road, and Sun City Boulevard. Based upon a review of Development Agreements with local developers and the City, SCE&G is able to provide natural gas service to these new developments. Typically, SCE&G reviews local natural gas loading requirements within certain areas and then assess whether to extend new lines to these areas. As SCE&G plans and coordinates any new natural gas lines with both the City and developers, it will be necessary to assess the development

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potential of surrounding areas as well as the full build-out of these developments. With this is mind, coordination between all entities involved is essential to meeting the needs of local citizens.

Figure 6.5 – Stormwater management practices within Sergeant Jasper Park protect the quality of existing marsh areas

Stormwater Management

Understanding that natural resources, such as wetlands, marshes, estuaries, and "Carolina Bays" are of significant importance to the citizens of the City of Hardeeville, Stormwater Management must be considered of equal significance. As development of the City increases and the number of impervious acres increases, it is imperative that the quality of stormwater runoff continue to be addressed. As the City's ordinance states, "Proper management of the quality and quantity of stormwater runoff will minimize damage to public and private property, insure a functional drainage system, promote the attainment and maintenance of water quality standards, enhance the local environment associated with the drainage system, maintain as nearly as possible the predevelopment runoff characteristics of the area, and facilitate economic development while mitigating drainage impacts."

In order to continue to protect the well-being of its citizens and natural resources, it is imperative that the current stormwater management facilities are maintained to acceptable levels of service. The City has taken steps related to stormwater management by completing a study of 'Stormwater Infrastructure Inventory and Mapping' in September 2003. This report identified many of the needs and recommendations for the City. It is recommended that this report be updated as some improvements may have been completed or their may be additional needs within the city limits.

The City has experienced a history of flooding in areas in and around "Downtown Hardeeville". This area of "Downtown Hardeeville" includes the following areas:

- Boyd/Coburn/Bush Streets
- Keller Place (Subdivision)
- Walsh Drive
- Epps/Carrol Avenue
- Garr/Charles/First Street

Figure 6.6 – Roadside Drainage Ditch with Standing Water

The majority of the areas above flow to the New River, which is routed through the existing ditch network towards Interstate 95 and eventually to the New River. Many of these ditches within "Old Town Hardeeville" are located on private property and therefore the City does not have access. With this being the case, the City cannot

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consistently maintain these areas to levels necessary to continue stormwater flow downstream. The City will continue to work with private landowners to address local stormwater management. There has been cooperation between the City, local residents, the County, and the State thus far and this will continue in order to address stormwater management.

As of May 2009, the City currently operates two stormwater pumping stations which are located on McTeer Street and along US 17 (South). These pump stations and associated storm drainage infrastructure are currently not operating effectively to convey stormwater downstream. Therefore, the areas surrounding the pump stations are consistently experiencing standing water and flooding. The City is currently in the process of evaluating these areas.

- US 17 (South) Pump Station Recommendations - There is a need to replace the pump and wetwell, regrade pond banks, establish grassing and place rip-rap around pond, and install a screen to minimize silt entering the pump. This is a long term need which the City is working with County and SCDOT personnel to address.

- McTeer Pump Station – To alleviate the standing water there is a need to regrade the outfall ditch approximately 2–3 feet below the outfall pipe invert. To alleviate the flooding a preliminary stormwater study with some additional topographic survey, hydrologic and hydraulic modeling of the ditch and pump station would be necessary.

- The City of Hardeeville Industrial Park currently experiences flooding due to lack of stormwater infrastructure downstream.

In addition, the Public Works Department has cited several downstream issues on US 17 South that are causing drainage problems in the City of Hardeeville. The South Carolina Department of Transportation (SCDOT) is aware of this problem and has repaired several culverts to attempt to rectify the situation. As similar issues arise with regard to state maintained storm water facilities, communication and coordination with the SCDOT should continue. There are potential Community Development Block Grant (CDBG) opportunities available for new projects to address stormwater management and the City will continue to look to outside sources for assistance.

The City currently addresses stormwater management and erosion and sediment control (Section 4.9) through their ordinance. This ordinance provides guidance to engineers and developers as to stormwater design requirements for development within the City; however, with the increase in development there will be a need for City and County personnel involvement with Stormwater Management. With the establishment of a Stormwater Management Utility (SMU) in the County, coordination efforts between the City and the County would be responsible for maintenance, construction, inspection, and control of stormwater facilities which will

Figure 6.7 – Stormwater utility fees could be utilized to correct areas of standing water

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protect the natural resources of the City. The ordinance would need to identify the goals of the SMU, establish the SMU and utility fund, purpose and responsibility of the SMU, and scope of the SMU. As part of the creation of the SMU, a schedule of stormwater utility service fees based upon the development category and/or amount of impervious area within each development. The revenue from these fees would be applied to any stormwater management maintenance, design, construction, and inspection. In the development of the utility the following documents would need to be completed: a Stormwater Master Plan for the County would need to be completed to identify a baseline for water quantity and quality levels; a Manual for Stormwater Best Management Practices; and a Stormwater Cost of Service/Rate Study.

Solid Waste and Recycling

Waste Pro, a private waste removal service company, has provided waste collection services for the City of Hardeeville and residents living in and around the City of Hardeeville. Area residents have the option to pay for curbside collection of waste or haul to a permitted facility (e.g., convenience center, landfill, etc). The City does not currently have a recycling program in place nor does Waste Pro provide curbside recyclable collection. It should be noted that Waste Pro does provide curbside recycling pickup for residents in Ridgeland and other parts of Jasper County. With enough participation, Waste Pro could provide curbside collection of recyclables for the Hardeeville area. In those areas of Jasper County where Waste Pro does provide curbside recyclable collection, items collected include:

- Cans (aluminum)
- Plastic bottles and jugs (#1, #2)
- Glass (green, brown, clear)
- Paper (newspaper and inserts, cardboard)

The nearest convenience center to the City is approximately four miles to the south on Toomerville Loop. It is staffed and operated by Jasper County personnel. The drop-off center accepts household waste for transfer to a Municipal Solid Waste (MSW) Landfill for disposal. The center also accepts the following items for recycling:

- Aluminum and steel cans
- Plastic jugs and bottles
- Newspaper and inserts
- Office paper
- Cardboard
- Magazines and books
- Used oil filters
- Used oil (must be poured into a collection tank of site)
- Empty oil bottles
- Used tires

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- Lead-acid batteries
- Scrap materials
- White goods (refrigerators, stoves, washers, dryers, etc.)
- Yard trimmings (leaves, pine straw, limbs and branches)
- No contractors will be allowed to use the drop off centers
- Construction and demolition debris (C&D)
- Glass (brown, green, and clear)
- E-waste (computers and electronics)
- Paints
- Cooking Oil (from resident ONLY)
- Used antifreeze
- NO hazardous material can be accepted at the drop off

The City does not own or operate a convenience center nor does it provide collection points for recyclables. The nearest landfill for municipal solid waste is approximately 17 miles from the City (Hickory Hill MSW Landfill), while the nearest landfill for construction, demolition and land clearing debris is approximately 19 miles from the City (Oakwood C&D Landfill).

Figure 6.8 – Sign along Church Road promoting keeping Jasper County clean

The City continues to work with "Keep Jasper Beautiful" in securing funding for a recycling program through potential grant monies. The recycling program would include at a minimum recycling collection points at City Hall, area parks, and the City's Public Works building. Waste prevention and recycling can result in significant reductions in greenhouse gas emissions. According to DHEC's Fiscal Year 2007 solid waste management annual report, Jasper County (population: 21,809) recycled 6531 tons of MSW (glass, metal, paper, plastic, banned items, miscellaneous) resulting in an environmental impact equivalent to: eliminating electricity usage by 2,132 households for one year; 136 acres of forest preserved from deforestation; or conserving 1,892,044 gallons of gasoline. The City of Hardeeville's population of 2,300 (according to www.cityofhardeeville.com) makes up more than 10% of Jasper County's population. If Jasper County's percentages of recycling to population remain consistent, a City of Hardeeville recycling program could be equivalent to eliminating electricity usage by 224 households for one year; 14 acres of forest preserved from deforestation; or conserving 198,600 gallons of gasoline. While residents in and around the City of Hardeeville do contribute to the 6531 tons of recycled waste in Jasper County, that number would undoubtedly increase with more convenient collection points, especially curbside collection.

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In consideration of future development within the City, a more convenient disposal location could be beneficial. According to current location restrictions through DHEC's Demonstration of Need regulations, a Class Two landfill that could accept construction, demolition, and land clearing debris could be located in the Hardeeville area. In locating a future landfill, the site would need to be consistent with Jasper County's Solid Waste Management Plan, any applicable zoning and land use ordinances, as well as all siting criteria established in DHEC's solid waste landfill regulations. It should be noted that the process of permitting a landfill has become very lengthy after new solid waste landfill regulations became effective in 2008 (likely 2-3 years for a Class Two landfill).

Before determining a course of action for any of the City's solid waste/recyclable collection projects, it is highly recommended that a thorough cost analysis study be done on the City's current expenses and potential options related to solid waste/recyclable collection and management. The study should address all costs related to solid waste/recyclables including staff dedicated to collection and management, equipment used, fuel consumed, disposal fees, and site management.

Communications

Telephone, cable, and internet services for the City are primarily provided by Hargray, which has been a part of the community for 60 years and has been run as a family business until recently when the business was sold. Hargray serves all of Jasper County from the Savannah River Bridge on US 17 to Switzerland on US 321 to Tillman. Hargray provides several levels of telephone service ranging from local, long distance, and international calls. In addition, Hargray offers both traditional dial-up access and modern broadband high speed internet service. A comprehensive list of local Wi-Fi sites is not available, but through anecdotal information it has been determined that Wi-Fi sites in the City of Hardeeville include but may not be limited to: Hardeeville City Hall/Community Campus/Recreation Complex; Hardeeville Community Library; McDonalds on the eastern side of Exit 8; and Bobops on the western side of Exit 8. Hargray offers a "Value-Added" package that "bundles" all three services (i.e., telephone, cable, and internet) for a single, reduced price over purchasing the same service individually.

Regarding wireless telephone service, in addition to Hargray, Nextel, Verizon, and Alltel have towers in the area and are able to provide cell phone service to residents. Even though there are several providers in the area, "holes" in cell coverage do exist within the city limits and as one travels outside the City on more rural routes. Due to the rural nature of the area, it becomes a public safety concern since most individuals are relying more on cell phones for daily use and emergencies.

Currently, Hargray is the sole provider for telecommunication services; however, Embarq and Time Warner were recently granted Franchise Agreements to serve within the area. This was granted in 2007, under Title 58, Chapter 12 SC Code of Laws where both Embarq and Time Warner were granted franchises based on State-Issued Certificates of Franchise Authorization. The addition of these two (2) companies to the market may decrease the price of services due to the increased competition for market share. Currently, the market may only be able to sustain Hargray; however, as planned new developments move forward, the market will expand. Dish Network and DirecTV satellite providers are also within the City, which offer additional options to citizens.

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Recreational Facilities

Among the many benefits that residents and visitors of Hardeeville often list are the city's recreational facilities and programs. While the community has traditionally been supportive of outdoor activities for all ages, for many years the facilities in the City did not live up to the community's enthusiasm or expectations. Due in part to the City's auspicious planning initiatives which secured additional funding and support for city-owned facilities, citizens have begun to see notable and vast improvements in the recreational offerings that the city provides.

Recreation Complex

The City's combined Public Works / Parks & Recreation staff is responsible for the operations and maintenance of the City's Recreation Complex, which is located along Jim Hatter Way immediately behind the Hardeeville City Hall and the Hardeeville Senior Center.

Beginning in 2004, the City began its multi-phased improvement plan to upgrade its recreational amenities. Phase I was completed in 2005 and featured the newly renovated and dedicated football field, four baseball fields, and a multiuse practice field. Phase II was completed in 2008 and brought to the complex the addition of restroom and concession facilities. Additional renovations were made in 2008 to the multi-purpose field and to configure one of the larger fields for collegiate standards. In 2009, the University of South Carolina Beaufort Sand Sharks played their inaugural season on the improved field.

Currently, the City boasts a lighted, regulation-sized football field with a capacity for 2,000 spectators, a lighted, multi-purpose field for football and soccer, and a recently completed field house comprised of a concession stand, player locker rooms, and restrooms. The Hardeeville High School Hurricanes played their inaugural and second seasons of football at Municipal Stadium (in 2007 and 2008, respectively) while their football field was being constructed and brought to regulation standards. The Hardeeville Patriots youth team continues to call the field its home, and twice a year, adult flag-football league games are held at Municipal Stadium.

For baseball and softball, the Richard Gray Baseball Complex features two 205-foot fields for youth leagues, one 400-foot field for intramural adult softball, and one regulation-sized baseball field for high school, collegiate, and minor league squads. A recently completed building situated between the four diamonds features a scoring tower, a concession area, a dressing room for officials, and restroom facilities. The fields play host to the USCB Sand Sharks in addition to the adult and youth baseball and softball leagues. In addition, the complex also houses two basketball courts, a children's playground, two fishing ponds, a dog park, and a storage and equipment facility.

Figure 6.9 – The Richard Gray Baseball Complex

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The recreation complex not only serves as Hardeeville's home for sports activities, but also as the center of the City's many events throughout the year. Fireworks light up the sky during the summer months for Fireworks and Fun, hot rods and hot food lighten the mood during the annual Catfish Festival in the fall, and smiles are found on the faces of children during the annual Easter Egg Hunt and Fishing Rodeo in the springtime. Due to the central location of the facility in the City and the continued improvements in the amenities, events at the complex are becoming more popular and better attended year after year.

With continued population growth (and revenue) expected over the next ten years, the complex that has served the City's residents and guests so well will continue to require additional investment and improvements to maintain its growing reputation as a premier facility. Future phases have called for several additional amenities, including a walking/biking trail along the complex periphery, a dog park, an expanded "tot lot" play area for younger children, a large scale picnic/cookout shelter, fishing piers on the ponds, a possible "outfitters building", a remote control boat access, and additional bleachers and benches throughout the complex.

The major constraint that faces the City upon the fulfillment of these future additions to the complex is physical space. The City must strongly consider pursuing the purchase of additional acreage in order to accommodate a growing population and growing appetite for recreational opportunities. Given the nature of recreational planning, activities which may be popular today may not be as popular ten or twenty years into the future. The key word in planning for recreational facilities is flexibility. An obvious solution is multi-purpose fields. Recreational and park land is provided for throughout the city as part of development agreement process to ensure adequate park space is available.

Millstone Landing

Located on the banks of the Savannah River, Millstone Landing has proven to be one of Hardeeville and southern Jasper County's most favored places and the principal access point for boats and water craft on the river. The Marine Rescue Squadron utilizes the facility located at the landing and uses the river access to respond to received calls.

Recognizing the importance of the landing to the community, the City of Hardeeville annexed the 10.7 acre parcel in 2008 to ensure that the landing continues to be preserved for future generations. City staff will be working on efforts to secure funding to improve facilities at the landing in the coming years.

Figure 6.10 – Millstone Landing along the Savannah River

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County Facilities

Located within the city limits, Sgt. Jasper County Park is a highly acclaimed 406 acre park maintained by Jasper County Parks and Recreation Department. Originally maintained as a state park, Jasper County took control of the park in the late 1990s and has since then made measurable improvements to its facilities. The park has proven popular with residents and visitors to the area, and a variety of recreational and social opportunities continue to keep the park busy throughout the year. Visits to the park typically average between 1,500 to 2,000 vehicles a month.

Overlooking a freshwater lagoon, the main building of the park features sufficient space for meetings, workshops, courses, or other social events and gatherings. An expansive deck juts out over the lagoon, providing opportunity for these gatherings to enjoy the outdoor environs that define the park.

The park also features a half-mile walking trail, a sheltered picnic area, and additional picnic tables located along the trail in proximity to the main building. Kayaks and canoes are among the items that are available to rent through the park. The recent completion of "The Sarge" disc golf course has added another dimension of active recreation to this park and has provided Hardeeville and Jasper County an opportunity to host local and regional events in this ever-popular activity.

Other Facilities

Skirting the western edge of the city limits, the Savannah National Wildlife Refuge is a major federally protected area that covers the expansive marshlands and islets that define the course of the Savannah River on its meandering course to the Atlantic Ocean. Accessible only via South Carolina Highway 170 (affectionately known as Alligator Alley), the Refuge in years past has typically been bypassed as an attraction of sorts and has generated mostly hunters, fishermen, birdwatchers, naturalists, and other nature-lovers in a passive environment. Recent events have shown that there is great public interest in the Refuge, with the commencement of an interpretative center being constructed on the South Carolina side of the river. Hardeeville citizens have repeatedly highlighted the educational, natural, and cultural possibilities that such a center could provide the citizenry, through public education and outreach. The City should engage directly with the Center in order to increase such opportunities and to further educate the public on the fantastic, yet fragile environment that lies next door.

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Cemeteries & Burial Sites

There are currently three cemeteries located within the city limits according to county assessor information. However, there are several dozen family lots and individual burial grounds located inside the city limits. The Jasper County Historic Society has published a book Cemeteries of Jasper County, which provides a listing of historic, ancestral, and ecclesiastical interment sites in the county.

Beyond the city limits in the immediate southern Jasper County region exist nearly 20 additional burial sites. The largest site in southern Jasper County is Purrysburg Cemetery, located off Purrysburg Road near Millstone Landing. Several churches located in the county offer limited burial space for congregation members. Additional interment sites are located in Ridgeland, Bluffton, and surrounding jurisdictions. Capacity issues exist at the majority of the burial sites. Some facilities have opened in recent years to handle additional gravesites, including a 30 acre memorial park in Bluffton and an expansion to the Ridgeland Cemetery.

The increasing demand for burial space is becoming a major land use issue across the United States as a large percentage of its population enters into elderly age. This demographic anomaly will require municipalities such as Hardeeville to actively consider pursuing land for cemeteries, memorial gardens, and perpetual care facilities. Given the anticipated population increase that the City and Jasper County faces from growth, it is imperative to ensure that adequate space be reserved for those who have passed away.

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Hardeeville Community Library

The current Hardeeville Community Library facility is located on 35 East Main Street at the intersection of Main Street and Sauls Court. The corner lot on which the Library is currently situated was donated in 1979. The building was erected in 1982 and officially dedicated in 1983. The library itself was founded in 1977.

Historically the Library functioned out of an old Argent Lumber wash house situated on the old town playground at the former City Hall. Images and articles that highlight the history are available in the library for public consumption. The Library was originally operated by a local volunteer group known as Friends of the Library. Although the friends of the library no longer operate the library they still exist as an active group. Currently, the library is staffed with 1 full-time position, 1 part-time position and two substitute positions.

Facility

The Hardeeville Library is a tremendous asset to the Hardeeville Community. The library has an estimated 250 patrons in the facility each week. The facility is approximately 1,000 square feet including office space, a reference desk, 2 small reading areas, media center, and library inventory. The hours of operation are Monday through Friday, 10:30 to 5:30 pm. There are ten (10) public access computers with internet access and library catalogs as well as three (3)laptops that are available for public use. Personal computers can access the internets through the library WIFI system.

Figure 6.11: Hardeeville Community Library

The Hardeeville Library is part of the Allendale Hampton Jasper Regional Library System and has access to their resources through interlibrary loans. In addition to the Regional Library System patrons have access to the state library, the state's electronic database, as well as the University of South Carolina Columbia Library through the state interlibrary loan agreement. The Interlibrary Loan does not cover law material from USC Columbia, but makes available immense resources to the citizens of Hardeeville.

Limitations on space and hours of operation have been identified as major concerns for the existing Library facility and expansion is necessary to meet future needs. The City of Hardeeville should support Jasper County in the coordination with the library system for expansion of their facilities and resources.

Library Events

The library staff hosts several events throughout the year, several of which are held in the Community Room at Hardeeville City Hall. The events and program are an extension of what began several years ago. These events include annual book sales, book signings, Black History Month in February, National Library Week in April, and the Hardeeville Library Summer Program. The Hardeeville Library Summer program is one of the most popular library sponsored events in Hardeeville. There is a themed reading program that culminates with activities and presentations that revolve around the themes. The program currently takes place in the Hardeeville Community Room at City Hall and has a tremendous turnout.

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Fire Protection

Fire protection is one of several basic city services offered to citizens of Hardeeville. In order to maintain an effective level of service it is imperative that the Fire Department grow with the city. As the city grows, demand for service increases as well. As the demand for service increases so does the possibility of simultaneous multiple calls. Multiple calls require the department to be structured to meet national requirements for simultaneous accidents.

The Hardeeville Fire Department is a municipal, combination fire department The initial response area covers approximately 85 square miles; including 13 miles of Interstate 95, 22.5 miles of US highways, and 15 miles of CSX and Amtrak railroad. The service area extends beyond the city limits into the remainder of the Hardeeville Fire District in unincorporated Jasper County. Although Hardeeville's current population is just over 2,300 residents the Hardeeville Fire Departments currently serves a minimum of 7,000 citizens.

Existing Facilities

There are currently two fire stations that serve Hardeeville, which include Station 81 located on Martin Street and Station 82 located on Argent Blvd. The location of the fire stations is a key consideration for providing adequate protection and ideal response time. As the proposed developments were going through the approval process, much consideration was given to the location of the current fire station and its ability to provide adequate fire protection. The City of Hardeeville maintains an Insurance Service Office (ISO) rating of 3 on a scale of 1-10 (The highest possible rating is 1). In order to maintain and improve this rating, there are certain minimum requirements that must be met such as having a fire station located within 5 road miles of any site and fire hydrants within 1000 feet of structures.

Figure 6.12: Station 81 - Downtown Hardeeville

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Station 81 – Downtown Hardeeville Station

Station 81, which is the current headquarters, is located at 29 Martin Street. The facility has been renovated several times over the past few years to accommodate equipment and staffing needs. The adjacent public works building is currently being utilized to house one of the fire engines. This site has limited office space sleeping quarters, and storage space. There have been discussions about upgrading and expanding Station 81 to meet future needs.

Station 81 includes:

- Engine 81-2004 Sutphen, 2000 gpm commercial pumper
- Truck 81- 2006 Sutphen, 70+ platform, 2000gpm pump
- Squad 81- 2004 Ford F550, outfitted as a service company
- Tanker 81- 2002 Marion Pumper/Tanker, 1250gpm pump, 1500 gallon tank

Station 82 – Cherry Point Fire Station

Station 82 is located at 2539 Argent Blvd. This location also includes office space for a police substation. The Cherry Point Fire Station was purchased by the City of Hardeeville in 2008. Through an intergovernmental agreement with Jasper County, Hardeeville also assumed the Cherry Point Fire District in 2009 on a contractual basis.

Station 82 includes:

- Engine 82- 1984 Mack, 1250gpm pump, 1000 gallon tank
- Engine 83 (reserve)- 1985 Pierce, 1500gpm pump, 750 gallon tank

Figure 6.13: Station 82- Cherry Point Fire Station

Proposed Facilities

There are a total of 9 proposed sites for future fire stations throughout the city as referenced in Figure 6. The timing of the proposed stations is dependant upon existing and anticipated needs. As the new stations are built and staffed the proposed fire station locations may be adjusted to maximize the efficiency of available resources and scheduling.

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The proposed Tradition Fire Station 83 facility, located in Tradition, will be approximately 5,000 - 6,000 square feet and will be situated on an approximate 2 acre site along Utility Lane. The property was dedicated to the City as part of the Argent West Development Agreement. The design and architectural details of the facility will likely be similar to the new station (Station #82) located on Argent Blvd.

SCE&G donated property to the City of Hardeeville for a training facility on Purrysburg Rd at the proposed station # 85. The site currently has a small house that can be renovated and expanded to include an apparatus bay. Having this training facility operational has several benefits including the ability to train locally and meet staffing needs sooner. The Vision of the Hardeeville Fire /Rescue is "to maintain a well trained Fire Department, keeping the citizens we serve in the forefront of our endeavors, while establishing traditions for the fire service in the City of Hardeeville". The proposed facility would be in keeping with this vision.

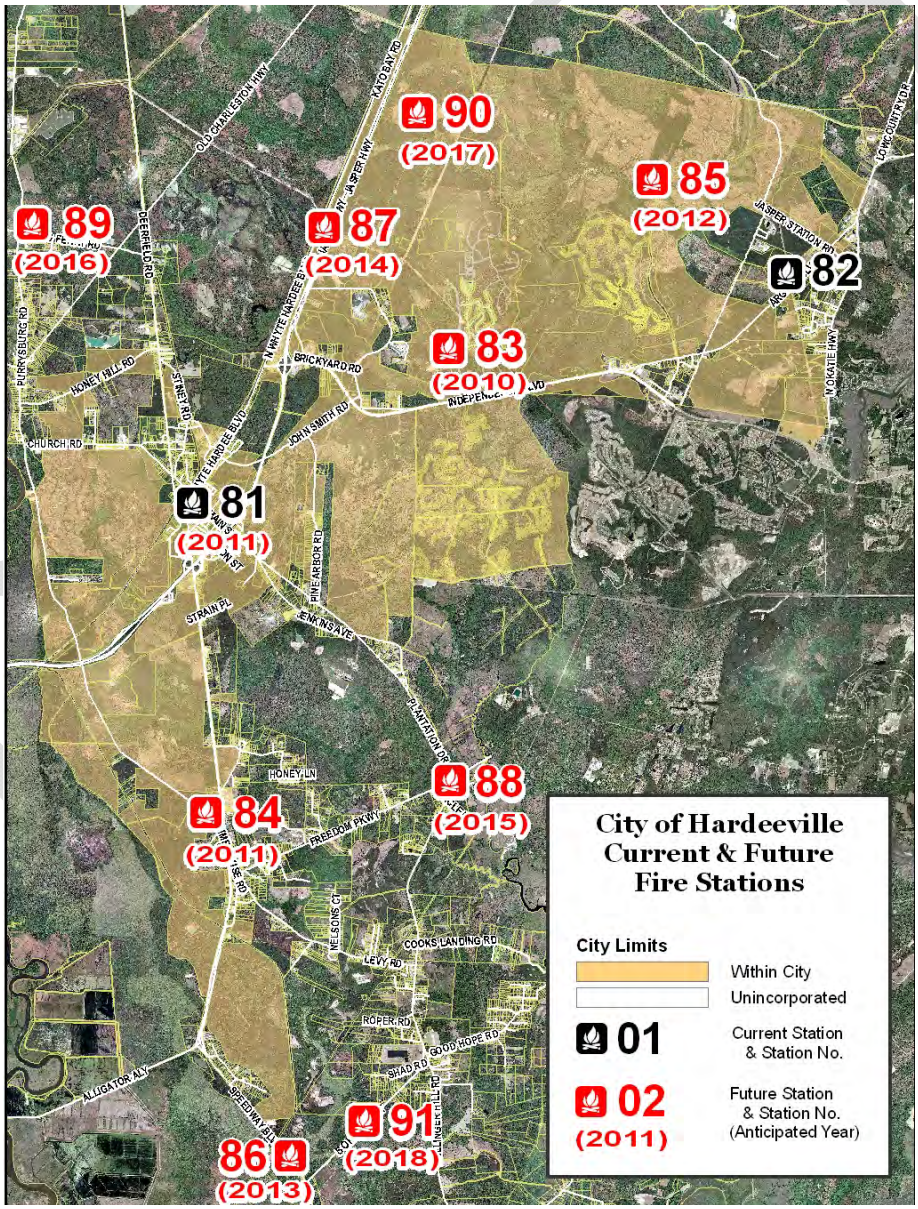

Figure 6.14: Proposed Fire Station Location

Public Safety

The Police Department is currently headquartered at 36 East Main Street on the corner of Martin and Main Street. This building was the former City Hall, and is shared with the Municipal Court. The Police Department also has dedicated space in the recently acquired Cherry Point Substation on Argent Blvd.

Public Safety Divisions

There are four main divisions of the police department which include, Patrol Division, Criminal Investigation, Victim/Witness Services, and Code Enforcement/Animal Control Services. The Patrol Division provides deployment of patrol sergeants and officers throughout the area and responds to calls for service. The Patrol Division is usually the first response to calls. Criminal Investigations Division is primarily responsible for reports, analyses, arrests, and prosecution, of criminal cases. The Victim/Witness Services arm provides assistance to victims and witnesses of crime related incidents in accordance with state statutes. The Code Enforcement/Animal Control arm enforces and responds to violations of municipal codes, regulations, and ordinances. This division also works closely with veterinarians, animal shelters, and humane societies in the protection and control of animals.

Programs

In an effort to continually expand and improve Hardeeville's police protection and crime prevention, several ongoing programs have been implemented. These new programs include a Bicycle Patrol Unit, a Canine program, Traffic Safety officer program and School Resource Officer program. The bicycle patrol program provides an effective means of curtailing crime. One of the advantages of the bike patrol is the ability to arrive on scene without drawing attention. The Police Department would like to expand their bike patrol. The Canine unit adds the ability to effectively detect narcotics and provides additional tracking capabilities. The School resource officer program provides law enforcement and police services at Hardeeville Middle/High School and collaborates closely with school administrators to help maintain a safe school environment.

The Police Department is committed to empowering citizens through their Community Oriented Policing (COP) initiatives as well as providing an exceptional level of service to citizens and visitors to the Hardeeville Community. The Police Department offers several Neighborhood Watch Seminars throughout the year. The channels of communication between the police department are open and ongoing citizen evaluations help measure the effectiveness of the department as it relates to the needs of the citizenry.

Future Facilities

26 Martin Street is currently under renovation to meet the needs of the police department. The renovated facility will include space for the municipal court and will serve as the new headquarters for the Hardeeville Police Department. In addition to the proposed new facility, several of the Planned Development Districts throughout the city have property set aside for the development of future substations. The substations will likely provide space for both police and fire personnel and equipment.

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Municipal Buildings

As the city grows employment needs grow and space needs increase as well. Hardeeville's administration is committed to maximizing the available resources and makes strategic adjustments to maximize functional and spatial needs of each department. This section highlights the current inventory of municipal buildings and their current functional use.

City Hall (205 E Main Street)

City Hall is located at 205 East Main Street. City Hall is the primary administrative building. Other departments currently functioning from the City Hall location include, Planning & Engineering, Building, Financial Services, and Economic Development. There are eight (8) offices, seven (7) storage/utility rooms, two (2) conference rooms, two (2) meeting spaces, a warming kitchen, the Council Chambers, Community Room, and City Museum which is located in the lobby areas. The Council Chambers is approximately 1,200 square feet and contains an integrated media system for meetings, presentations, and live video broadcasts. The Museum has an expansive collection of photos, narratives, relics and artifacts that display Hardeeville's rich history and culture. The Community Room with more than 1,700 square feet of flexible space is typically used to host large public meetings, community events, and is often rented for private engagements through the Parks and Recreation Department.

Figure 6.15: City Hall

Behind City Hall is the Recreation Complex which contains, four baseball fields with a central scoring tower, 2 football fields, a field house on the main football field, basketball courts, multipurpose fields, trails, fishing ponds, a playground, and a maintenance facility.

110 East Main Street (Heyward House)

The Heyward House is located at 110 East Main Street. Hardeeville purchased the house in 2009 to meet their public facility needs and preserve a significant piece of Hardeeville's History. There are plans to renovate and utilize the structure to house the Library. The existing library facility at Main Street and Sauls Court is inadequate in size to meet the needs of its patrons and the Heyward House can provide adequate space and room for expansion.

Figure 6.16: Heyward House

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30 Martin Street (Old Hargray Building)

The Old Hargray Building is located at 30 Martin Street. The City recently obtained this building initially through a lease option agreement and then finalized the purchase of the facility in 2009. Hargray retained a portion of the building for their sustained operations. The building is approximately 7,500 square feet and currently houses the Parks and Recreation Department as well as the Media Department. There are seven (7) offices, two (2) large rooms that can be utilized as multipurpose rooms or additional office space, and a kitchen.

Figure 6.17: 30 Martin Street

29 Martin Street- Fire Department Headquarters

Station 81, which is the current fire department headquarters, is located at 29 Martin Street. The facility has been renovated several times over the past few years to accommodate equipment and staffing needs. The building is approximately 5,300 square feet. With four (4) bays, the site has limited office space, sleeping quarters, and storage.

Figure 6.18: Fire Department Headquarters

2539 Argent Blvd- Cherry Point Fire/Police Substation

Station 82 is located at 2539 Argent Blvd. This location also includes office space for a police substation. The Cherry Point Fire Station was purchased by the City of Hardeeville in 2008. Through an intergovernmental agreement with Jasper County, Hardeeville also assumed the Cherry Point Fire District in 2009 on a contractual basis. The Police department also has a substation within the facility.

Figure 6.19: Cherry Point Fire/Police Substation

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36 E. Main Street- Police Department & Municipal Court

36 E Main Street currently houses the police department and municipal court. This 3,100 square foot building is the former City Hall and the site of the former Municipal Playground. City Hall was moved to 205 E Main Street in 2004. Once the renovated facility at 26 Martin Street is completed, this building will be available to accommodate additional space requirements of the City departments.

Figure 6.20: Police Department & Municipal Court

26 Martin Street

26 Martin Street is currently vacant. It was previously used as a Hargray maintenance facility. This building is approximately 9,000 square feet. The police department and municipal court will be moving into this location after renovations are made in the near future.

Figure 6.21: 26 Martin Street

27 Martin Street- Public Works

27 Martin Street currently houses the Public Works Department. This approximately 2,400 square foot facility was previously utilized as the Water Department before Hardeeville negotiated water rights with Beaufort Jasper Water Sewer Authority (BJWSA). The impound lot in the rear of the facility also serves as a yard for maintenance equipment. With the expansion of the Hardeeville Recreation Complex at 205 E Main Street an additional maintenance facility was added behind City Hall that the Public Works Department uses for additional storage.

Figure 6.22: Public Works Building

Figure 6.23: Rec. Complex Maintenance Facility

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Medical Facilities

The Coastal Carolina Hospital is located at the intersection of Independence Blvd (Hwy 278) and Medical Center Drive at 1000 Medical Center Dr. The approximately 84,000 square foot facility includes 27 private medical/surgical rooms, ten (10) inpatient acute rehabilitation rooms and a 4-bed intensive care unit. The Coastal Carolina Hospital is a part of the Hilton Head Regional Healthcare system.

The Coastal Carolina Hospital offers a range of services to the community and region including acute medical care, cardiac care, hyperbaric /wound healing, inpatient acute rehab, occupational medicine, outpatient therapy, respiratory/pulmonary care, imaging, surgical, clinical laboratory, emergency, and support services. Other nearby medical facilities includes Memorial Health and Candler Hospital in Savannah, Hilton Head Regional Medical Center in Hilton Head, and Okatie Outpatient Center.

Local higher education institutions like University of South Carolina Beaufort and Technical College of the Low Country offer professional and certificate degrees in the medical field that can support the local medical practice. The Nursing program at USC B offers two tracks which include a pre-licensure four year educational track and a Registered Nurse (RN) – Bachelor of Science in Nursing (BSN) completion track. Following graduation pre-licensure students are eligible to take the National Licensure Exam for state licensure as a registered nurse. Technical College of the LowCountry offers a Medical Office Assistant Certificate and The Health Services Department offers nursing, radiologic technology, surgical technology, massage therapy, and physical therapy. Coastal Carolina Hospital has an intern program for students seeking experience.

Figure 6.24: Coastal Carolina Hospital

Schools

Throughout the planning process, The K-12 System was identified as one of the most important areas of focus for Hardeeville. The citizens of Hardeeville understand the importance of the youth in the longevity and success of Hardeeville and the significance a quality education plays in the perception and quality of life in Hardeeville. Hardeeville not only desires to attract and maintain an educated workforce, but more importantly desires to prepare and educate the existing population for greater opportunities.

K-12 Schools

The Jasper County School District has 2 public Schools which educate about 3200 students. There is currently one school within the city limits of Hardeeville. The Hardeeville K-12 South Campus, located on Sergeant Jasper Park Road, was completed in 2007 and opened its doors in the Fall of 2008. This new campus offers adequate space for the students and faculty and an environment conducive to learning. The facility alone can not address all of the complex needs of the students.

Figure 6.25 – The Hardeeville K-12 South Campus

One of the many challenges within the local public school system is the language barrier of students who speak English as a second language. Although Hardeeville offers courses for citizens that speak English as a second language these classes typically target adults. These language barriers often materialize in reduced performance and lower test grades.

The K-12 system has been identified as an area that needs improvement. According to the Jasper County School District plan more than 75% of Kindergarten students and more than 50% of the first and second graders read at their respective reading levels. These findings illustrate a need to improve Jasper Counties Early Childhood Initiative. The Jasper County School District has certainly made tremendous strides forward in the improvement of test scores, but continued improvement is warranted. A more thorough analysis of these findings can be found in the Jasper County School District Plan.

Private Schools offer another option for students. Located along Hwy 46 at 1293 Plantation Drive, Abundant Life Academy is the closest private school to Hardeeville. While not within the city limits, several students from Hardeeville attend. There are approximately 210 students enrolled in this school. Thomas Heyward Academy which is located on Tarboro Rd in Ridgeland also offer Hardeeville's youth another alternative. Although this school is located in Ridgeland, transportation services are provided to the school from a pick-up location in Hardeeville. Thomas Heyward's current enrollment is approximately 550 students. The interface between private and public schools has been widely debated, but the private schools offer another option for residents.

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Higher Education

Continued Collaboration with local institutions that prepare and train our workforce is a key component to the success of Hardeeville. Hardeeville anticipates growth in industrial and professional related services and has two local institutions that can prepare citizens for the demands of employment industries.

USC Beaufort is a subsidiary of the University of South Carolina system. The New River Campus, also referred to as the South Campus is conveniently located along Hwy 278 approximately 6 miles from downtown Hardeeville. USC Beaufort offers several degrees and areas of study for prospective students.

Technical College of the Lowcountry (TCL) offers yet another option for individuals seeking to further their education and expand their employment opportunities. TCL's New River Campus is located along Hwy 278. This institution offers a variety of degrees and certificate programs to meet the professional development needs of its patrons.

In addition to USC Beaufort and TCL, residents of Jasper County can attend Colleges in neighboring Chatham County, GA at in-state tuition rates. There are many regional opportunities for local residents to further their education.

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Recommendations

Needs

- Additional water reclamation infrastructure to serve new developments.
- Preserve groundwater quality.
- Review Franchise Agreements with all utility providers to ensure that all utility companies are meeting their particular responsibilities to the citizens.
- Continued coordination and communication with utilities to ensure long-range plans and goals are consistent.
- Stormwater management facilities are maintained to acceptable levels of service, specifically in McTeer Street area, industrial park and downtown areas.
- Support innovative energy conservation, renewable energy, and green building programs from electric companies or private interest which assist in rate reductions, enhance the safety and convenience of electricity and fund community service, and preserve the environment in the present and future.
- Increased options for solid waste disposal for City residents.
- Development of a recycling program for residents.
- Increased collection locations (i.e. convenience centers) for solid waste closer to City residents.
- Additional fields for recreational leagues in the downtown Hardeeville area
- Completion of final phases for the recreation complex.
- A master plan for Millstone Landing that preserves the historic and social fabric of the site while improving existing facilities and access.
- Additional cemetery and burial space in response to population growth and demographic pressures.
- Continued expansion of opportunities to attract an educated workforce
- Continued collaboration with post secondary educational institutions in the area
- increased support for tutoring, mentor, and internship programs
- Expansion of potential sites for future police and fire substations, parks, and schools.

Policies & Implementation

- Support efforts of BJWSA to ensure quality service to local citizens.
- Coordinate to ensure water system is regularly tested by both BJWSA and SCDHEC.
- Continue to support the use of reclaimed water for irrigation within the city limits.
- Proactively participate in energy conservation opportunities; such as the compact fluorescent light (CFL) program, GreenPower, and/or renewable energy generation facilities, such as solar systems in local homes.
- Enhance development regulations to encourage “green” construction practices.
- Encourage local home builders and developers to be sustainable in their construction practices.
- Support all local utilities to be involved in Planning Commission meetings and increase their awareness of new developments.
- Update the ‘Stormwater Infrastructure Inventory and Mapping’ report completed in 2003 to address current issues and update items which may not have been addressed.
- Support and coordinate with SCDOT to ensure State stormwater facilities are maintained.

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- Research Community Development Block Grants (CDBG) to assist with stormwater management control.
- Creation of an educational or interpretive center
- Work with County and local developers in the development of establish a Stormwater Management Utility (SMU) by Ordinance within the County which would be responsible for maintenance, construction, inspection, and control of stormwater facilities.
- Cost Analysis Study should be completed on the City's current expenses and potential options related to solid waste/recyclable collection and management, and options for an additional Construction & Demolition Landfill (Class Two Landfill) with Jasper County.
- Develop a parks and recreation master plan to further plan for future improvements and expansion that is flexible for future trends in sports and leisure activities.
- Work with the Savannah National Wildlife Refuge to develop a partnership that focuses on education and outreach to make the Refuge more accessible and recognizable to citizens.
- Actively pursue local, state, and federal grants or funding to support recreational facility improvements.
- Consider the possibility of a municipal cemetery and/or identify parcels that can adequately serve as interment grounds.

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Chapter 7
Transportation

Summary & Implications

Transportation facilities have played a key role in the development of cities and towns on a historical basis. Such facilities have had a significant impact on the development of the City of Hardeeville and the surrounding area. During Pre-European periods, when the Savannah River was a primary mode of transportation, people developed around the waterway due to practicality. When the railroad was established it too became a hub for development within Hardeeville and played a major role in the distribution of people and goods to and from the City.

Today, the roadway network, railroad, public transit, air transportation, and pedestrian and bicycle facilities form a more comprehensive transportation system. These infrastructure components are designed and constructed to serve predicted growth and expansion, and infrastructure improvements are taken into consideration to address the present conditions of a community and the impact which transportation demands place on the existing transportation network.

Interstate 95

The City of Hardeeville lies within 30 miles of Savannah, Hilton Head Island, and Beaufort. Interstate 95 (I-95) runs right through the middle of Hardeeville, providing access to the City from north and south. This major freeway is the busiest and most well known highway on the East Coast, serving as a transportation corridor that parallels the Atlantic Ocean from Houlton, Maine to Miami, Florida until eventually becoming US Highway 1 giving access to Key West, Florida. I-95 consists of approximately 1,900 miles of roadway traveling through fifteen US states (see **Map 7-1**). It serves many large and small US cities, international and regional airports, and marine ports, thus providing connections country-wide and globally, via air and marine transportation.

Figure 7.1 – Interstate 95

This primary highway on the East Coast offers many great tourism and business opportunities as it passes through or nearby some of the country's greatest attractions, scenic and historic sites, and beaches. I-95 is used by millions of people daily. Due to population growth and industrial/commercial growth, the amount of traffic that this highway must support in the future is predicted to increase, and as the demand increases, the roadway design capacity must be taken into consideration, in order to maintain a sufficient level of service.

Need for Widening

The level of service along I-95 is already deteriorating as congestion increases. The four-lane section running through the City of Hardeeville is experiencing heavier volumes than its design can accommodate and the South Carolina Department of Transportation (SCDOT) has identified widening as the improvement solution. In the

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Interstate Corridor Plan, prepared by the SCDOT to address future interstate needs for capacity and maintenance, I-95 is recommended to be widened from four lanes to six lanes from the Georgia state line to US 278 (exit 8).

I-95 Interchange Assessment

Figure 7.2 – I-95/US 278 Interchange at Exit 8

With the continued operation and expansion of the Garden City Terminal and the planned construction of the Jasper Ocean Terminal, I-95's significance to Hardeeville and the region will only become more important. Not only will products from these ports travel I-95, but property within Hardeeville will be prime to support spin-off logistics and distribution facilities. For such to be viable, I-95 and its associated interchanges will need to meet the needs of these facilities. The Lowcountry Council of Governments (LCOG) recently released the I-95 Interchange Assessment, which looked at the ability of existing interchanges to accommodate truck movements associated with logistics/distribution centers. Exits 5 and 8 were both identified as having the potential to support such industries, but both would require geometric improvements to do so. These improvements are summarized in Table 7.1.

Table 7.1

Necessary Interchange Improvements to Accommodate Logistics/Distribution Center Truck Traffic

Interchange	Potential Improvements	Estimated Cost
Exit 5: I-95 at US 17	Separate frontage road from ramps; lengthen deceleration to reflect requirements of current truck operations	$715,000
Exit 8: I-95 at US 278	Lengthen deceleration to reflect requirements of current truck operations; add signalization	$906,000

Proposed Exit 3

With the prospect of the Jasper Ocean Terminal, the City of Hardeeville and Jasper County have partnered to not only support this new port but are actively seeking funding for transportation improvements from the South Carolina State Transportation Infrastructure Bank. A traffic study, developed by the LPA Group Inc., is included in the funding application. The study assessed the impact that anticipated development would have on the existing I-95 interchanges Exit 5 (US 17) and Exit 8 (US 278), as well as the effect of a new interchange, Exit 3 at Purrysburg Road.

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According to the application to the State Transportation Infrastructure Bank, if constructed, Exit 3 will serve several purposes. It will provide a new access point in order to serve substantial development associated with RiverPort and Hardeeville Commerce Park north of I-95 and access to the development that will occur in conjunction with the Sherwood and Reed industrial tracts located south of I-95 along US 17 near the site of the proposed Jasper Ocean Terminal. Another important function of the new interchange is to provide relief to the existing interchange, Exit 5. According to the traffic analysis report, Purrysburg Road will be able to provide an adequate level of service as an undivided, two-lane road during the initial stages of the RiverPort development, but will exceed the capacity after approximately ten years and will need to be expanded to four lanes to address higher traffic volumes. Four lanes will meet the demands and impacts of the planned developments in the City of Hardeeville and local area within Jasper County through the design year 2033.

Figure 7.3 – Purrysburg Road Bridge Over I-95

As proposed in the State Transportation Infrastructure Bank application, the Exit 3 project is composed of the following elements (see Figure 7.4):

- New Exit 3 on I-95;
- Four-laning of Purrysburg Road south from I-95 to US 17;
- East-west connector roadway from Purrysburg Road to US 321; and
- Intersection improvements at US 321/US 17 on the northern end and at US 170/US 17 on the southern end.

The total cost for the above improvements is estimated at approximately $120 million. The application proposes that the State Transportation Infrastructure Bank fund $68.3 million, while the local match (through donation/acquisition of right-of-way and construction costs) of $51.6 million be shared by the City of Hardeeville, Jasper County, and the Stratford Company.

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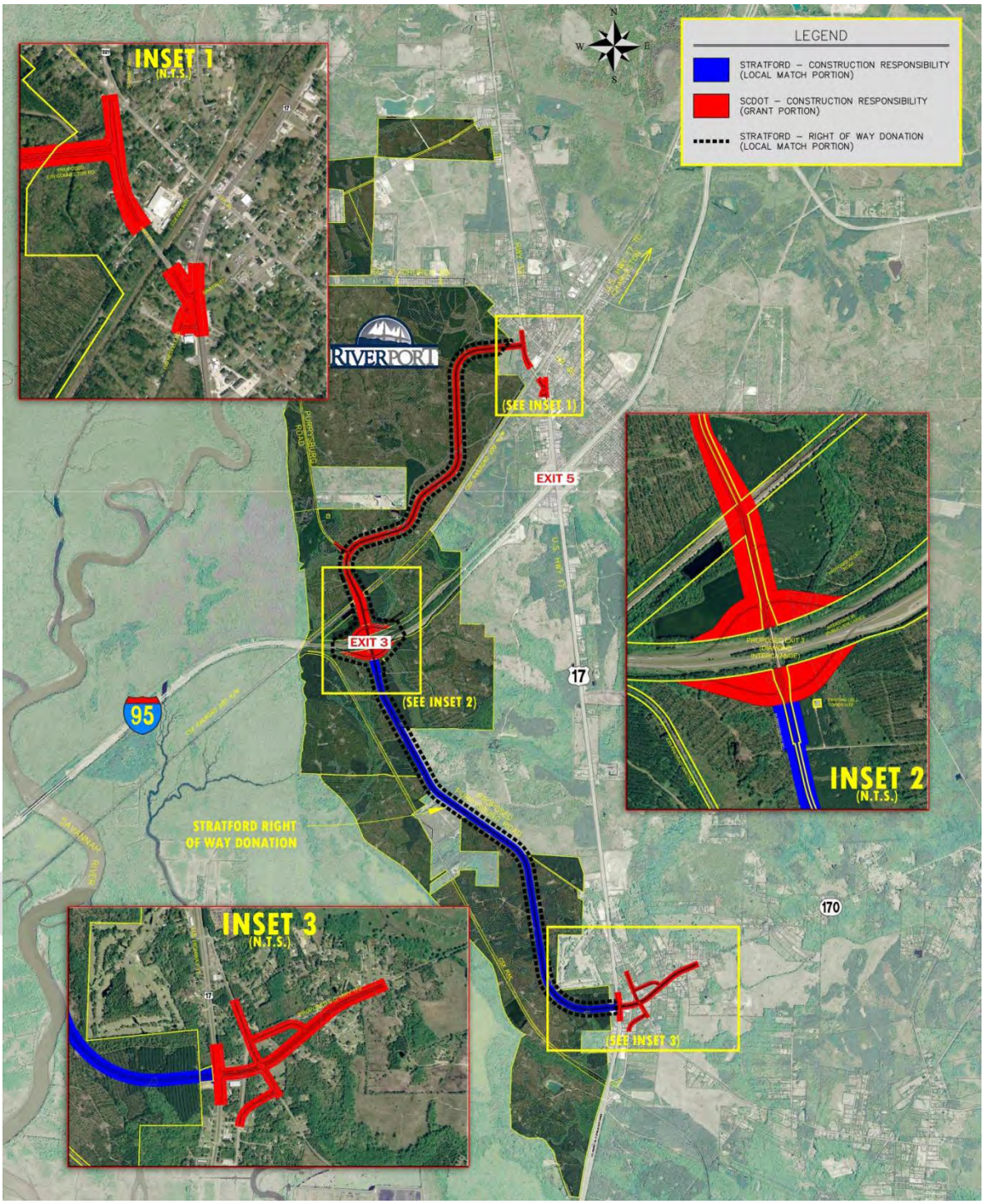
Figure 7-4 – Proposed Exit 3 Project

As included in the City of Hardeeville/Jasper County Application to theState Transportation Infrastructure Bank



Local Street Network

Functional Classification

In addition to I-95, the City of Hardeeville is served by a street network that includes three federal highways (US 321, US 17, and US 278), three state primary routes (SC 46, SC 170, and SC 141), numerous state secondary roads, and local streets. Streets provide two functions: vehicle mobility and property access. The functional classification of a street varies depending on the level at which both of these roles is achieved. A street's mobility decreases as access between the street and adjacent properties increases; this relationship is graphically depicted in Figure 7.5. The street network is generally divided into a hierarchy of four classes: Principal Arterials, Minor Arterials, Collectors and Local Streets. The Federal Highway Administration (FHWA) classifies roads based on the role they play in the roadway network, including the type and volume of traffic they carry. The role a roadway may serve is also based on whether the area is urbanized or rural. The functional classification of a roadway segment may change over time due to the parameters of the traffic utilizing the roadway. The functional classifications of roadways within the City of Hardeeville are depicted on Map 7.2. FHWA's definitions for all four classifications are presented in Table 7.2.

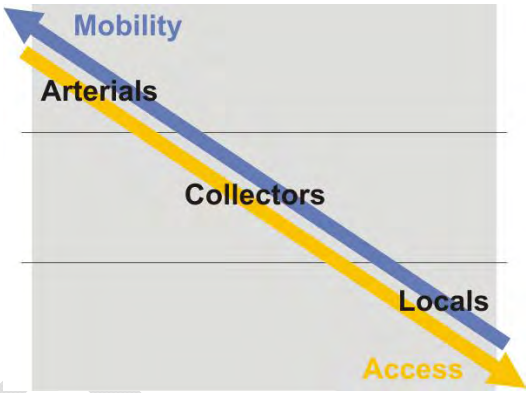


Figure 7.5 – Mobility-Access Relationship by Functional Class

Table 7-2
FHWA Functional Classifications

Functional Class	Service Provided
Principal Arterial	• Serves major activity centers • Highest traffic volume corridors • Longest trip desires • Carry high proportion of total travel on minimum mileage • Highest level of access control
Minor Arterial	• Interconnects and augments principal arterial system • Somewhat lower level of mobility than principal arterial • More emphasis on property access
Collector	• Provides both property access and traffic circulation • Distributes trips from arterials to ultimate destinations • Collects traffic from local streets and connects them with arterials
Local	• All streets not defined as arterials or collectors • Direct access to adjacent properties, collectors, and arterials • Lowest level of mobility

Principal arterials serve centers or areas in which major activity takes place and connect the City of Hardeeville to other urban areas within the region; these roadways have the highest traffic volume corridors, longest trip desires, the highest level of access control, and carry a high proportion of travel on minimum mileage. US 17 south of I-95, US 278, and SC 170 (Okatie Highway) are principal arterials in the local area. This portion of US 17 carries approximately 12,000 vehicles per day and serves as a primary route between Hardeeville and Savannah to the south. Commercial development at Exit 5 is located along this section of US 17. Similarly, US 278 provides connections to Bluffton and Hilton Head and is where much of the new growth over the past decade has occurred. With its I-95 interchange at Exit 8 and expansive amounts of timber property along its frontage,

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US 278 is seeing unprecedented development, including higher education facilities (i.e., University of South Carolina at Beaufort and Technical College of the Lowcountry New River Campus), commercial development (e.g., New River Auto Mall, Wal-Mart, Okatie Crossing, etc.), and residential communities (e.g., Tradition, Hilton Head Lakes, etc.). Okatie Highway (SC 170) connects to US 278 and links north to Beaufort and Ridgeland (via SC 442) and south to provide an alternate route to US 17 and Savannah. At its junction with US 278, Okatie Highway is programmed for expansion as Okatie Crossings continues to come online as a major regional retail destination and with continued residential growth in Jasper and Beaufort County.

Commercial and residential growth like that being seen along US 278 and SC 170 can lead to mobility degradation through the addition of numerous property access points along a roadway. However, through the establishment of the Highway Corridor Overlay District, the City of Hardeeville has been proactive in protecting the mobility of US 278 by limiting the number of access points through shared, signalized intersections that lead to frontage road systems to connect adjacent properties. Additionally, City ordinances require that, as practical, connectivity between adjacent developments be planned for and achieved.

Figure 7.6 – Frontage road along US 278 provides access to multiple properties

US 321, SC 46 (Main Street), and the portion of SC 170 (Okatie Highway) between SC 46 and US 17 all function as minor arterials, serving to interconnect the principal arterial system. Because property access points (i.e., curb cuts) are more common, lower speed limits and frequent traffic entering and exiting the roadway limit mobility. Although outside the city limits of Hardeeville, SC 462 serves as a minor arterial from the Okatie Highway (SC 170) and connects northward to Ridgeland.

Major collectors include US 17 north of SC 46, Purrysburg Road, Church Road (SC 31), Warren Street/John Smith Road SC 141, and Argent Boulevard (SC 442). Their primary function is to move passengers and goods from arterial roadways to their destinations, and vice versa. Collectors provide both property access and traffic circulation. Traffic speeds tend to be lower on collectors than arterials due to their high degree of access to adjacent properties and congestion is more likely to occur. Streets that serve a majority of downtown Hardeeville and neighborhoods in the local area are classified as local streets. Many of Hardeeville's local streets are on the South Carolina state secondary road system. A local street is any street not defined as an arterial or collector. These streets have the lowest level of mobility and provide direct access to adjacent properties, collectors, and arterials.

Traffic Volumes

The study area is served by an existing roadway network composed of the four classifications of streets previously mentioned. The latest available (2007) South Carolina Department of Transportation (SCDOT) Average Annual Daily Traffic (AADT) counts for these roads are presented on Map 7.3. The traffic counts on the

I-95 corridor, from the Georgia State Line to US-278, are high in comparison to the surrounding roadways within the network, and they are also higher than the traffic counts for other portions of I-95 throughout Jasper County. This is a contributing factor for the recommendation of road widening for this portion of I-95, from the Georgia State line to US-278.

In anticipation of growth associated with planned development districts along US 278 (e.g., Argent West, Argent East, Anderson, Morgan, etc.), Clough Harbour & Associates was retained to develop a travel demand model for the City of Hardeeville and Southern Jasper County in 2006. Through this detailed analysis of the existing transportation network, it became apparent that projected traffic volumes could not be adequately accommodated by the existing network and appropriate mitigation measures and improvements to the system would be necessary to maintain an acceptable level of service. Based on the conclusions of the travel demand model, the City of Hardeeville now requires traffic impact assessments (TIA) for large-scale developments. These TIAs require the evaluation of the adequacy of the existing network to service the proposed development and the determination of the impacts of the proposed development on the network. Additionally, if impacts do exist, then mitigation measures must be presented and a plan for the implementation of such measures and their associated costs is written into the development agreement.

The existing conditions level of congestion or traffic flow on the city street and highway system are measured based upon a level of service (LOS). The LOS is assessed quantitatively and qualitatively; for roadway conditions where there are no interruptions, the LOS is assessed on a quantitative basis. LOS standards for a road segment or intersection (signalized or unsignalized) are based on the ratio of the daily traffic volume to the intersections or roadway segments daily capacity. This volume-to-capacity ratio is an indication of the delay time a driver would encounter moving along the road segment through the intersection. LOS is based upon travel delays and ranges from “A” to “F” rating. “A” is the highest/best travel condition and “F” is the lowest/worst condition. These LOS ratings are further explained below.

Figure 7.7 – Hilton Head Lakes along US 278 required a traffic impact assessment as part of development approval

- LOS "A" - low traffic volumes, high speeds, and free-flow conditions.
- LOS "B" - light traffic volumes, minor speed restrictions, and stable flow.
- LOS "C" - moderate traffic volumes, where speed and maneuvering are restricted to a limited degree by the amount of traffic.
- LOS "D" - heavy traffic operating at tolerable speeds, although temporary slowdowns in flow may occur.
- LOS "E" - very heavy flow and relatively low speeds; traffic is unstable and short stoppage may occur.
- LOS "F" - extremely heavy flow, with frequent stoppage and very slow speeds; an unstable traffic condition under which traffic often comes to a complete halt.

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Through the TIA process, numerous intersections within the City of Hardeeville and surrounding area have been studied in order to find the ratio of the daily traffic volume to the segments or intersections daily capacity. Currently, most of the local area enjoys relatively moderate levels of service on road segments and most intersections in the community. An interconnected, synchronized traffic signal network will eventually be needed at major intersections in order to control queue times and to assist in the efficient flow of traffic. The following roadways are illustrated on Map 7.4 with their respective LOS.

Table 7.3

Intersection Level of Service

Intersection	LOS AM Peak	LOS PM Peak	Intersection Type
1. I-95 Southbound Ramps @ US 278	B	B	Signalized
2. I-95 Northbound Ramps @ US 278	D	B	Unsignalized
3. US 278 @ Medical Center Drive	[1]B	[1]B	Signalized
4. US 278 @ US 17	B	C	Unsignalized
5. SC 141 @ US 278	C	F	Unsignalized
6. New River Parkway @ US 278	D	F	Unsignalized
7. New River Parkway @ East Argent/SC 141	B	B	Unsignalized
8. Jasper Station/Shortcut Road @ SC 141	C	C	Unsignalized
9. SC 141 @ SC 170	[2]B	[2]C	Signalized
10. Argent Boulevard @ US 278	B	D	Unsignalized
11. Oldfield Way @ SC 170	C	F	Unsignalized
12. SC 442 @ SC 170	F	D	Unsignalized
13. US 17 @ SC 170	B	B	Unsignalized
14. US 278 @ Sun City Boulevard	C	B	Signalized
15. SC 170 @ Sgt. William Jasper Boulevard/Tide Water Drive	A	A	Signalized
16. US 278 @ Palmer Grace Drive/Okatie Center Boulevard S EB	A	B	Unsignalized
17. US 278 @ Palmer Grace Drive/Okatie Center Boulevard S WB	B	B	Unsignalized
18. US 278 @ Palmer Grace Drive/Okatie Center Boulevard S NB	C	C	Unsignalized
19. US 278 @ Palmer Grace Drive/Okatie Center Boulevard S SB	C	D	Signalized
20. SC 170 @ US 278 EB Ramp	B	C	Unsignalized
21. SC 170 @ US 278 WB Ramp	F	F	Unsignalized
22. SC 170 @ US 278 NB Ramp	B	B	Unsignalized

Note: The information presented above were studied and reported between 2006-2008 by Thomas & Hutton Engineering Co., SRS Engineering, LLC, and A&R Engineering Inc., in no particular order.

(1) Depicts the current LOS (TIA by SRS Engineering, Inc.)

(2) Depicts the LOS for 2010 No-Build (TIA by SRS Engineering, Inc.)

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Pedestrian & Bicycle Facilities

Pedestrian and bicycle facilities are essential elements in a complete transportation network. Sidewalks and pathways allow for pedestrian travel for shorter trip lengths and when users have no other alternative mode of transportation (i.e., they do not own a car). Streets that are suitable for bicycle travel may include striped bike lanes, wide outside travel lanes, paved shoulder areas, and/or slower posted vehicular speed limits.

Figure 7.8 – Recent enhancements have greatly improved the pedestrian environment along Whyte Hardee Blvd. (US 17)

The City of Hardeeville has limited sidewalks that are mostly concentrated in the older, more established downtown area (see Map 7-5). Sidewalks exist along Whyte Hardee Boulevard (US 17) and Main Street (SC 46), as well as portions of Heyward Street, Boyd Street, Martin Street, and Church Road in the vicinity of the former school property. Residential streets within the downtown core that do not have sidewalks do possess low speed limits and moderate traffic volumes, making them conducive to walking. Pedestrian connectivity exists between these residential areas and key destinations along US 17 and Main Street, including shopping, restaurants, City Hall, and the Price Wise Food Store. Recent enhancements along US 17 between downtown and I-95 have improved the pedestrian environment exponentially. However, outside of this central area of the City of Hardeeville, there are no sidewalks along local streets.

Of key concern is the lack of safe pedestrian access across I-95; no sidewalks exist along US 278 at Exit 8 and sidewalks stop just north of the US 17 bridge at Exit 5. Consideration should be given to providing adequate and safe pedestrian access through these interchanges and over I-95 either through the provision of sidewalks along existing bridge structures or through the addition of dedicated pedestrian bridge structures.

Figure 7.9 – Share the road signs are located on several roads, including Warren Street.

No bicycle lanes exist in the City of Hardeeville. However, several roadways have posted "share the road" signage, including Medical Center Drive, Warren Street/John Smith Road (SC 141), SC 46, and Church Road. No additional bicycle amenities, such as bike racks, have been identified in the City. However, several roadways may have sufficient pavement width between curbs to be restriped to include bicycle lanes.

The City does require convenient pedestrian circulation systems be provided continuously throughout new developments. Where feasible, any existing pedestrian routes are to be preserved and enhanced and pedestrian-motor vehicle conflicts minimized. All streets, except for alleys, are to be bordered by sidewalks on both sides. Bicycle circulation is encouraged and should be accommodated on streets and/or on dedicated

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bicycle paths. Where feasible, any existing bicycle routes are to be preserved and enhanced. Shared-use pedestrian/bicycle pathways are desired in larger planned developments. Shorter block lengths are encouraged with a mix of uses in close proximity to each other to allow for shorter trips that can be accomplished on foot or via bicycle. Additionally, TIA requirements for new developments include the qualitative and quantitative analysis of bicycle and pedestrian trips. The fruits of these requirements are being realized in new developments including Tradition, Sun City Reflections, and Hilton Head Lakes.

As individuals become more conscious of energy consumption, fuel costs, and the health advantages of an active lifestyle, quality environments for biking and walking will only become more important. Just as the City of Hardeeville has performed detailed analysis of future vehicular transportation corridors and solutions, so should the City plan for bicycle and pedestrian modes. A comprehensive bicycle and pedestrian plan should be completed for the City of Hardeeville to identify suitable roadways for bicycle travel, critical pedestrian connections, and key origins and destination for bicycle and pedestrian travel.

Public Transit

The Lowcountry Regional Transportation Authority (LRTA) is the public transit provider serving Jasper County, Beaufort County, Hampton County, Allendale County, and Colleton County. The LRTA provides service under the banner of Palmetto Breeze. Palmetto Breeze's primary goals are to provide a low-cost means for citizens to commute to their job, assist with job-related and daily living functions, and childcare transportation. Employers are also able to give their employees a pre-tax transit commuter benefit for utilizing the bus as their mode of transportation to their job. The government benefit is provided to attract good, able-bodied workers from the rural areas within the Palmetto Breeze network. Discounts, within the rate structure, are also available for those who choose to utilize the bus service on a weekly or monthly basis. A full, one-way fare originating in Hardeeville costs $2.50 (i.e., throughout the system, fares range from $2.00 to $3.25), while weekly and monthly tickets are $27.00 and $93.50 respectively.

Figure 7.10 – Passengers board Palmetto Breeze bus

The LRTA offers demand response (dial-a-ride) service in Beaufort County but currently does not offer such service in Jasper County; however, FAITH (Focused Alternative Interfaith Transportation for Health) Volunteer Medical Transportation is available to all residents of Allendale, Beaufort, Colleton, Hampton, and Jasper Counties. This service is based on volunteer driver availability and provides transportation to medical appointments. All individuals who can transfer into a private vehicle with minimal assistance are eligible for this service.

Palmetto Breeze has thirteen local and regional fixed routes. Fixed-route service is via 40-foot coach buses complete with audio and video entertainment. Routes servicing Hardeeville are depicted on Map 7-6. Route 307 serves the City of Hardeeville; the route leaves Gifford at 4:55 a.m. daily with stops in Luray, Estill, Lena, Furman, Scotia, Garnet, Hardeeville, Pritchardville, Bluffton, and Hilton Head Island. Route 850 provides service between Ridgeland and Hardeeville. Local service within the City of Hardeeville is provided through

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Route 851. Tables 7.4, 7.5, and 7.6 present schedules (i.e., all pickup times are approximate) and stops for each of these routes. Route 308 travels through Hardeeville but does not stop.

Table 7.4

Route 307 Schedule

Town	Stop Location		AM	PM
Gifford	Hwy 321	Gifford Intersection	4:55	7:05
Luray	Hwy 321	Luray Store	5:08	7:00
Estill	Hwy 321	Laundry Mat	5:12	6:55
	Hwy 321	Bobop's Gas Station	5:13	-
	Hwy 321	Nickel Pumpers	5:15	6:50
	Hwy 3	New Town	5:20	6:49
Lena	Lena Road	Red House on left	5:24	6:47
	Lena Road	Stove Pipe Road	5:27	6:45
Furman	Hwy 601	Ashley Road	5:28	6:43
	Hwy 601	Ways Store	5:30	6:40
Scotia	Hwy 33	Scotia Store	5:35	6:35
Garnet	Hwy 321	Garnett Post Office	5:40	6:30
Hardeeville	Hwy 17 & Hwy 46	Gas Station at Stop Light	6:12	5:55
	Hwy 46 & Hwy 170	Stop Sign	6:15	5:50
Pritchardville	Hwy 40	Country Store	6:25	5:45
Bluffton	Hwy 46	Chevron	6:27	5:40
	Hwy 46	Nickel Pumpers	6:30	5:37
	Benton Field Rd.	Palmetto Breeze	6:35	5:35
Hilton Head Island	Palmetto Bay Rd.	Tide Point	7:09	-
	Palmetto Bay Rd.	Haig Point Embarkation	7:12	-
	Palmetto Bay Rd.	Food Lion	7:18	-
	Palmetto Bay Rd.	Publix	7:22	-
	Palmetto Bay Rd.	Bi-Lo	7:24	-
	N. Forest Beach Rd.	Sea Crest	7:31	-
	N. Forest Beach Rd.	Crown Plaza	7:31	-
	Lighthouse Rd. (Seapines)	Housekeeping	7:45	-
	Lighthouse Rd. (Seapines)	Harbour Town	7:50	-
	Hwy 278	Wal-Mart	-	5:18
	Hwy 278	Pineland Station	-	5:12
	Hwy 278	Speedway Gas Station	-	5:10
	Hwy 278	McDonald's South End	-	5:05

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Table 7.5

Route 850 Schedule

Stop Location	AM	PM
Palmetto Breeze Annex	7:00	3:30
Bellenger Hill Rd.	7:30	3:03
Shad Rd.	7:35	2:55
River Edge	7:40	3:15
Roper Rd.	7:46	2:50
Levy Hwy.	7:53	2:45
Freedom Hwy.	7:58	2:40
Ernest St.	8:02	2:33
Sanders Rd.	8:10	2:26
Jasper DSNB Center	8:40	2:00

Table 7.6

Route 851 Schedule

Stop Location	AM	PM
Ford Rd.	9:10	1:35
Nelson Ct.	9:15	1:25
Levy Rd.	9:20	1:20
Bush-Clark Rd.	9:25	1:15
Waiters Ave.	9:27	1:12
Turning Leaf Ln.	9:35	1:05
Church Rd.	9:39	1:03
Old Charleston Hwy.	9:47	12:56
Portabella Rd.	9:55	12:48
Main St.	10:00	12:45
Barker St.	10:05	12:33
Simmons Ln.	10:07	12:35
Jenkins Ave.	10:10	12:37
Deer Run Apts.	10:15	12:40
CENTER	10:20	12:30

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With so many service oriented jobs located in the Lowcountry, commuter bus service is essential to provide an economical travel option. As Hardeeville grows and jobs become located closer to home, commuter bus service may become less important but local circulator transit's importance will increase. Additionally, with new commercial development being built further out from the city center, it is important to provide public transportation between residential areas in the core of the City to these outlying areas. Public transit should not only be accommodated but encouraged as a viable alternative to automobiles. Transit usage reduces fuel costs, emissions, and the amount of traffic on roadways. Additionally, and most importantly, public transit is an essential service for those who do not have access to an automobile.

As new developments are reviewed and approved by the City, it is important that they be designed to accommodate transit. Currently, the MZDO requires "convenient access to transit stops" within new developments. This should be advanced further to include the provision of street geometrics that allow buses to provide "front door" access, bus pullouts along busy streets, and continuous pedestrian connectivity between bus stops and buildings. Additionally, the City's ordinance does not require bus shelters; rather, it may actually discourage shelters in that it places certain requirements on shelters (e.g., high visibility, lighting, etc.) if a property owner decides to install them. A stronger approach would be to set "warrants" or thresholds for when bus shelters are required (e.g., at commercial land uses in excess of 10,000 square feet) and then stipulate specific design specifications.

Rail

Historically, the railroad has been a vital component of the transportation system of Hardeeville, and was utilized to ship lumber supporting the logging industry. The railroad remains an important component today, serving the Hardeeville Industrial Park and businesses within the area.

Figure 7.11 – CSX Charleston Subdivision

CSX Transportation (CSX) owns and operates the rail line that runs through the City of Hardeeville adjacent to industrial and commercial properties along the western boundary of the city limits. The line is referenced as the Charleston Subdivision, which is part of the larger Florence Division or Florence "Service Lane" of CSX's Southern Region ("Service Lane" is a term generally assigned to lines containing key corridor routes).

There are five crossing in the City of Hardeeville and they are summarized in Tables 7-7 and 7-8. The Federal Railroad Administration (FRA) has been keeping data on railroad crossings for the past 30+ years. According to the FRA Crossing Inventory, railroad activity has held steady along the Charleston Subdivision for the past 30 years. Daytime crossings are from hours of 6:00 a.m. to 6:00 p.m. Nighttime crossings are from the hours of 6:00 p.m. to 6:00 a.m. Switching movements involve a single train crossing the roadway multiple times in order to serve local businesses. Of those trains engaged in switching movements, the FRA does not designate

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whether these movements occur during the daytime or nighttime hours. However, no switching movements were associated with any of the crossings in Hardeeville.

Table 7.7
Railroad Crossing Summary

Crossing	Type	Safety Equipment	Accidents
Purrysburg Rd.	At-grade	Reflective crossbucks (2); Standard stop signs (2)	None
US 321	Grade-separated	N/A	None
Main St.	At-grade	Gates (2); Mast mounted flashing signals (2); Audible bells (2)	1977, Passenger vehicle struck by freight train, driver did not stop, driver and passenger killed 1983, Truck struck by passenger train, truck stalled on tracks, no injuries
Industrial Park Rd.	At-grade	Gates (2); Mast mounted flashing signals (2); Audible bells (2)	None
Private Road	At-grade	None	None

Table 7.8
FRA Crossing Inventory for Charleston Subdivision in the City of Hardeeville

Crossing	Thru Movements		Switching Movements	Total
	Daytime	Nighttime		
Purrysburg Rd.	8	14	0	22
US 321	5	11	0	16
Main St.	9	15	0	24
Ind. Park Rd.	9	15	0	24
Private Road	8	14	0	22

**Information is based on most recent FRA Crossing Inventory data available.*

Amtrak has "trackage rights" to the line, which allows them to run their trains on the line at the discretion of CSXT officials. Some years ago Hardeeville did have a passenger station, but does no longer. The closest stations in proximity to Hardeeville are the Savannah Amtrak Station (approximately 26 miles south of Hardeeville) and the Yemassee Amtrak Station (approximately 36 miles north of Hardeeville). As the population of Hardeeville increases, passenger rail service should be considered as an alternative for longer trip lengths and the reestablishment of an Amtrak passenger station should be investigated.

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Rail's importance to the City of Hardeeville and the region will only increase as Hardeeville Industrial Park, Riverport, Sherwood, Hardeeville Commerce Park, and Reed industrial tract come online to service both the existing Port of Savannah and the proposed Jasper Ocean Terminal. According to the South Carolina State Rail Plan 2008 Update undertaken by the South Carolina Department of Commerce, the new Jasper Ocean Terminal does have the potential to be serviced by rail. Although the site of the Jasper Ocean Terminal does not currently have rail access, there is a former CSXT branch line approximately five miles away. The exact configuration of rail to the new port is still in the very early planning, but most likely a spur from this current inactive line would be extended adjacent to planned roadways to serve the new port. Rail would connect back into the "A" line across the Savannah River, of which the Charleston Subdivision is a part.

Air Transportation

The City of Hardeeville is served by several air transportation terminals, including three commercial terminals. The Savannah-Hilton Head (SAV) International Airport is approximately 16 miles away, less than 20 minutes from downtown Hardeeville via I-95 to Exit 104 onto Airways Avenue/Pooler Parkway. Commercial carriers including AirTran Airways, Comair, Continental, Delta Air Lines, United Express, and US Airways operate from SAV International Airport. The Hilton Head Island (HXD) Airport is located 27 miles east of Hardeeville, and the only commercial carrier serving this location is US Airways Express. The Charleston (CHS) International Airport, located approximately 90 miles northeast of Hardeeville, includes carriers AirTran, Continental, Delta Air Lines, United Express, and US Airways and is also utilized by a substantial number of air travelers from local areas.

Other, smaller, non-commercial air transportation facilities include: the Lowcountry Regional (RBW) Airport located in Walterboro approximately 58 miles north of Hardeeville via I-95; the Ridgeland (3J1) Airport located in Ridgeland approximately 19 miles north via I-95; the Hampton-Varnville (3J0) Airport located near Hampton/Varnville approximately 47 miles north via US 321 to 601; the Allendale County (88J) Airport located in Allendale approximately 55 miles north via US 321; and the Beaufort County Airport located in Beaufort approximately 33 miles eastward via US 278 to SC 170.

Map 7.7 depicts the locations of air transportation facilities and Table 7.9 presents data on each.

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Table 7.9
Air Transportation Facilities

Airport	Code	Acres	Runway	
			Length (ft)	Width (ft)
Savannah-Hilton Head Intl	SAV	3,650	9,351	150
Hilton Head Island	HXD	131	4,300	100
Charleston Intl	CHS	2,060	7,004	150
*Lowcountry Regional	RBW	1,400	6,002	100
*Ridgeland	3J1	82	2,692	70
*Hampton-Varnville	3J0	50	3,580	60
*Allendale County	88J	95	5,005	75
*Beaufort County	**	**	3,430	**

**Airport is not a commercial airport; **Information not available*

Regional Transportation Planning

Lowcountry Council of Governments (Lowcountry COG)

The City of Hardeeville is located within the planning area of the Lowcountry Council of Governments (COG), which serves Jasper County along with Colleton, Hampton, and Beaufort Counties. The Lowcountry COG provides transportation planning assistance on a regional level and helps coordinate with other governmental and non-governmental agencies. The Lowcountry COG is involved in the oversight of federal and state funded transportation projects that will affect the City of Hardeeville.

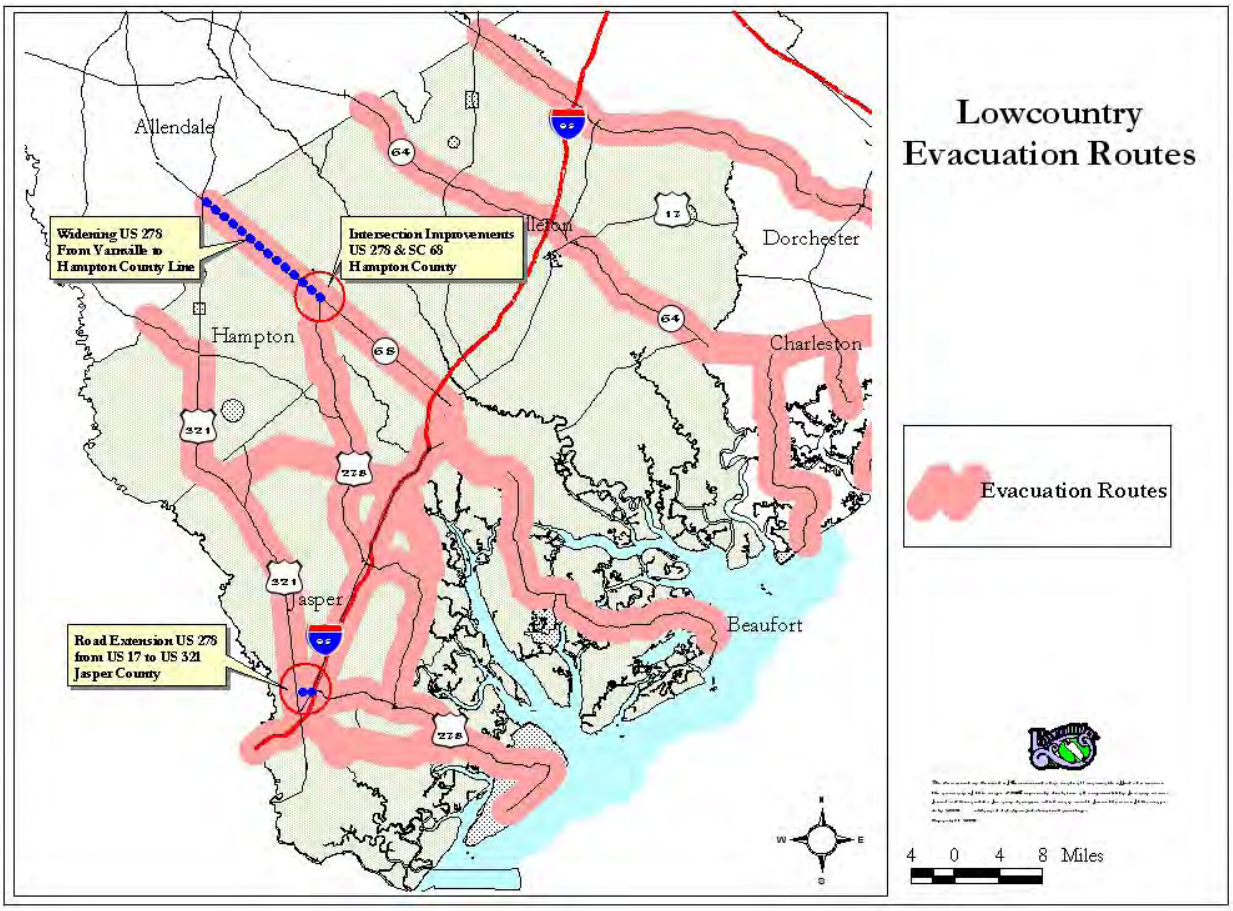
One of the principal planning documents produced by the Lowcountry COG is the Long Range Transportation Plan (LRTP). The most recent version of this document was drafted in 2006 and includes goals, objectives, strategies, and implementation recommendations for improving the multimodal transportation network in the region. At the writing of the LRTP, less than $3 million dollars annually through 2012 was projected for state transportation improvements in the region. Therefore, the LRTP focused on lower cost recommendations like policies for improving bicycle and pedestrian connections, increased use of public transit, making the region more "freight friendly," and intersection safety improvements. The only intersection improvement project within the City of Hardeeville is the recommended redesign of the intersection of US 321, SC 46 (Main Street), and Church Road. No cost estimate was included.

Additionally, the LRTP spoke to the importance of hurricane evacuation and listed several improvements in the region that would assist in expediting the evacuation process. Two of those recommendations would have direct influence on the City of Hardeeville (see Figure 7.12):

- Extend US 278 as four lanes from its terminus at US 17 (near Exit 8) for approximately 1.1 miles to US 321.
- Widen US 321 to four lanes for approximately one mile to the Hardeeville city limits.

Figure 7.12

Lowcountry Evacuation Routes and Recommended Improvements



South Carolina Department of Transportation (SCDOT)

The SCDOT is involved with roadway projects across the state and in Jasper County that will influence the transportation network of the City of Hardeeville. Roadway projects may be funded at federal, state, or local levels and include a variety of improvements including bridge replacement, road widening, and resurfacing. In the Interstate Corridor Plan, prepared by the SCDOT to address future interstate needs for capacity and maintenance, sections of I-95 within Jasper County are identified for improvements. I-95 is recommended to be widened from four lanes to six lanes from the Georgia state line to US Highway 278. A substandard bridge on I-95 is identified for replacement in the Interstate Corridor Plan approximately seven miles north of the City of Hardeeville. Roadway improvements identified in the Interstate Corridor Plan are long-term and are scheduled to be addressed over the next 20 years.

Additional projects in the area which will directly or indirectly impact the transportation network of the City of Hardeeville include the widening of US 17 for an approximately seven mile stretch beginning at the Georgia state line and ending south of Hardeeville at SC 170. This project is listed on the SCDOT Statewide Priority List of Rural and Urban Program Widenings. Several secondary roads in the City of Hardeeville are included in the State Program for 2008 and 2009 for road resurfacing, which are state funded.

The SCDOT has approved monies from the American Recovery & Reinvestment Act for roadway improvement projects throughout the state; currently there are no projects approved in the vicinity of the City of Hardeeville but additional projects may be approved in the future. These projects include road resurfacing, sidewalk improvements, bridge replacements, and safety/traffic improvements.

Jasper County Comprehensive Plan (Updated April 2007)

Both Jasper County and Beaufort County affect each other with respect to future economic growth, and the need for cooperative transportation planning to address future impacts and mitigate traffic congestion is increasingly important. Major growth predicted along US 278 and SC 170 in both counties symbiotically affects the other. US 17 in Southern Jasper County is considered to be an important transportation concern as Jasper and Beaufort Counties grow, the connectivity to Savannah will become more important as well. According to Jasper County's Comprehensive Plan, the Talmadge Bridge over the Savannah River was constructed to accommodate a four-lane highway on the South Carolina side. This project is currently in the SCDOT five-year Statewide Transportation Improvement Program (STIP); currently, $2.5 million dollars has been allocated for planning, environmental documentation, and design in fiscal year 2009. Additionally, a new airport facility is being considered to replace the existing one in Ridgeland.

Beaufort County Comprehensive Plan (October 2007)

As previously stated, predicted future growth and roadway conditions in Beaufort County and Jasper County will affect each other, thus the need for coordinated planning between these neighboring counties is essential. According to recommendations within Beaufort County's Comprehensive Plan, Beaufort County will engage in coordinated regional transportation planning with Jasper County and the LCOG. The Plan states that there are approximately $334 million in committed and planned transportation improvements identified and funded to address existing and future transportation needs, and there are approximately $701 million of additional planned projects that are not yet funded.

Committed and funded project *US 278 Signal System, ITS Architecture Plan & street lighting*, includes signalization upgrades and expansion from Hilton Head Island to Jasper County with an estimated cost of $1.1 million. These improvements will assist in addressing some of the existing and predicted roadway deficiencies. Planned Transportations Improvements (in order to address 2025 Needs) *SC 170 / SC 46 Widening Project* from SC 170 to Jasper County is estimated to cost $15 million.

The Beaufort County Comprehensive Plan makes reference to a number of planning tools and policies utilized to account for growth and address transportation demand and help reduce vehicle miles traveled (VMT):

- **Access Management Standards and Corridor Planning** benefits a community by reducing accidents, providing safer, channelized access to businesses, and improving mobility. Access management standards will not increase capacity, but can be used to efficiently maximize the existing capacity of the road network. Some access management techniques include maximizing intersection and driveway spacing, providing deceleration lanes, sharing driveway access, and requiring road and parcel interconnectivity (see Beaufort County Joint Corridor Access Management Plan Section).

- **Traffic Impact Analysis Ordinances** for Beaufort County, require developers to determine the impact of their proposed development on the transportation system and to provide mitigation accordingly.

- **Traffic Modeling** is based on projected growth from proposed development and the comprehensive plans of the County/municipalities, thus enabling the County to predict future traffic volumes.

- **Intelligent Transportation Systems (ITS)** includes three components: video surveillance cameras, response vehicles, and radio advisory broadcasts. The County operates and maintains 51 surveillance cameras along major highways. Using the footage from the cameras, the Emergency Management Department is able to send vehicles to assist vehicles in need (i.e. wrecked, stranded, etc.). Images from the cameras are also placed on the County's web site so that commuters can evaluate traffic conditions before traveling between home and work. The cameras also give the County the ability to alert people of existing traffic conditions and what to avoid, via electronic message boards or AM radio stations.

- **Land Preservation** disenables portions of land from being developed, thus minimizing potential traffic volumes. Beaufort County and the Town of Hilton Head Island both have land purchase programs which assist in keeping certain lands undeveloped.

- **Land Use Policies** include those directed at supporting internal trip capture by allowing or requiring mixed used development, and those policies which encourage centralized, high-density development that assists public transportation utilization and also connects transportation to land use.

Beaufort County Joint Corridor Access Management Plan

Included as an appendix to the Beaufort County Comprehensive Plan is the *Okatie Highway (SC 170) and West Fording Island Road (US 278) Joint Corridor Access Management Plan*. The scope of this plan is to preserve the throughput capacity of West Fording Island Road (from the Jasper County line to McGarvey's Corner (SC 170)) and Okatie Highway (from Old Baileys Road (S 18) to McGarvey's Corner) by planning for properly timed and spaced signals, implementing access management standards, and promoting linkages to minimize local traffic from these principal arterials.

The Plan has two primary goals. The first goal is to provide for the efficient and safe flow of traffic along West Fording Island Road (US 278) and Okatie Highway (SC 170). Traffic hazards must be reduced for through traffic and local traffic since SC 170 is a crucial link for Northern Beaufort County residents who commute to work in the Hilton Head, Bluffton, and Savannah areas. Also, US 278 is the only principal east/west arterial connecting

Interstate 95 with Bluffton and Hilton Head Island. The second goal is to establish a cohesive and well-linked community for existing and future neighborhoods along West Fording Island Road and Okatie Highway. As these roadways develop, they will be utilized with an increasing frequency by the local community in order to access existing and future residential areas.

These goals will be achieved through: appropriate signal spacing and future signal implementation; coordinating signal operations in order to maximize through traffic capacity; driveway spacing and maximization of access points within the limits of the SCDOT *Roadside Management Standards* (the standards of the Joint Corridor Access Management Plan are to be used in addition to the SCDOT standards); using appropriate driveway geometric design; creating driveway linkages; developing backside access roads; and constructing deceleration lanes.

The *Okatie Highway (SC 170) and West Fording Island Road (US 278) Joint Corridor Access Management Plan* also proposed the development of pedestrian/bicycle facilities including a ten-foot wide pedestrian and bicycle trail to be located on the east side of Okatie Highway and on both sides of West Fording Island Road.

In principle, the City of Hardeeville supports the goals of the *Okatie Highway (SC 170) and West Fording Island Road (US 278) Joint Corridor Access Management Plan.* The plan is well-founded and consistent with current industry trends and industry-accepted practices for access management and alternative transportation mode accommodations. Recommendations for particular signal locations included in the plan should be revisited in light of ongoing development proposals in the City of Hardeeville to ensure that the greatest public utility of signal-controlled access points is attained.

Transportation's Connection to Land Use

The direct connection between transportation systems and the land uses adjacent to those systems is undeniable. It is a cyclical and symbiotic relationship; as development occurs, transportation systems are impacted and improved to service that development, and as transportation systems are put in place, the characteristics of new development are clearly in response to that system. Historically, cities and towns have developed around transportation, rather than a land use vision setting the tone for a supporting transportation network. Our earliest cities formed around rivers, railroads, and streetcar systems; while more recent suburbs grew up along state highways or adjacent to the federal interstate system.[1]

As Hardeeville moves forward, the most efficient use should be made of the existing transportation network's limited capacity. Because funding for transportation is limited and competition for those funds is fierce, it is imperative that we ensure optimal usage of any funding. The days of building "big roads" are quickly passing, if not already gone. Future capital improvement decisions must be savvy ones, focusing on creating a stronger, interconnected street network. Hardeeville is already working in this direction through requirements set forth in the MZDO that include controlled access collector roads between existing arterials and connecting a substantially greater number of local roads to provide additional route options. Through the development approval process, the City of Hardeeville is ensuring that proposed streets are coordinated with the street system in the surrounding area, and, where possible, provision for the continuation of those streets between

[1] Moore, T., and Paul Thorsnes, with B. Appleyard. 2007. *The Transportation/Land Use Connection.* Chicago, IL: American Planning Association.

communities is considered. The more possible routes, or connections, that are available, the greater the reduction of congestion, especially on collectors and arterials that are used for longer trips.

Hardeeville has also placed focus on improving connectivity and accessibility for other modes of travel in addition to automobiles, including walking and biking. Nationally, almost half of trips made daily are three miles or less in length, a distance that can easily be achieved by bicycle and is not an unreasonable walk.[2] Through its ordinances, the City of Hardeeville mandates that sidewalks be placed on both sides of all streets. In larger developments, the City actively works with developers to encourage a connected system of shared-use paths and sidewalks to accommodate both pedestrians and bicycles. Additionally, Hardeeville encourages a mix of land uses to create small nodes of neighborhood conveniences in close proximity to residential development. Encouraging development patterns that lend themselves to a variety of destinations within a relatively short distance is not only convenient but will also reduce dependency on automobiles, relieve congestion on roadways, reduce parking demand, and improve quality of life for all citizens.

Figure 7.13 – Bicyclist along Main Street

With the proper encouragement of infill redevelopment, Downtown Hardeeville can serve as a prime example of a quality transportation/land use relationship. Infrastructure to support this scenario is already in place; with shorter block lengths, sidewalks, and transit routes the City can leverage the area to readily facilitate compact, mixed-use development. Downtown presently has a number of retail, service-oriented, and food service uses within close proximity of each other and residential areas. By facilitating future infill development in Downtown Hardeeville, the City can establish a strong central core that embodies the principals and goals of quality transportation and land use planning.

In anticipation of future development, the City of Hardeeville has taken a proactive approach to connected transportation and land use planning through the establishment of a vision for a system of regional roadways. These roadways will service both existing and planned developments, while providing more route options to disperse vehicular traffic throughout the region. This system, conceptually depicted in Map 7-8, will provide connectivity and access between existing and proposed land uses and the arterial system, as well as enhance the functionality of existing major arterials (e.g., US 278).

Figure 7.14 – Interconnected bicycle and pedestrian pathway in Tradition

[2] Federal Highway Administration. *University Course on Bicycle and Pedestrian Transportation (FHWA-HRT-05-085).* http://www.tfhrc.gov/safety/pedbike/pubs/05085/index.htm

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To promote sustainable communities, the City of Hardeeville negotiates development agreements with all new, large-scale developments. The focus of these agreements is to ensure that adequate facilities and services are in place when the development opens and maintained in the long-term, as well as to protect and enhance the quality of life of the citizenry. Most agreements include the dedication of land for future schools and parks, which will be accessible via interconnected pedestrian and bicycle pathways. The regional roadway network is also a fundamental element of each of these agreements, including the understanding of roadway construction, operation, and maintenance responsibilities. The following provide a brief summary of recent development agreements and highlight how these developments will improve mobility and connectivity.

- *Anderson Tract* is a development which will provide for a mixture of medium density residential, office, and retail/commercial land areas. Hilton Head Lakes, LLC will construct Lakeside Boulevard through the project area, serving to provide access and connectivity. The developer is responsible for construction of the roadway and maintenance for a two-year period following the 1,000th certificate of occupancy. Following that period, the road will be the City of Hardeeville's responsibility for continued maintenance. The property is located east of I-95 along US 278 in Jasper County; the land is directly adjacent to US 278, a principal arterial, and will provide connectivity via Lakeside Boulevard between US 278, the proposed US 278A, and SC 46.

- *Argent West (Tradition) Tract* will provide a combination of medium density residential, office, retail, and industrial land areas and is located at the northeast quadrant of, and directly adjacent to, I-95 and US 278 in Jasper County. Exit 8, the interchange of I-95 and US 278, provides access to Argent West. US 278 (and over two miles of frontage road) and vacant land parcels make up the southern border, and I-95 (and almost three miles of frontage road) and Sergeant Jasper State Park form the western border. New roads include, but are not limited to, "Central Road" which will be constructed by the developer, and Road "A" providing access to/from US 278, which will be constructed by the City. Central Road will be dedicated to the City upon completion but maintained by the developer for a period of two years following the 3,000th certificate of occupancy. Then, maintenance will be the responsibility of the City. Central Road forms an intersection with US 278 directly across from Lakeside Boulevard (Anderson Tract), providing connectivity via Lakeside Boulevard all the way to SC 46. An Interstate Justification Report (IJR) may justify a future interchange at the north end of the property in order to further mitigate access issues.

- *Argent East Tract* will consist of medium density residential, office, retail, and industrial land uses. The property is bordered on the east by the Great Swamp, the south by US 278 and SC 141, and the north by the BJWSA raw water canal. The property is adjacent to both US 278 and SC 141 providing access to these principal arterial and major collector streets respectively. Argent East also includes approximately one mile of frontage along Highway 141, with an additional access at Jasper Station Road. Also assisting in connectivity, land tracts Sun City Hilton Head, Argent West, Anderson Tract, Morgan Tract, and West Hardeeville Tract are within close proximity to the Argent East Tract. Road improvements will include, but are not limited to, SC 141, the construction of "Central Loop Road," and other "near site" improvements. Central Loop Road will provide direct connections between US 278, Argent Boulevard, and SC 170. It will be dedicated to the City upon completion but maintained by the homeowners' association for a period of two years following the 3,000th certificate of occupancy.

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- *Hardeeville Tract* will provide for a variety of medium density residential, office, retail, and industrial land areas. The Tract is located west of, and adjacent to, I-95 and US 17 and east of, and adjacent to, the Savannah River in Jasper County; the property's direct adjacency to these roadways and river will provide access. I-95 also has an interchange within the area located at Exit 5 that connects to Purrysburg Road, providing access to the property. Road improvements by Copper Station will include Purrysburg Road and other roads throughout the project. The developer will dedicated road improvements to the City in phases but maintain them for a period of two years following the 3,000th certificate of occupancy. If an Interstate Justification Report (IJR) justifies a future interchange (i.e., Exit 3) at the north end of the property, Copper Station agrees to donate a 200 foot right-of-way.

- *Morgan Tract* will consist of medium density residential, office, retail, and industrial land uses. The property is located east of I-95 along US 278 east and directly adjacent to US 278, SC 46, and SC 141 and will feature road connectivity between adjacent lands for traffic mitigation. "Spine Road" will be constructed through the project area in order to provide access between US 278 and the future US 278A. It will be constructed by the developer but dedicated to the City. The homeowners' association will be responsible for maintenance for a two-year period following the 1,000th certificate of occupancy.

- *Okatie Crossings* will provide for retail/commercial, office, and multifamily residential land areas, and is located west of SC 170 and along US 278 in Jasper County. The land is directly adjacent to US 278 and SC 170 and potential road connectivity between adjacent lands for traffic mitigation is planned. There are existing access points to/from the property from SC 170 and US 278.

- *Sherwood Tract* will consist of a variety of medium density residential, office, and retail/commercial land areas and is located south of I-95 between US 17 and Purrysburg Road. The land is directly adjacent to US 17 and will feature road connectivity between adjacent lands for traffic mitigation. Sherwood Village, LLC will construct two parallel roadway thoroughfares via building a north/south spine road to parallel US 17 that will connect the other parallel thoroughfares, the planned extension of 278-A and the Purrysburg Road Connector. The construction of this internal road system will prevent much traffic within the project area from ever having to utilize US 17 and SC 46, providing traffic congestion relief to other areas.

- *Sun City Hilton Head – Pulte/Del Webb Tract* will consist of a variety of medium density residential and retail/commercial land areas and is located north of US 278 between SC 141 (Argent Boulevard) and SC 170. The land is directly adjacent to US 278 (principal arterial), SC 141 (major collector), and SC 170 (major collector) and will feature road connectivity between adjacent lands for traffic mitigation.

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Recommendations

Needs

- As demand increases, adequate levels of service on I-95, major and minor arterials, and collectors must be maintained.
- In order to support logistics/distribution facilities, I-95 and its associated interchanges will need to meet the needs of such facilities.
- Adequate levels of service on roadways and at intersections are critical to the operation of the transportation network.
- Outside the central core of Hardeeville, there are no sidewalks along local streets.
- Safe pedestrian access at all intersections, along all streets, and across I-95.
- Additional transportation enhancement opportunities.
- Improved local circulator transit service to connect residential areas to new commercial developments in outlying areas.
- Rail service to the proposed Jasper Ocean Terminal.
- Increased influence and leverage over regional transportation planning.
- Improved hurricane evacuation routes and procedures.

Policies & Implementation

- Advance the widening of I-95 from four to six lanes from the Georgia state line to US 278 at Exit 8.
- Support the further analysis and implementation of necessary geometric improvements to Exits 5 and 8 to accommodate logistics/distribution facilities.
- Implement Exit 3 and associated improvements on Purrysburg Road, east-west connector from Purrysburg Road to US 321, and intersection improvements.
- Facilitate the funding and improvement of poorly operating intersections to improve traffic safety and flow and achieve and maintain an adequate level of service.
- Ensure, as traffic signals are implemented, that they are interconnected and synchronized to reduce congestion and maintain level of service.
- Investigate and advance methods for providing adequate and safe pedestrian access through the interchanges over I-95 at Exits 5 and 8.
- Complete a comprehensive bicycle and pedestrian plan to identify suitable roadways for bicycle travel, critical pedestrian connections, and key origins and destinations for bicycle and pedestrian travel.
- Support Palmetto Breeze in analyzing and implementing a stronger local circulator transit service to provide connections between residential areas and new commercial developments.
- Enhance development regulations to encourage development that is “transit-friendly” through the establishment of bus stop “warrants” and design standards and the requirement of design features such as “front door” access, bus pullouts along busy streets, and continuous pedestrian connectivity between bus stops and buildings.
- Consideration of the reestablishment of a passenger rail station should be investigated to provide additional transportation options for longer trip lengths.
- Support the planning of future rail connections to the proposed Jasper Ocean Terminal.
- Proactively participate in the planning of the regional transportation network through establishing a stronger voice with the Lowcountry COG and SCDOT.

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- Advance the improvement of the intersection of US 321, SC 46 (Main Street), and Church Road, as provided in the Lowcountry COG LRTP.
- Support the implementation of hurricane evacuation improvements outlined in the Lowcountry COG LRTP, including the extension of US 278 to US 321 and widening US 321.
- Advocate for the widening of US 17 for the seven-mile stretch between the Georgia state line and SC 170.
- Position now for future federal monies for transportation improvements (i.e., stimulus, appropriations, etc.).

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Chapter 8
Housing

Introduction

The need for adequate and secure housing is a basic tenet of any community and is of chief importance to current and future residents. The significance of housing in terms of availability, quality, variety, and affordability are enhanced in areas where rapid growth is forecast. The City of Hardeeville's growth projections demand that an appropriate balance of all aforementioned factors be thoroughly investigated and areas of needs be adequately addressed. While economic and civilian factors play a significant role in determining the future of a community, the housing element is what ultimately ensures our City will have a thriving, successful population.

Housing Characteristics

This section provides information on the number of housing units in the city as well as the types of units, the age and condition of housing, and information on ownership, rental availability and vacancies. It should be noted that the basis for much of the information provided in this section of the Chapter is based upon U.S. Census Bureau data from the 2000 Decennial Census. Due to Hardeeville's impressive growth over the past decade, some of the information presented may be antiquated and should be considered for historical evaluation. In these situations, this section will cover efforts to give more time-appropriate figures and estimations to ensure a more accurate assessment of housing characteristics.

Figure 8.1 – A single-family home in Downtown

Number of Units (2000 Census Data)

According to data released by the Census, the City of Hardeeville had 725 housing units across 4.3 square miles in March of 2000, with nearly all housing units being located in downtown Hardeeville. In the 1990s, approximately 80 new homes were added to Census records, or an increase of about 12.3 percent for the decade from the total housing stock.

Number of Units (2009 Estimate)

Given the dramatic increase in growth that has occurred in the first decade of the 21st century, City staff has attempted to give a better estimate to the number of homes in the city. Having up-to-date housing numbers is vital for numerous reasons, ranging from assessment issues to economic development forecasts. Typically, most communities count building permits for new home construction in order to have relevant data on hand. Often though questions emerge about jurisdictional issues and whether existing homes in the city were ever properly counted for the Census. Therefore, more thorough reports are essential in obtaining an accurate assessment of housing stock. Listed below are some of the major reports conducted in recent years:

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In 2007, the City received a jurisdictional review request from the South Carolina Electric and Gas Company (SCE&G). This request featured a list of serviced address points in the city from which the utility provider had provided service. While the address list did not distinguish between commercial and residential properties, it did provide a helpful starting point for the purposes of establishing whether new and recent construction was located within Hardeeville or in the unincorporated areas of Jasper County.

In 2008, City staff calculated that an additional 167 units were added in the City through the end of 2007, thus bringing the housing unit total to 867. The calculations were based upon building permit records. The majority of these newer units have been constructed outside the downtown area in the planned development areas of the city (primarily in the Tradition and Hampton Pointe communities). Still, some "infill" development and re-development has occurred in the downtown area. The calculation has not accounted for the recent completion of a 254-unit apartment complex, a 26-unit residential subdivision, and new buildings that have been constructed in 2008 and early 2009.

City staff continued to research the number of additional housing units throughout 2008 and into 2009 not only for internal use, but also for preparation for the 2010 decennial census. Through the U.S. Census Bureau's Local Update of Census Addresses (LUCA) program, staff identified over 600 housing units that had previously not been accounted for by Census takers in 2000. This investigation was based primarily on address point records, visual identification, and verification from utility providers. While the majority of these properties were new construction, there were additional properties that had been previously unaccounted for in the last Census. A reasonable margin of error must also be accounted for in interpreting results of unaccounted or "missed" units, as some properties may be considered for commercial or professional use in spite of a residential appearance.

Figure 8.2 – New construction in Hampton Pointe

Based upon these studies and updated building permit records for the first five months of 2009, the City estimates that there are approximately 1,250 housing units in the city as of June 2009, a growth of 72.4% in the last decade. This figure was arrived at through the following calculation listed in Table 8.1 below:

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Table 8.1 – Estimation on Housing Units

Number of Housing Units in 2000:	725
2000 Census "Missed" Units (estimate)	45
New Units (2000 to June 2009, est.)	
Downtown area:	40
Pine Arbor area:	15
Courtney Bend (apartments):	254
Deerfield Village:	26
Planned Development Districts	
Hampton Pointe:	100
Tradition:	30
Other PDDs:	15
Total	1,250

Sources: U.S. Census Bureau Census 2000, City of Hardeeville, various developments

Figure 8.3 – Courtney Bend

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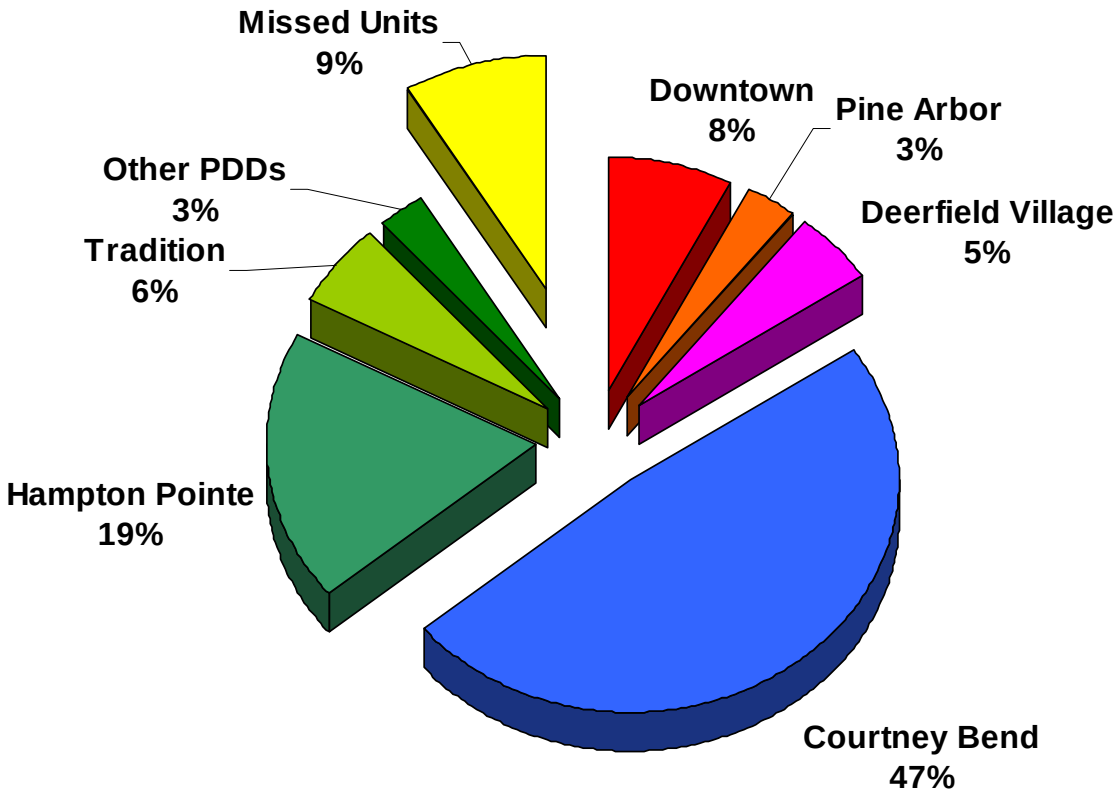
Location of Units

Using the previous calculation provided in Table 8.1, approximately 60% of the city's units are currently located in downtown neighborhoods in Hardeeville. Nearly 20% of units are in the Courtney Bend apartment development, while an about 1 out of 8 units is located in the Planned Development areas in the northeastern portions of the City. Additional areas of growth include the Pine Arbor and Deerfield Village areas.

Since 2000, the majority of new units have occurred outside the downtown areas. Figure 8.4 shows that nearly half of all new units accounted for are located in Courtney Bend, with nearly 28% of new units occurring the Planned Development areas.

Figure 8.4 – Location of New Units (since 2000)



Age & Condition

From the 1950s to the 1980s, residential growth exploded percentage-wise as nearly 40% of the City's current housing stock was constructed (and nearly 70% of the City's housing stock in 2000). The majority of homes located in the downtown area tend to be older homes but in adequate condition, with many of the modern comforts such as air conditioning, carports or garages, and sufficient insulation and plumbing. In the 2000 Census, it was reported that less than 1 percent of homes in the city have "substandard" plumbing facilities. Figure 8.6 reveals additional information about the City's housing stock:

Figure 8.5 – A newer home in Tradition

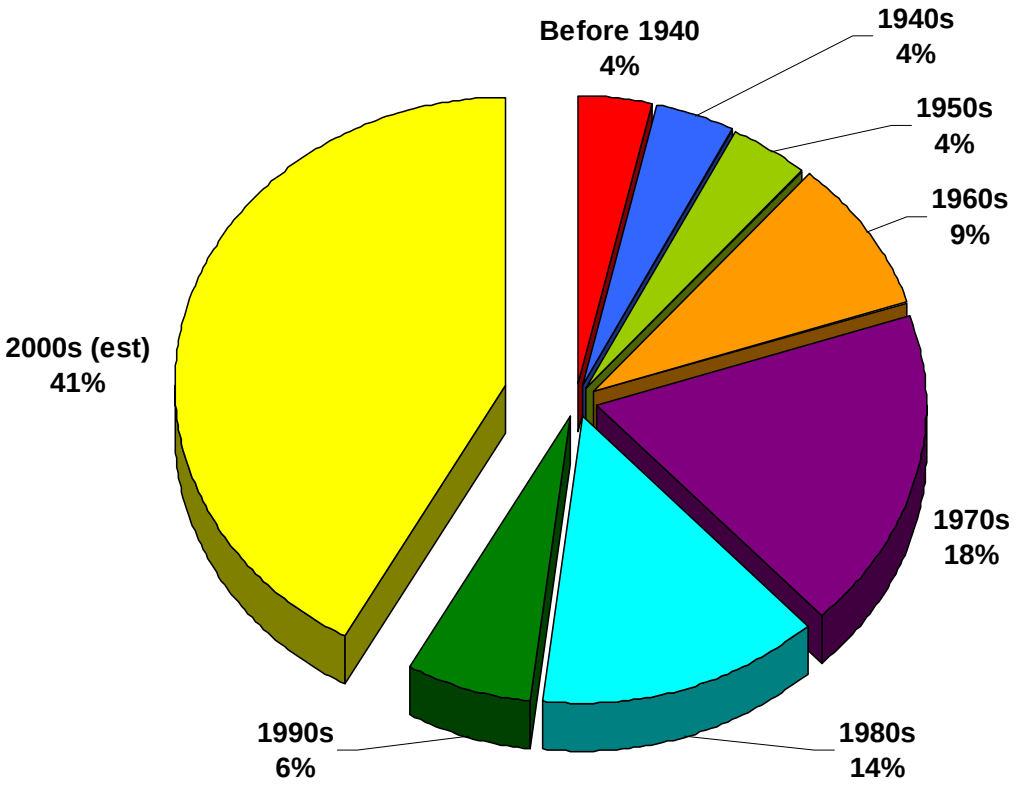


Figure 8.6 – Age of Housing Stock

Occupancy

The 2000 Census reported that the City's vacancy rate was just under nine percent in 2000. The majority of vacant units were homes that were being sold at the time. City staff anticipates a similar rate for downtown areas with the upcoming 2010 census. As some of the newer developments continue toward build-out, the City has periodically received updates on occupancy rates for their respective properties. Continuous monitoring of occupancy rates remains a vital task for planning and economic development purposes.

Affordability

Over the last three decades, the Lowcountry region has been celebrated as one of the most unique and beautiful areas in the United States by major media outlets. The well-documented quality of life in our region has resulted in tens of thousands of new residents who have relocated to the region. Due in part to the fragile and unique environment of the Lowcountry and a desire to maintain quality of life, land values have skyrocketed as available land for development becomes more cherished. The resulting increase in land values has placed enormous strains on efforts to maintain affordable and quality housing for existing residents and new arrivals to the area.

In years past, Jasper County remained an affordable option for many in the region as growth and development in Beaufort County accelerated. Growth pressures are now facing Jasper County and the City of Hardeeville, and a focus on maintaining a solid mix of housing types and home prices needs coordination and sound planning.

In response to escalating home prices in the Lowcountry region, renewed efforts for affordable housing have been made. In 2008, the 26-unit Deerfield Village was opened by Jasper County Neighbors United (JCNU), a local housing advocacy group. JCNU is currently pursuing the purchase of other residential properties in the City to further their goals of providing additional housing opportunities. Additional developers and other local advocacy groups have approached the City with other proposals to increase the availability of housing for all income levels.

Housing Trends

Historic Trends

Hardeeville's residential growth has been relatively uneven and is a reflection of the city's geographical extent over the years. Hardeeville's initial growth from a railroad village to a lumber town brought the community stable growth during the first decades of the twentieth century. Given the increase in the City limits and the anticipations outlined in planned development developer agreements, historic trends are not a viable tool in providing an assessment for future growth in the housing sector.

Single-family homes were and remain the biggest segment of the housing stock in Hardeeville. Several multi-family units were developed during the City's previous housing boom in the 1970s and 1980s. Mobile homes in the past have accounted for 10 to 25 percent of the City's housing stock, dependent upon the decade.

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Current Trends

In the first decade of the 21st century, Hardeeville has seen explosive growth in housing units, though much of it has been located outside the downtown areas. Figure 8.7 shows the number of residential permits issued during the decade. Much of the spike in 2007 and 2008 can be attributed to the residential permits that were issued for the developments in the newer areas of the City. The 2008 and 2009 economic recession has also had an impact in the number of permits issued, particularly through the first half of 2009.

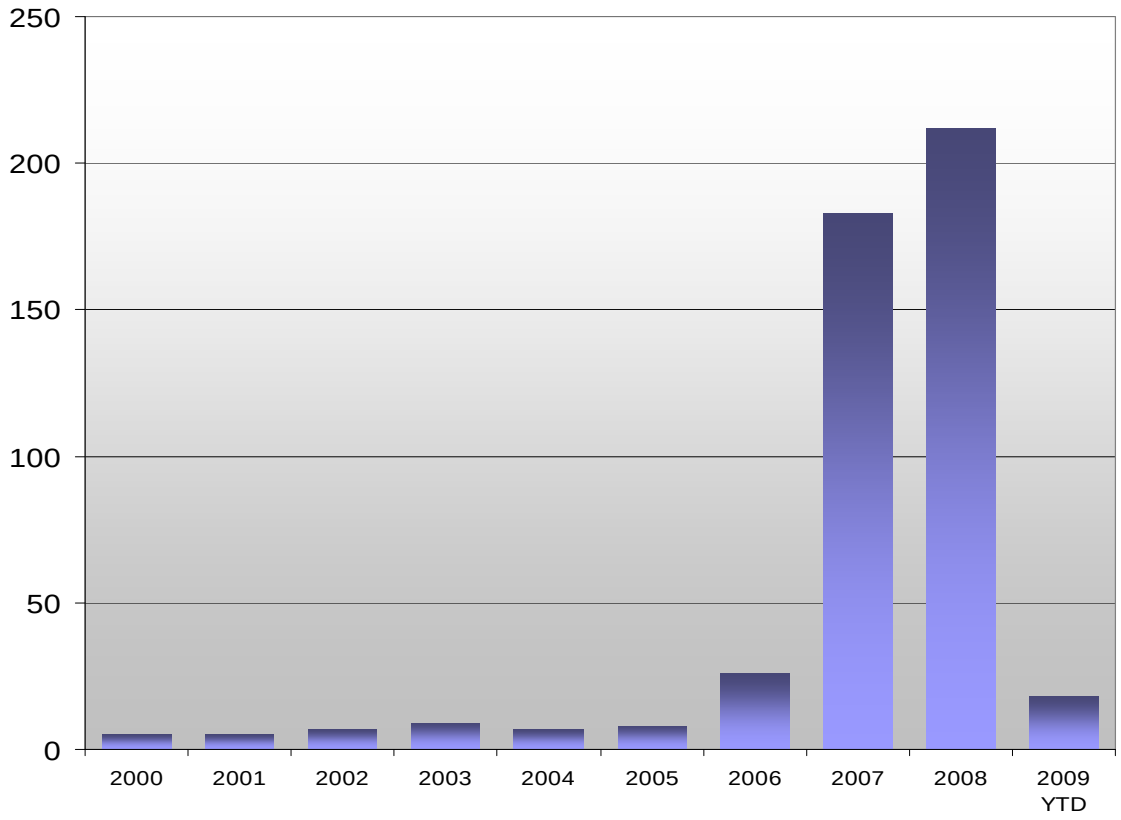

Figure 8.7 – Residential Permits Issued – 2000 to June 2009

Figures for new housing growth in the downtown areas reveal that new construction and remodeling have remained steady during the past decade, averaging between five to ten residential permits per year. This pace is equivalent to the averages set during the 1990s, when the City was essentially built out at that time, save for isolated parcels in the various downtown neighborhoods.

Figure 8.8 – Infill development in downtown Hardeeville

The most impressive trend that can be accounted for is the growth in multi-family units. The completion of Courtney Bend in 2008 added 254 multi-family (apartment) units to the city, more than doubling the number of multi-family units in the City in one year from about 170 units to over 420.

In 2000, there were approximately 100 mobile home units within the City Limits. Current regulations in the City's Municipal Zoning and Development Ordinance prohibit the movement and placement of new mobile home units on property. City staff estimates that the number of units since 2000 has declined slightly.

Future Trends

An obvious conclusion from Figure 8.6 is that construction accelerated in 2006, 2007 and 2008 and has slowed in 2009. The major consideration is the downturn in the overall U.S. economy, which began during the last quarter of 2007. The housing sector was the most affected sector of the economy nation-wide. The important lesson drawn from this economic downturn is that future trends and projections need to be mindful of the economic zeitgeist of the region, the state, and the nation as a whole. Singular projections alone cannot be entirely reliable; therefore it is important to have several projections that can be helpful in anticipating housing trends in coming years.

Housing Analysis

The recent passage of the South Carolina Priority Investment Act in 2007 created several mandates for which various communities must address in their respective Comprehensive Plans. Among the mandates were four analyses that related to the Housing Element, including unnecessary housing requirements, market-based incentives, available data, and partnership opportunities.

Unnecessary Housing Requirements

South Carolina local governments are required to analyze all factors that determine housing requirements and identify any such requirements or regulations which may overburden affordable housing development. For this section, two separate analyses were performed; the first identifying possible hindrances in the current

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Municipal Zoning & Development Ordinance (MZDO); and the second analyzing the approval process for potential projects.

For the first analysis, the general development standards listed primarily in Articles 4 and 5 of the MZDO were analyzed for residentially zoned single-family home construction, a residentially zoned multi-family development, and a residential planned development district. To simplify the findings, the following words were utilized.

- *Essential*: If standard is significant to the health, safety, and welfare of the parcel and surrounding areas.
- *Prohibitive*: If a standard is restrictive to the point where cost-effective housing may be exorbitant.
- *Dependent*: If a standard is dependent upon site conditions that are exclusive to a particular project and may be prohibitive in some cases.
- *Not Applicable*: If the standards do not apply.

Below are the findings.

MZDO Section	Standard / Requirement	Single-Family Home	Multi-Family Development	Residential PDD
4.2.A.	Restricted use in non-residential zoning districts	Essential	Dependent	Not Applicable
4.2.A.	Minimum Lot Size	SFR1: Essential SFR2: *Prohibitive* MFR: Essential	Dependent	Dependent
4.2.A.	Area per dwelling unit	SFR1: Dependent SFR2: *Prohibitive* MFR: Essential	Dependent	Dependent
4.2.A.	Lot Width	SFR1: Essential SFR2: *Prohibitive* MFR: Essential	Dependent	Dependent
4.2.A.	Minimum Setbacks	SFR1: Essential SFR2: Dependent MFR: *Prohibitive*	Dependent	Dependent
4.2.A.	Building Height	Essential	Dependent	Dependent
4.2.B.	Individual Lot Requirements	Dependent	Dependent	Dependent
4.3.	Open Space % Requirement	*Prohibitive*	Dependent	Dependent

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4.4.	Pollution Mitigation	Essential	Essential	Essential
4.5.A.	Bufferyards	Not Applicable	Dependent	Dependent
4.5.B.	Screening	Not Applicable	Essential	Essential
4.5.C.	Landscaping	Not Applicable	Essential	Essential
4.6.	Parking & Loading	Not Applicable	*Prohibitive*	Dependent
4.7.	Lighting	Not Applicable	Essential	Essential
4.8.	Tree Protection	Essential	Essential	Essential
4.9.	Stormwater Management	Dependent	Dependent	Dependent
5.1.A.	Street Layout	Not Applicable	Dependent	Dependent
5.1.B.	Pedestrian Ways	Not Applicable	Dependent	Dependent
5.2.	Utility Improvements	Not Applicable	Dependent	Dependent

The results show that there are six instances where City Staff has identified frequent instances when standards as applied are handicapping cost-effective housing in most instances. These standards are as followed:

Minimum Lot Size, Setback, and Width. Single-family homes located in the Single Family Residential 1 (SFR1) zoning district tend to be larger homes on larger parcels, where higher densities are to be avoided in order to preserve the area's characteristics. However, there are numerous locations within the downtown area where Single Family Residential 2 (SFR2) restrictions severely hamper the development of infill housing. A reduction of the minimum lot size to 8,000 square feet, combined with a reduction in the required lot width may enable additional subdivision of larger SFR2 properties and would encourage infill development. Often coupled with the reduction in minimum lot width, some jurisdictions allow zero-lot-line homes, in which a side setback on one side is eliminated and an access easement is placed on the adjoining property.

Area Per Dwelling Unit. While this standard is important in regulating the number of dwelling units per acre for multi-family projects, this standard is prohibitive in allowing for residents to construct secondary living quarters on parcels within reason. Several jurisdictions have encouraged the development of guest-houses, caretaker homes, or mother-in-law suites on an existing parcel with an existing dwelling so long as setbacks are generally respected and the architecture and form of the structure closely resembles that of the principal structure and/or the neighborhood vernacular.

One further consideration of this hindrance is that several parcels in the City of Hardeeville that have more than one residential unit on one parcel were grandfathered in at the time of the current MZDO's adoption. By removing or alleviating this requirement, several of these parcels would return to conformance.

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Open Space Requirement. Currently, a blanket 30% open space requirement exists for all residential uses, with one-third of the open space reserved for active recreation. This requirement is especially prohibitive for several reasons:

- Open space requires maintenance, thus increasing the costs to a homeowner or property owner association
- Smaller lots could become financially infeasible if available building area is reduced
- Active recreation involves the purchasing of additional equipment or material that often must be replaced.

City staff suggests stipulations that would wave open space requirements under certain conditions, such as close proximity to a park or greenway or if additional landscaping is performed on-site.

Parking & Loading. Several dynamics of this section have proven to be difficult for the development of cost-effective housing. Multi-family residential requires 2.0 spaces per unit as a blanket standard. While this is a standard which many jurisdictions use, some jurisdictions have calculated parking ratios by the number of bedrooms per unit. Also contributing to the prohibitive nature is the size of parking space itself. The MZDO calls for 10-foot by 20-foot parking spaces, which is larger than average in comparison to other districts. Several developers and site engineers have struggled to accommodate the larger spaces, particularly as it relates to multi-family development. Some have approached the city's Board of Zoning Appeals in order to reduce the size of the space to accommodate the required amount of parking. Because the appeals process can be drawn out in time, the financial risks of appealing can be difficult to sustain for some developers.

Other Factors. Because much of the costs associated with developing land are site specific, it is difficult to evaluate hindrances towards affordable housing on a broad scale. The City of Hardeeville may want to consider the implementation of a performance-based system with regards to development standards as they relate to affordable housing. This would allow staff a degree of flexibility in assisting developers control costs while still maintaining a quality development that respects the code and the surrounding built and natural environment. By allowing flexibility in the zoning code, developers may be more inclined to support development of cost effective housing than they are with a more rigid set of guidelines.

Market-based incentives

Revenue bonds, tax credits, special funds, and fee reductions are typical methods of providing market-based incentives. A variety of programs can often times be combined to help increase the likelihood and effectiveness of a potential project. Below are several options that discuss possible market-based incentives for the development of quality affordable housing. The City should consider these programs as ways to promote affordable housing in the City. The Lowcountry as a whole has seen land values escalate in the last two decades and runs the risk of out-pricing many of the citizens who currently live here and potential new residents as well. In promoting affordable housing opportunities, the City must ensure that the developers who apply for the program have sound credentials and a solid business plan to ensure the ultimate success and vitality of the development itself.

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Low Income Housing Tax Credit. This program is the most commonly used tax incentive program with regards to developing affordable housing. It can be applied for by individuals, non-profits, or developers and is typically handled through the federal government. Municipalities rarely are directly involved with the low income housing tax credit, but often promote it to citizens and developers as a way to finance cost-effective housing.

Multifamily Tax-Exempt Bond Finance Program. South Carolina allows for revenue bonds as a principal method for market-based incentives for municipal improvements. Through the South Carolina State Housing and Development Authority, a program called the Multifamily Tax-Exempt Bond Finance Program helps to provide financing for multifamily housing through the sale of tax-exempt bonds to prospective shareholders. The program is eligible for for-profit developers that have demonstrated a history and commitment to constructing low and moderate income multi-family development projects. The funding is eligible for new construction, acquisition with renovation, or renovation; thus allowing the funding to be used for existing or future development. During the process, the applicant must submit numerous items for consideration, including a marketing study and pro forma to ensure full disclosure and intent.

Housing Action Partnership Program (HAPP). This program is designed to provide financial assistance to mixed-use housing developments. The program provides matching funds to applicants who otherwise would be unable to fully finance such projects on their own and/or with other programs form the South Carolina State Housing and Development Authority. Additional requirements include that the targeted median income of tenants cannot exceed 80% of the area median and that such development must occur in a geographically designated community revitalization area.

Density Bonus. This strategy has been applied by several municipalities throughout the country, though primarily in larger communities or cities. The economic context of incentive programs to encourage affordable housing is based on the premise that private developers will include affordable units if they receive something of economic value in exchange for this action, but otherwise would not be "incentivized" to incorporate the affordable units. Sometimes, such actions are legally codified through a performance-based zoning ordinance, which grants credits to a developer for developing density bonus and thus reduces fee costs.

Housing Initiative Fund. Some jurisdictions have initiated a separate housing initiative fund as a means to allocate affordable housing monies to prospective affordable-housing developments. Pioneered by Montgomery County, Md., these funds require developers to pay a nominal fee in-lieu of developing affordable housing within their development. The developer is able to negate this fee payment by providing affordable housing on the development itself. Typically, a governing agency than awards monies from the fund to well-qualified applicants. Some jurisidictions award this to individual homeowners wishing to construct, repair, or renovate their own homes, though most jurisdictions tend to award funds that benefit more than one homeowner.

Fast-Track Permitting. Some jurisdictions, including Pleasanton, Calif. have created incentives for developers to include affordable housing elements into their developments by guaranteeing faster review times during site plan review and/or "first in line" incentives to ensure a quick approval. The money saved in a developer's pro forma would then be allocated to the development of additional affordable housing. The developer must

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document the savings before and after the development permit is approved in order to ensure that the incentive is being met.

Available data

A significant obstacle in reporting on the housing situation in a community is the lack of up-to-date or relevant information. Census information is oftentimes obsolete, particularly in years leading up to a new decennial census. This is especially the case in fast-growing communities like Hardeeville. Estimations on the number and availability of housing units often are the result of intensive staff research, which may not always be available to dedicate full resources to accumulating and tabulating data. Additional obstacles to aquiring data is an uneven amount of collaboration with county agencies that deal with real estate and housing data, particularly the register of deeds, emergency management, and the assessor's office.

While the City on occasion is able to tabulate certain data from the Building and Planning departments, there currently does not exist a comprehensive system in which data collection on building is stored. The City should investigate the creation of a cross-departmental system in which up-to-date housing data is available to staff on an ongoing basis.

Partnership opportunities

In areas with high-land value, the importance of collaboration among housing agencies and advocates is important when promoting and constructing affordable housing. In years past, a variety of federal funding mechanisms have attempted to solve housing issues across the country, ranging from large-scale urban renewal projects shortly after World War II to Section 8 and Hope VI projects beginning in the 1960s and 1970s. In the 1980s, a focus on partnerships between federal, state, and local housing authorities with private and non-profit groups were encouraged in order to reduce wasteful spending and improve the effectiveness and quality of affordable housing. This section discusses several of these funding mechanisms and how potential partnerships may be formed between the City and the respective agency or group.

Public Housing Agency (PHA). At the current time, the City of Hardeeville and Jasper County do not operate or financially support a dedicated local housing authority, also known as a public housing agency (PHA). Numerous communities and counties across the state have over the years formulated and operated PHAs as the needs of their population have grown. The closest local housing authority in our area is located in the City of Beaufort. The Beaufort Housing Authority administers both Section 8 and low-rent housing programs.

The city should investigate the feasibility of creating a housing authority, either as a standalone agency for Hardeeville or in partnership with Jasper County. While affordable housing programs have often had negative connotations associated with them in the past, there have been a number of "success stories" and case studies from locations around the country that have emerged as a result of public-private partnerships. Any discussion towards the enactment of a PHA should take into the account the importance of having private sector and non-profit support in such an endeavor.

South Carolina State Housing Finance and Development Authority. This agency is a self-sustaining authority that receives no state appropriations. The authority acts as a clearinghouse of information for prospective homeowners and renters seeking financial assistance by coordinating with lending partners and housing

partners throughout the state. The primary activities of this agency are to approve and extend loans to low and moderate income applicants, especially for first-time homebuyers. Because Jasper County is a so called "targeted county", additional benefits for loan grants are often considered by the authority.

The authority also offers a "rental assistance program" in a select number of South Carolina counties. Currently, only Colleton County is the only Lowcountry county in which this program is offered. The City of Hardeeville, along with Jasper County and the Town of Ridgeland should investigate further to see if a rental assistance program could be initiated for Jasper County as a means to extend affordable housing options to its citizens.

The City should investigate the possibility of hosting representatives from the development authority periodically to further inform area residents about the availability of programs that are available. Further considerations of a partnership could include joint publications and marketing materials (similar to activities coordinated with the U.S. Census Bureau). Ultimately though, partnerships would need to be made through more targeted and local housing advocacy groups, which would offer greater support and assistance due to proximity and local understanding of the housing market and demand.

Jasper County Neighbors United. Established in 2003 as a community development corporation, Jasper County Neighbors United (JCNU) is a 501 (c)3 non-profit organization that is dedicated to providing and improving affordable housing options in Hardeeville and Jasper County. JCNU is the only certified community development corporation in Jasper County certified by the South Carolina Department of Commerce, and thus is eligible to apply for special funds projects that are made available by that agency.

To date, JCNU has developed the 26-unit Deerfield Village housing project which built quality new homes to qualified applicants who took part in homeownership courses. JCNU also recently finalized the purchase of the Mercy Circle apartment complex (formerly Branchwood II) and is in the process of securing funding for the rehabilitation and renovation of the complex buildings and grounds. The City should continue to work and support JCNU and consider future partnerships with the group for feasible and cost-effective programs. Beyond construction, the City should continue to support JCNU's efforts at improving and supporting homeownership through classes, repair programs, and support in applications that further these efforts.
Lowcountry Council of Governments. Through LCOG, The City can apply for grants via the HOME, Community Development Block Grant (CDBG), and other community development programs. Increased cooperation between the City and LCOG will help improve the effectiveness of city-sponsored applications.

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Recommendations

Needs

- Continuous updates of housing unit numbers from the various developments across the City
- Educating the public on the importance of ensuring an accurate housing count and having up-to-date housing information and data
- Implementation of a data collection process to ensure frequent updates to housing-related statistics
- Additional market-based incentives to encourage infill development and redevelopment in Downtown
- Expansion of housing types in appropriate areas of the City
- Additional affordable and market-range housing units
- Creation of a data collection system that is regularly updated with housing data and information.

Policies & Implementations

- Continue to devote staff resources and efforts to ensure an accurate Census with up-to-date housing information and statistics
- Engage the public in Census and housing activities through a Census Complete Count Committee
- Collaborate with other local agencies and advocacy groups to address the issue of affordable housing.
- Review the MZDO to review development standards that may hinder development of cost-efficient housing
- Investigate all possibilities of offering market-based incentives for the development of affordable housing
- Work with Jasper County to investigate the feasibility of setting up a Public Housing Authority
- Collaborate with Jasper County agencies to improve data collection on housing data.
- Host representatives from the South Carolina State Housing & Development Authority to discuss with staff and residents opportunities for affordable housing programs, market incentives, and tax incentives.

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Chapter 9
Land Use

Introduction

The land use element is a vital component of the Comprehensive Plan and is essential for the adoption and implementation of the Zoning Ordinance and corresponding Zoning Map. The city boundaries have increased fairly rapidly over the past few years and the City is in a position to stay ahead of the growth. This section defines and evaluates existing and future land uses within the City, in addition to discussing transportation design and community design for future development.

Land Use Categories

This section provides an explanation of general land use categories for the City of Hardeeville for purposes of guiding future development.

- *Residential* - These areas are intended primarily for single and multifamily neighborhoods and development.

- *Commercial* **-** This designation includes uses such as retail and income generating service operations. These areas provide basic services and goods for residents and other businesses.

- *Industrial* **-** Major industrial uses and industrial areas (parks) are included in this land use. High-tech and logistics industries are encouraged but not exclusive. Appropriate uses include but are not limited to manufacturing distribution, ports, limited industrial designations.

- *Mixed Use* - These areas are intended to be nodes where residential and commercial activities should coexist. This can be achieved through mixed uses within a single structure or on the same property but are not limited to these configurations.

- *Civic / Institutional* – These areas primarily consist of religious, governmental, educational, social, or community facilities such as schools, police/fire stations, libraries, and hospitals. As the city continues to grow over time, additional civic and institutional areas will be added to accommodate the needs of a growing population.

- *Open Space / Recreation* **-** Areas designated as open space typically include preserved areas, natural areas, or active and passive recreational facilities such as parks, trails, water bodies. Open space is strongly encouraged in all areas of the city and is a required element for nearly all new development that occurs in the city limits.

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Existing Land Use

Hardeeville is composed of a several varieties of land uses including commercial, industrial, open space, civic, institutional, residential, or a combination thereof. The majority of the land is currently undeveloped. Most of the property is either undeveloped timberland or newly created residential lots.

Existing Residential

Historically the residential areas were located in Downtown Hardeeville in neighborhoods such as Carmoorer Acres, Hutson Town, Palmetto Subdivision, and Keller Place to name a few (Figure 9.1). Additional residential development can be found along pine Arbor Rd and more recent Planned Development Districts along Independence Blvd Argent Blvd and Jasper Station Rd. The quality of the existing housing stock and specific characteristics are provided in more detail in the housing section of this document. Below is a description of the existing downtown-area neighborhoods.

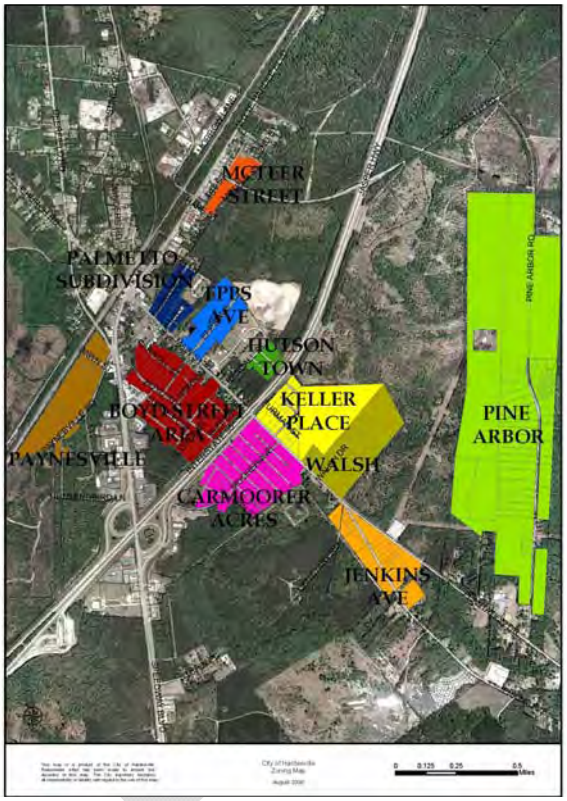

Figure 9.1: Neighborhoods

The Boyd Street, Palmetto Subdivision, Epps Avenue, and Hutson Town area forms a core section of the residential area of downtown and is bound by Interstate 95, Whyte Hardee Blvd., and John Smith Road. The prevailing housing style in this area is one-story, single-family ranch homes constructed primarily between the 1950s and 1970s, though older and newer homes exist in these areas. Mercy Circle is the only apartment complex within this area. Parcels along Epps Avenue are generally larger in size than in other sections and thus have typically larger homes as well. The area is characterized by its shaded streets. Main Street is the principal, connecting thoroughfare through the area and features a mixture of residential, commercial, and civic/institutional uses.

Car Moorer Acres and Keller Place form the core of downtown southeast of Interstate 95. Car Moorer Acres was developed in the 1950s by the Carroll and Moorer families and its architectural vernacular is reflective towards the aforementioned areas of downtown. The street pattern is a more organized grid pattern centered along Moorer Street and bordered by Frontage Road. Across Main Street, Keller Place was developed slightly after Car Moorer Acres was and features an assortment of architectural styles with some recent infill development.

The *Walsh Drive* area features two apartment complexes linked up by Walsh Drive and are typed back into Main Street. The *Jenkins Avenue* area is formed at the intersection of Jenkins Avenue with Main Street and continues in a southerly direction towards the edge of the City Limits. Continuing down Main Street one reaches the recently developing area along *Pine Arbor Road*, which features larger and more modern single-family homes with traditional Lowcountry and Mediterranean villa style architecture.

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The *Paynesville Road* area is located to the west of the highway commercial areas along Whyte Hardee Blvd. This area is generally quite but rather quaint, with several single-family homes located along the stretch. Additional residences are located off Paynesville Road on Dawn Street and Saint Phillips Avenue.

In the northern downtown area, residences are lined along *First Street and McTeer Street*. These are mostly single-family residences, though there are several apartment complexes in the area, some which are mixed in with commercial uses along Whyte Hardee Boulevard.

Existing Commercial

As typical in most small communities, Hardeeville's existing commercial activity can be classified into two locations; downtown commercial and highway commercial. Fortunately for our community, these commercial districts are relatively close to one another, thus allowing the community to have a better blend of businesses to form a major commercial district. This geographic reality is advantageous, because it allows business interests to work together for marketing and economic development efforts. In other words, there is no "turf" war among commercial interests.

Generally defined, highway commercial locations are clustered around Hardeeville's two existing interstate interchanges at Exit 5 and Exit 8. As typical with most highway commercial areas, these districts typically cater towards motorists but also benefit the local population. Typical land uses revolve around lodging facilities (hotels, motels, inns), dining facilities (fast food and sit-down), and gas stations. Due to Hardeeville's proximity to a state border, fireworks and accessory/novelty stores are a major component of highway commercial land uses, especially at Exit 5.

Downtown commercial (often referred to as general commercial) is focused on Whyte Hardee Blvd. and Main Street. Businesses located along Whyte Hardee Blvd. tend to be more automobile-oriented, meaning that the vast majority of their patrons will arrive via car to conduct their business. These lots typically have larger parking areas on their respective lots and include land uses like automotive repair, multi-tenant commercial centers (strip malls), health and professional services, and restaurants. Commercial uses along Main Street tend to be more localized and may encourage more pedestrians to visit, including grocery, specialty shops, and medical facilities.

In order to promote a commercial landscape that is more pedestrian friendly, the City's existing MZDO created two zoning districts (Downtown General Commercial and Downtown Mixed Use) along portions of Whyte Hardee Blvd and along all of Main Street in order to improve architectural standards and improve the pedestrian experience. Components that go into new development include the reduction of building set-back lines, solutions for parking on-site, and a list of approved architectural and building materials. These efforts will assist the city in further developing a Downtown Master Plan in the coming years to further develop the commercial core of the city.

Existing Industrial

Historically industrial development has been concentrated within the Hardeeville Industrial Park. Having convenient access to rail and major transportation increases the ability to provide industrial facilities. The CSX

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rail line runs through the Industrial Park and provides an opportunity for rail imports and exports. There are more than 20 employers in the Hardeeville Industrial Park (Figure 9.2). The most recent additions to the industrial inventory are the Deerfield Industrial Park and the Palmetto Park of Commerce, both located just north of the Hardeeville Industrial Park; and the Antunes project, which is a 100,000 square-foot distribution warehouse facility on US Hwy 17 south of downtown Hardeeville. Areas that are currently zoned for potential industrial development include areas between US Hwy 17 and Interstate 95 north of exit 8 and areas located near the intersection of Jasper Station Road and Argent Blvd. Industrial uses beyond the city limits can be found along SC Hwy. 170 and Argent Blvd.

Figure 9.2: Hardeeville Industrial Park

Existing Civic/Institutional

Civic and institutional uses are primarily located in downtown Hardeeville along Main Street. Other civic/institutional uses include the Hardeeville K-12 South Campus (which houses the Hardeeville Elementary, Middle, and High Schools) on Sergeant Jasper Park Rd; the Coastal Carolina Hospital, located along Medical Center Drive; and several houses of worship along Main Street and US Hwy 17. The majority of the municipal buildings are located on Main Street and Martin Street in downtown Hardeeville, with the exception of an acquired joint fire station and police substation located on Argent Blvd. Utility locations for water, sewer, power, and telecommunications also exist throughout the city, though are operated by regional agencies or utilities that provide services to the city.

Existing Open Space/Recreation

There are several areas within the city limits of Hardeeville that provide open space and recreational opportunities. In addition to wetlands and sensitive areas along the New River Watershed, there are several recreational facilities that provide open space and recreational opportunities such as the Hardeeville Recreation Complex, and Millstone Landing. The Recreation Complex boasts several active and passive spaces, including four baseball fields, two football fields, a dog park, and a playground, in addition to more passive areas such as green space and the fishing pond. Millstone Landing currently allows for boating opportunities through its boat ramp and in the future will have expanded passive recreational areas. Both sites are vitally important to the City in terms of hosting space for the various festivals that occur throughout the year.

Future Land Use

The future land use map will serve as a guide to determine consistency with the goals of our community. The zoning map and amendments to the map should reflect the vision set forth in the land use element and the future land use map. The idea is to set the stage for future development and forecast the potential land uses

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for the area. It is important that Hardeeville focus development in areas that are conducive to the types of proposed development desired.

The future land use map (Figure 9.3) is a compilation of the planned land uses from several planned developments throughout our community with consideration to existing zoning and land uses, as well as current growth patterns. Much effort has already gone into the establishment of future land uses in newly annexed areas. The next few sections look at the anticipated land uses in more detail.

Future Residential

There are more than 52,000 residential units planned over the next 30 years in Hardeeville. Much of the new growth is expected within the planned developments but other areas of the community, including downtown are expected to infill as well. Much consideration has been given to the location of available resources and interconnectivity of transportation networks to accommodate growth. Each of the residential developments also has areas designated for open space and recreation. There are provisions for sidewalks and pedestrian ways to accommodate pedestrian travel and accessibility.

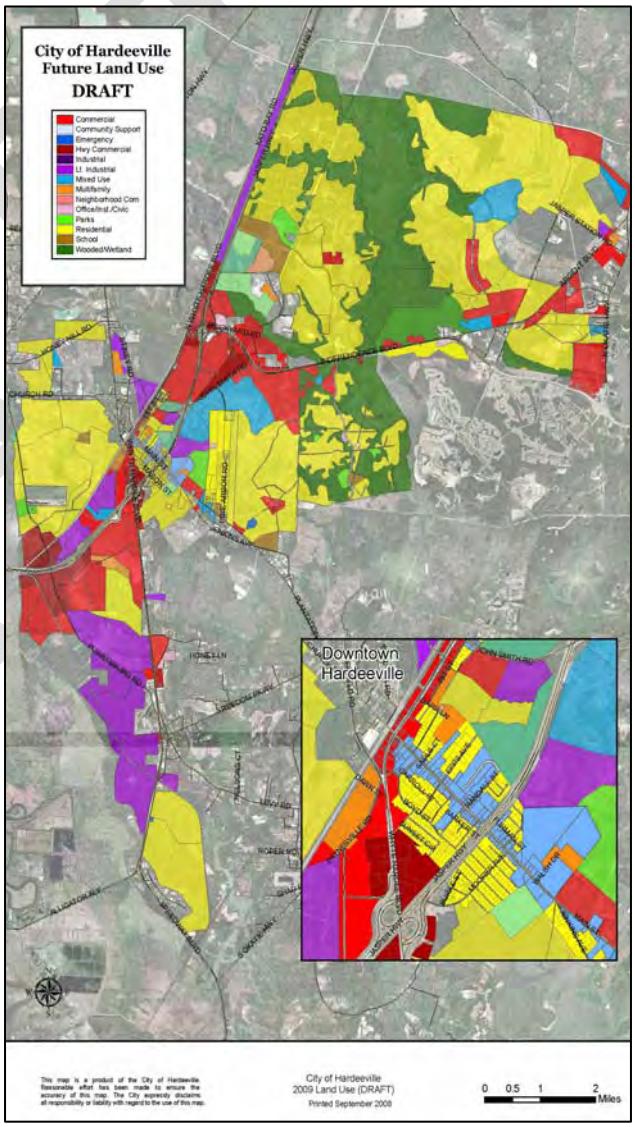

Figure 9.3: Future Land Use Map

While the City of Hardeeville currently operates with Euclidean-based zoning regulations (comprised with flexible, mixed-use areas in target areas) in the downtown area, the majority of the city currently is within planned development districts. With each planned development district, sensible land use patterns are of quintessential importance to the success and vitality for the project and the city as a whole. The broad concepts of design, form, and functionality of each of these major developments rely on the importance of the master plan process, in which many typical zoning regulations are listed and if necessary expanded upon or specialized for the community in question.

Each of the planned residential communities offers a slightly different product to meet a diverse set of needs and desires. For instance, Tradition and Hampton Pointe have golf courses on the property for residents and visitors to enjoy, but they offer very different housing styles and options. Hilton Head Lakes offers an extensive lake system which affords residents the opportunity to navigate through the community by way of personal watercrafts. Properties in downtown Hardeeville have a

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vernacular charm and offer convenient access to government services and the Hardeeville Recreation Complex. Projects like Courtney Bend offer rental property and single family projects like Deerfield Village offer another affordable alternative.

Tradition Hilton Head, a planned development within the former Argent West Tract has a mixed-use concept with development currently ongoing and with a project timeline of 20 to 30 years. The build out proposes nearly 9,600 housing units along with a "village center" commercial concept located in the central portion of the development. Over the past four years, the developer has submitted two master plans with significant attention placed on the location, design, and functionality of associated land uses. As with other master plans reviewed hereafter, the plan has placed emphasis on a sensible transportation solution for the community by encouraging pedestrian, bicycle, and golf cart access as an alternative to automobile traffic. The commercial component of the development is appropriately placed near the center of the community to encourage on-site retail and professional services to create a dynamic live-work community.

East Argent is a 7,500 acre project being developed over the next 30 years. Shell Brook, Jasper Commons and Hampton Point are planned residential communities within East Argent. ShellBrook, located along Argent Blvd, proposes 159 attached single-family dwelling units, Hampton Pointe proposes 1,137 units. Jasper Commons, which is located on Jasper Station Road proposes 490 units. Each of these communities will include a clubhouse, amenity areas, lagoons, and several trails, sidewalks, and bike paths throughout.

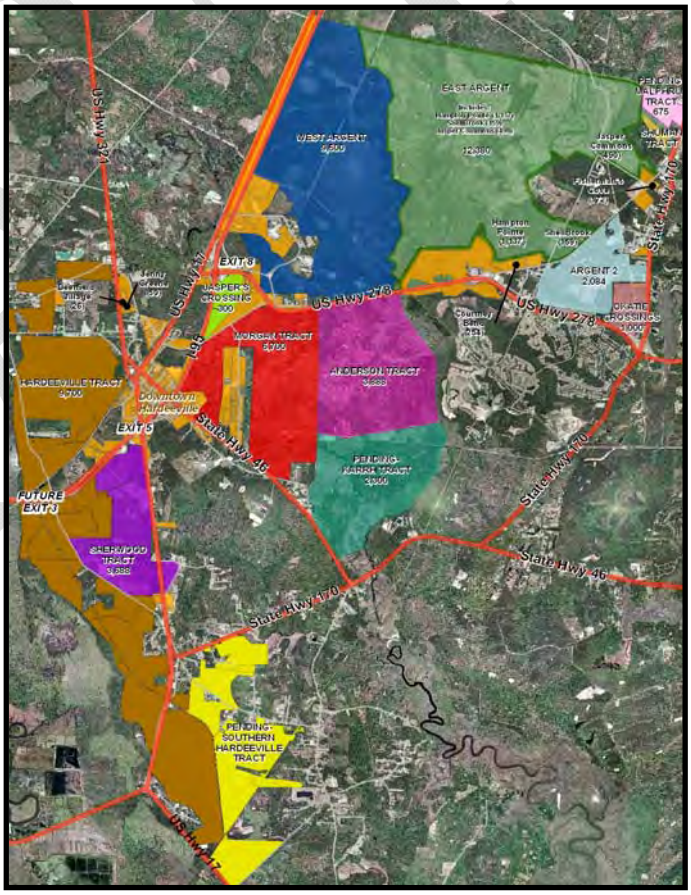

Figure 9.4: Proposed Residential Development

Because the East Argent area will be broken into several major planned development districts as opposed to a singular planned development, it is imperative to ensure that cohesion between the various developments exists. The development of the East Argent Loop Road is the essential component in ensuring that transportation throughout the site is effectively coordinated through a major new collector road as opposed to existing collector and arterial roads. The individual master plans reflect the importance of the transportation system and must take into account the surrounding land uses as proposed.

Hilton Head Lakes, a planned development within Anderson Tract, has a major residential component being developed over the next 20 years. The build out proposes nearly 3,888 units and anticipates approximately 1,500 residential units/lots to materialize by 2020. The master plan process for this development stressed the

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importance of having functionality through a central collector road (Lakeside Boulevard) in addition to having a mixture of residential uses located in logical areas within the development.

Argent 2, located along Argent Blvd and Hwy 170 near Hwy 278, is being developed within the next 10 years. The anticipated build out for the project is 2,084 units. Argent 2 is an age restricted development with nonresidential uses. This project will be completed by year 2020. The master plan process discussed the importance of connectivity between the residential uses with open-space and recreational areas, in addition to connectivity with surrounding development, including the Okatie Crossings development and the existing Sun City development in Beaufort County.

The *Hardeeville Tract/RiverPort* development is approved for 9,874 units over the next 30 years. The emphasis over the next 10 years will likely be more commercial and industrial in nature. The residential development for this site will begin to materialize in the next five to ten years. As a component of the original development agreement, the Amended RiverPort plan will utilize 7,522 of the originally allocated units while the remainder will remain under the original PDD.

The *Sherwood Tract* is a 1,536 acre development being developed over the next 20 years. Sherwood Tract proposes 3,688 Residential Units of which 809 can be multifamily, 1,797 mixed use residential, and 1,082 high density single family detached. Like the Hardeeville Tract, the Sherwood Tract will likely emphasize the commercial and industrial components initially, but will discuss residential land uses in the master plan.

Future Commercial

The construction of U.S. Highway 17 and Interstate 95 added traveler oriented commercial land uses near the Exit 5 area connecting to the original business district of the City. Three miles north at Exit 8 additional highway commercial activity is being developed, including Hardee Station. The Hardee Station project which is located near the interchange at the intersection of Hwy 278 and 278 will feature a collection of hotels as well as four restaurants and a pharmacy. Okatie Crossings, located at the intersection of Hwy 278 and SC Highway 170, is a 1.7 million square foot retail development expected to break ground in 2010 and will be a major regional commercial center. Shuman Commercial is being planned on Okatie Hwy at the intersection of the East Argent Loop, which connects Argent Blvd to Hwy 170 through the Argent East Tract. More passive commercial activities occur in the mixed use district along Main Street, which has retained several residential and civic uses.

The East Argent, Tradition, Hilton Head Lakes, Coastal Land Tract, Morgan, RiverPort, Sherwood Tract, and the proposed Savannah Tract, each have a commercial component that is currently being refined. The general locations of the commercial nodes have been determined conceptually. Below are further details for each aforementioned development.

Within the *East Argent* development the East Argent Loop Road that connects Argent Blvd to Hwy 170 will feature internal commercial development near the Hampton Point Residential Community and along the Shuman Tract property at Hwy 170. This corridor will likely attract residents in the major residential tracts

that comprise the East Argent area, including Hampton Pointe but will also likely attract outside trips, such as residents in nearby Sun City or Courtney Bend.

Tradition's commercial development will be a "village center" concept, located central to the planned development District within a 15 minute walk of the majority of the residents. While most portions of Tradition's residential neighborhoods are anticipated to be gated, the village center will be openly accessible for all residents and will be located off Tradition Avenue, the major collector road in the development. The village center will adopt a "downtown" feel of its own, with shopfronts, second-floor professional suites, and a major anchor being the focus of the commercial development. Additional professional buildings and centers may also be located on the premises.

The commercial development within *Hilton Head Lakes* will be situated near Hwy 278 and will be accessible by internal streets and limited curb cuts from Hwy 278. By utilizing a parallel access road, the City will be able to effectively separate local and long-distance traffic while improving safety for motorists and visibility for future tenants.

The *Coastal Land Tract* has already been partially developed as an institutional use (the Coastal Carolina Hospital). Allowed commercial uses and proximity to exit 8 may encourage future commercial development to compliment the existing commercial and institutional node at exit 8. Health-oriented and professional commercial uses may be logical commercial uses for this tract.

The *Morgan Tract* commercial area will be more regionally based and will be focused along US Highway 278. Much like the Hilton Head Lakes area, the concept of internal streets and access roads will likely be implemented to facilitate traffic patterns.

The concept plan for *RiverPort* calls for a new commercial node to be located at the future exit 3 along Purrysburg Road / RiverPort Parkway. An additional mixed-use village area of land is set aside for property located north of Interstate 95 that would encourage pedestrian friendly commercial nodes to develop among residential development.

Additional commercial development opportunities will be possible upon further consideration of the *Sherwood Tract* and *Savannah Tract*.

Having commercial development internal to the Planned Development Districts allow current and future residents the ability to do their shopping and entertainment without getting onto the major arterials and in many cases will allow the option of not using an automobile altogether. As other potential sites are presented for commercial development consideration will be given to those areas that have adequate infrastructure in place to handle the anticipated growth.

Future Industrial

Industrial development is a very beneficial product when considering the potential tax revenue generated from the operations and the cost of providing services. A general rule of thumb estimates that industrial developments cost 6/10 of the tax to provide service. In the past most of the industrial development has been

concentrated within the Hardeeville Industrial Park with access to rail. Transportation networks are very important to successful logistics operations, because the businesses rely heavily on imported or exported goods and services that are mobilized by air, rail, water, and highway or a combination thereof. One of the advantages of Hardeeville as a place to locate industry is access to Interstate 95, existence of the CSX rail line, and the proximity to an International Airport and ocean shipping terminal.

There remains several large tracts of land within the Hardeeville Industrial Park that are suitable for a variety of industrial uses. Most of these properties are located in the northern sections of the industrial park. Additional industrial lands are located along Stiney Road, just north of the industrial park.

The development of the RiverPort Tract will have significant regional implications for our economy and for our land use patterns and development. The location of the tract is sensible and practical, with close proximity to the existing Garden City port terminal in Georgia and the future Jasper Ocean Terminal site. The site's location is also beneficial for multi-modal transportation solutions, being that it would be able to utilize existing and future railroad spurs lessening the impact of truck transportation on existing roads and highways. The development of a future exit 3 on Interstate 95 coupled with an upgrade of Purrysburg Road will also benefit the facilitation of traffic in the area, as exiting exits, US Highway 17, and other smaller roads in the area will not be as adversely impacted.

Additional areas for industrial development may include portions of land southwest of Mockingbird / Hummingbird Lane (between Exit 5 and future Exit 3), portions of the Grays Tract (located on the southwestern corner of John Smith Road and Interstate 95); portions of the Morgan Tract, and the corridor of land stretching north from Exit 8 between US Hwy 17 and Interstate 95.

Future Open Space/Recreational

An open space Master Plan is being developed to determine areas that are likely to be preserved or enhanced. Improvements to the Millstone Landing facilities would not only create recreation for existing residents but has the potential to bring tournaments and events to boost tourism for the City and the region and truly tie Hardeeville and Jasper County to the Savannah River. Open space should be a component of every development, and it is important for Hardeeville to capitalize on areas that might provide interconnected greenways and natural areas for wildlife habitat enhancement and environmental stewardship.

Open space considerations are also vital to continued development of downtown Hardeeville. The City's MZDO does contain open space requirements for new development. Practical and sensible solutions for open space should be considered during site plan review; specifically when the open space can positively interact with surrounding parcels and natural features. Another consideration for downtown that should be investigated is the possibility of developing a greenway network. Greenways can double as recreational and ecological features and have been proven to be popular methods for attracting new growth and revitalization to downtown areas across the United States. These considerations deserve further attention and will be addressed in greater detail during the Downtown Master Plan process.

As mentioned in the community facilities portion of this plan, future passive and active recreational facilities may be best analyzed through a recreation master plan that can assist the future planning and development of

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said facilities. Such a plan should be implemented in the short-term and should allow for enough flexibility to accommodate changes in social behavior and preferences for one activity over another, thus avoiding excessive expenses for minimal utilization.

Future Civic/Institutional

East Argent Hilton, Head Lakes, and Tradition each have potential schools sites set aside for future development. Coordination with the Jasper County School District is essential for planning and programming of the schools. In 2007, The Hardeeville K-12 campus opened its doors to their students. While the school district is currently maintaining the standard of grouping all grades together on one campus, future decision-making may call for a shift in policy. To adequately prepare for such a shift, the city must continue to stress the importance of reserving land for schools (both private and public) that also relate well with their surrounding land uses.

Certain institutions such as schools and medical facilities can oftentimes be situated in residential uses, thus encouraging pedestrian activity and an alternative to vehicular traffic. The development of trails and greenways should consider future areas for institutional or civic uses which may encourage or foster non-vehicular trips. Grants and funding opportunities exist for such endeavors. Ultimately, coordination among various agencies and groups (including the City of Hardeeville) need to be realized in order to achieve such a vision and to secure any funding assistance.

Transportation & Land Use

Major Roads

With the continued operation and expansion of the Garden City Terminal and the planned construction of the Jasper Ocean Terminal, I-95's significance to Hardeeville and the region will only become more important. Hardeeville has more than 10 miles of frontage along I-95 which is the most highly traveled thoroughfare in eastern United States.

I-95 is recommended by the South Carolina Department of Transportation to be widened from four lanes to six lanes from the Georgia state line to US Highway 278. Additional projects in the area which will directly or indirectly impact the transportation network of the City of Hardeeville include the widening of US 17 for an approximately seven mile stretch beginning at the Georgia state line and ending south of Hardeeville at SC 170 from two to four lanes.

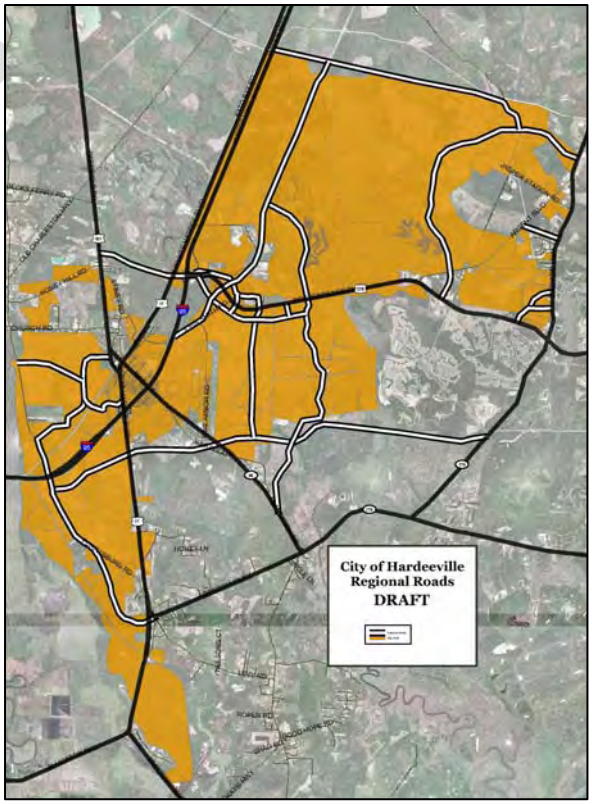

Figure 9.5: Major & Regional Roads

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Regional Roads

The City of Hardeeville requires interconnectivity between developments through a network of regionally significant roads. East Argent Loop Road, Tradition Avenue, and Purrysburg Improvements as shown on the exhibit are examples of such roads. The intent of these roads is to alleviate some of the pressure on the arterials roads and improve circulation throughout the City. East Argent Loop Road, for example, takes some of the pressure off of argent Blvd and provides access to Hwy 170 through the Shuman Tract. Three phases of the road have been approved. About 20% of this road has been built which currently provides access to the Hampton Pointe residential community. Approximately 1 ½ miles of Tradition Ave, the main road into Tradition, has been built. Lakeside Blvd in Hilton Head Lakes has been started as well. These two roads form the main entrances into each of the developments and meet at the intersection of Hwy 278. The regional roads will not only relieve some of the pressure from Hwy 278, but the proposed roads will also provide interconnectivity between developments and land uses.

Inter-jurisdictional cooperation in transportation solutions is important for numerous reasons, particularly with major centers of business, industry, and tourism located in and around the City of Hardeeville. Given our location along the coast, interconnectivity is especially important during the Atlantic hurricane season. Continuous dialogue among the various state and local agencies during planning, construction, and implementation of future roads must be maintained to ensure that evacuation routes and emergency management services are adequate and adjustable if necessary.

Community Design & Land Use

Hardeeville was once a rather rural community, but is now on the brink of tremendous growth and new opportunities. Undeniably with these new opportunities come new challenges.
Throughout the planning process we have heard the citizens repeatedly make recommendations to focus in downtown Hardeeville. Hwy 17 Streetscape project has been very successful in creating a rhythm and enhancing the existing Character of Downtown Hardeeville. It is important that new developments maintain and enhance community character and Commercial Design Guidelines could be established to create a vernacular appearance.

The layout of the City shows a strong axis along Main Street along with the traditional commercial hub around the site of the former rail depot. The construction of U.S. Highway 17 and Interstate 95 added traveler oriented commercial land uses near the Exit 5 area and have connected to the original business district of the City. More passive commercial activities occur along Main Street, which has retained several residences and civic uses; thus, it can truly be considered a “mixed use” thoroughfare.

The area that is considered Downtown does not have an absolute boundary, but consists of the area surrounding Exit 5, along John Smith Rd from Hwy 17 to the I-95 overpass, the area along Main Street from Hwy 17 to Jenkins Ave, and everything else in between. A major concept in improving the downtown area will come with improving access with surrounding areas, particularly with locations west of the city and towards the proposed RiverPort development and the Savannah River. As master plans for these areas are drafted for the area, focus should be given on providing logical access between these areas.

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Most of the residential areas in downtown currently exist so any redevelopment that occurs would likely be infill housing. In those areas designated for commercial and mixed use, there is potential to redevelop some of the existing structures for commercial use or higher density residential. It is understood that a downtown redevelopment of this caliber is a major undertaking and should be approached with thoughtful consideration.

The overarching concept that Hardeeville envisions for its future is a thriving economic community with a mixed use downtown commercial core, strong industrial component, interconnected properties with alternate transportation modes and routes, and a healthy balance of persevered open space and wildlife habitat. To this end, much attention is being given to the continuation of the Hwy 17 streetscape expansion and downtown Master Plan as well as planned development outside of the downtown core.

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Recommendations

Needs

- Expansion of potential sites for future police and fire substations, parks, and schools.
- Establishment of area specific plans
- Preservation and Creation of open space areas for the Citizens of Hardeeville.
- Ensure that development utilizes alternative methods of transportation including but not limited to pedestrian, bicycle, and transit.
- Encourage the efficient use of the available land supply in the city, including redevelopment of underutilized land in Downtown Mixed Use and Downtown General Commercial Areas.
- Continued coordination and communication with adjacent jurisdictions to ensure long-range land use plans and goals are consistent.
- Focus transportation investments where development is desired and expected

Policies & Implementation

- Complete a comprehensive bicycle and pedestrian plan to identify suitable roadways for bicycle travel, critical pedestrian connections, and key origins and destinations for bicycle and pedestrian travel.
- Work closely with Regional Transit Authority to establish routes that are convenient and practical for Hardeeville residents and visitors
- Develop a Downtown Master Plan
- Establish an Open Space and Recreation Master Plan for creation and expansion of new and existing facilities
- Ensure future developments are consistent with the land use element and other elements of the comprehensive plan

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Chapter 10
Implementation / Priority Investment

Introduction

The purpose of the implementation priority investment chapter is to begin to enumerate and quantify the goals of the city into tangible items that can be prioritized and attained. This section not only prioritizes and quantifies the costs associated with capital projects it also analyzes potential sources of income and funding needs. Creating a vision for the city is imperative, but without a capital improvement plan with cost considerations, many plans sit on the shelf and are rarely implemented. Hardeeville is committed to ensuring that their plans be implemented and to this end careful consideration has gone into the development of the goals and funding estimates.

Role of the Plan

Adoption of the Comprehensive Plan is the essential first step in the local government planning process; the adoption of the Plan does not signify the end of the process, but rather establishes the foundation on which the *continuous* planning process is based. As a policy document, the Comprehensive Plan provides the City of Hardeeville a framework for planning decision-making. Rather than making detailed recommendations, the Comprehensive Plan establishes general recommendation direction to guide the City of Hardeeville as it moves forward. The Plan should be the first-source, ready-reference of the City of Hardeeville when the future of the community is considered or discussed.

The Comprehensive Plan sets the tone and basis for the City's MZDO. The MZDO is a tool used to implement the Comprehensive Plan and its authority and legality are tied directly to the adoption and continuous review and update of the Comprehensive Plan. As a policy document, the Comprehensive Plan, in coordination with the MZDO, is utilized to weigh the merits of new development proposals (both public and private). New development within the City of Hardeeville should be strongly encouraged to comply with the intents of the Comprehensive Plan; this is why it is important that the MZDO be in concert with the Plan.

With the publishing of this document, the City of Hardeeville has established a process for the preparation, continuous evaluation, and updating of the Comprehensive Plan. By law, the Comprehensive Plan must be reviewed every five years and updated every ten years. Hardeeville's planning staff will evaluate the ongoing functionality and continued applicability of the Comprehensive Plan as they utilize it as a guide in the maintenance and enforcement of development regulations and review of proposed new developments.

In the latter part of the fourth year after its adoption, the Planning Commission will undertake a detailed review of each element of the Plan, ensuring that the direction of the Plan is still in concert with the goals of the City of Hardeeville. Should inconsistencies be discovered or new directions emerge, appropriate amendments to the Plan will be made in accordance with state enabling legislation. At the beginning of the Plan's ninth year, the Planning Commission will initiate a process for completely updating each element of the plan. For more information on the responsibilities of various parties in the comprehensive planning process, see the section that follows.

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Responsible Parties

A number of parties are responsible for the drafting, evaluation, and updating of the City of Hardeeville Comprehensive Plan. Each has an essential role to play in ensuring that the Plan is realistic and acheivable, and that it is implemented in a timely and responsible fashion.

City Council

Through its policy-making powers, City Council decides how the City of Hardeeville will develop and grow. As the City's governing body, City Council established the Planning Commission and its authority by ordinance (City of Hardeeville Code of Ordinances, Chapter 14, Article II). In its establishment of the Planning Commission, City Council granted authority to the Planning Commission to "Prepare and revise periodically a comprehensive plan and program for the development of [the City of Hardeeville]" (Sec. 14-25). City Council appoints the members of the Planning Commission and can greatly influence the quality of planning in the City of Hardeeville based on the qualifications and caliber of those it appoints to the Commission.

Although Planning Commission is charged with the planning process (including preparation of the Comprehensive Plan), City Council is responsible to monitor the preparation of the Comprehensive Plan, ordinances, and regulations. Since City Council will ultimately be the body responsible for these documents (through their adoption), it is imperative that they have a complete understanding of their content, application, and consequence. Additionally, City Council greatly influences the legitimacy of the Comprehensive Plan and its implementation through its decisions regarding development approvals, infrastructure improvements, and budgets.

Planning Commission

As outlined above, the Planning Commission is granted it authority to oversee the planning process, including the Comprehensive Plan, by City Council in Chapter 14, Article II of the City's Code of Ordinances. The Commission is composed of five members serving four-year staggered terms. Members must reside and own property within the city limits of Hardeeville. The Planning Commission has no authority in and of itself to enact policy, but rather serves as a planning advisory group to City Council.

The Planning Commission is responsible for the timely completion and maintenance of the Comprehensive Plan, as well as the MZDO. Once complete, the Commission recommends to City Council that each of these documents be adopted. Planning Commission is afforded regular opportunity to ensure that the Comprehensive Plan is implemented as intended through the powers and duties given to it by the City's Code of Ordinances. These include:

- Preparation and revision of the Comprehensive Plan;
- Preparation and recommendation to Council tools for implementing the Comprehensive Plan, including zoning ordinances, land development regulations, and an official map;
- Establishment of principles and policies for guiding development in accordance with the Comprehensive Plan; and
- Review and determination of proposed developments to ensure they conform to the intent of the Comprehensive Plan.

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As part of its duties, the Planning Commission must ensure that the Comprehensive Plan is reviewed and updated in accordance with the enabling legislation of South Carolina. As such, the Planning Commission oversees the following Comprehensive Planning timeline:

Timeframe	Action
Year 0	Recommend updated Comprehensive Plan to Council for adoption
Year 4	Begin formal review period and draft any necessary amendments to the Plan
Year 5	Recommend any necessary amendments to the Plan to Council for adoption
Year 9	Begin formal update period and draft Comprehensive Plan
Year 10	Recommend updated Comprehensive Plan to Council for adoption
Ongoing	Continuous review of the Plan for applicability and functionality; recommend periodic amendments to the Plan as necessary

City Staff

As the Planning Commission is comprised of citizen volunteers, the City of Hardeeville recognizes that the Commission must be supported by a full time planning staff. The size and complexion of this staff may change as needs and budgets dictate, but the function of providing research and professional expertise to the Commission remains constant. When specialized knowledge is required, outside consultant services are contracted to supplement staff expertise.

While specifically defining the roles and responsibilities of City Council (as they apply to the planning process) and Planning Commission, South Carolina's planning enabling legislation does not do so for planning staff. The specifics of the need for and duties of the planning staff are left up to each local government to decide. With regard to the Comprehensive Plan, the City of Hardeeville's planning staff is responsible for crafting the Plan and providing deliverables to the Planning Commission for their review and comment. Additionally, staff is responsible for the implementation of Plan objectives through their day-to-day work in maintaining and enforcing zoning and land development regulations. As time and budgets allow, staff are also responsible for moving the Plan's recommendations forward.

Stakeholders

A wide variety of individuals, groups, and agencies exist that have a vested interest in the content and implementation of the Comprehensive Plan. These stakeholders include but are not limited to the citizens of Hardeeville, property owners, businesses, Jasper and Beaufort Counties, school districts, utility providers, resource agencies, LCOG, and SCDOT. Each of these stakeholders must take an active role in not only the development of the Plan but also in its implementation.

Throughout the development and adoption of the Comprehensive Plan, the City of Hardeeville has offered extensive opportunities for meaningful stakeholder participation, from the initial planning charrette, to numerous public meetings to vet each element of the Plan, to a public hearing at its adoption. However,

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ultimately, it is the responsibility of each stakeholder to become actively involved and remain involved. The City can and will encourage participation, but it is up to the individual stakeholder to actually engage in the process. Further, as the recommendations of the Plan are implemented, it is essential that each stakeholder remain active in the planning process to provide the most effective advancement of the intents of the Comprehensive Plan.

South Carolina Priority Investment Act

With the passage of the South Carolina Priority Investment Act (PIA) in May 2007, several new requirements were placed on the comprehensive planning process. The basic intent of the PIA is to preserve and enhance the vitality of local communities and the quality of life of the citizens of South Carolina through:

- Better coordinated planning among adjacent jurisdictions;
- Sounder fiscal planning to make the most of limited financial resources; and
- Land use planning that does not pose unnecessary obstacles to the creation of traditional neighborhoods and affordable housing opportunities.

To achieve these intents, the PIA enhances one existing Comprehensive Plan element and creates two new elements:

- *Housing* – Although not a new element of the Comprehensive Plan, the PIA did amend the Housing element to include an examination of current development regulations to determine if they present unnecessary obstacles to the development of affordable housing and traditional neighborhood design. Regulations would only be characterized as "obstacles" if they are considered to go beyond the basic protection of the health, safety, and welfare of the citizenry. Market-based incentives that would encourage the development of affordable housing and traditional neighborhoods must also be considered and analyzed. Such might include density bonuses, relaxed zoning regulations, reduced or waived fees, fast track permitting, and design flexibility. The PIA specifically allows for a new zoning classification, the priority investment zone, which would be designated as an area that would remove the barriers to affordable housing and encourage traditional neighborhood design by offering the market-based incentives outlined above. *[These new requirements have been addressed as part of Chapter 8 of this Comprehensive Plan.]*
- *Transportation* – Formally a component of the Community Facilities element, Transportation is now its own unique element to consider all transportation facilities (i.e., roads, rail, airports, transit, bike, pedestrian, etc.) and their role in a comprehensive transportation network. Additionally, using the Plan to create logical linkages between existing and future land use and transportation is required. *[Chapter 7 of this Comprehensive Plan fulfills the new Transportation Element requirement.]*
- *Priority Investment* – As a completely new element of the Comprehensive Plan, the Priority Investment element must be included to set a path for the prioritized expenditure of available federal, state, and local funds over the next 10 years. The PIA requires that the Priority Investment element be formulated through a coordinated effort with "adjacent and relevant jurisdictions and agencies" so as to reduce redundancies and increase communication. *[The requirements of the Priority Investment Element are fulfilled as part of this chapter – Chapter 10.]*

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Coordination with Adjacent and Relevant Jurisdictions

In order to provide a more comprehensive and integrated approach to planning, the City of Hardeeville has made a concerted effort to coordinate with adjacent and relevant jurisdictions and agencies. This includes Jasper County, the Town of Ridgeland, Beaufort County, the Town of Bluffton, the Town of Hilton Head Island, the Beaufort Jasper Water Sewer Authority, the Savannah National Wildlife Refuge, Palmetto Electric Cooperative, South Carolina Electric and Gas, Hargray Communications, Jasper County School District, USC-Beaufort, Technical College of the Lowcountry, and the Lowcounty Council of Governments to name a few. Interaction and coordination includes invitations and attendance in the Planning Charrette process that began in October 2008 as well as various public meeting and information gathering sessions. The city also utilized the website and local access television channel (HTVN) to distribute a survey and further reach out to these agencies.

Funding/Needs Analysis

In developing the various elements of this Comprehensive Plan, a variety of projects have been identified that will require the expenditure of capital funds. Such funds are limited and although it is the desire of the City of Hardeeville to complete all of the projects identified, funding constraints will require a phased approach. To that end, an analysis of the relationship between identified needs and available funding has been performed and is outlined in the sections that follow.

Revenue Sources

Two general categories of revenue sources are available for consideration by the City of Hardeeville to plan, design, implement, and operate/maintain capital projects: 1) existing revenue sources that are currently being utilized by the City; and 2) potential funding sources that are not currently utilized but could be evaluated as alternative funding methods.

Existing Revenue Sources

Current revenue sources that are available include budgeted funds, funds available from existing Municipal Improvement District financing from Hilton Head Lakes at Hardeeville, Developer Fees for each of the Development Agreements, as well as other contributions and conveyances from these same Development Agreements as listed in the Land Use section (Chapter 9). These Revenue Sources are detailed in Tables 10-1 through 10-7. The tables also include projected funds over the next ten years. Some assumptions have been made and notated on the tables.

Table 10-1, on the following page, provides an overview of the approved Planned Development Districts as of September 2009. This table is a long range snapshot of the project characteristics at build-out and includes such information as total land size, amount of commercial acreage, and number of entitled residential units. It should be noted that these figures represent the total amount of land and units that have been entitled and does not represent quantities built to date.

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Table 10-1 City of Hardeeville Development Projects - Acreage/Density

Development	Status	Type	Res.Units	Res. Density per Upland Acre	Commercial Ac.	Comm. % per Upland Acre	Uplands	Wetlands	Total Ac.
Tradition	Under Construction	PDD/DA	9,500	2.68	175	0.05	3,549	1,601	5,150
East Argent Tract	Under Construction	PDD/DA	12,380	2.71	1,320	0.29	4,561	2,717	7,278
Anderson Tract	Under Construction	PDD/DA	3,888	2.71	50	0.03	1,434	1,300	2,734
Hardeeville Tract	Under Construction	PDD/DA	9,784	1.77	1,800	0.33	5,513	935	6,448
Morgan Tract	Approved	PDD/DA	6,700	3.85	500	0.29	1,740	884	2,624
Del Webb	Under Construction	PDD/DA	2,145	2.70	0	0.00	793	192	985
Okatie Crossings	Under Construction	PDD/DA	1,000	6.29	282	1.77	159	0	159
Sherwood Village	Approved	PDD/DA	3,688	2.85	1,027	0.79	1,295	241	1,535
Grand Total			49,085	3.20	5,154	0.44	19,044	7,870	27,123

The Land Allocations table (Table 10-2) shows the amount of land that has been allocated to the City of Hardeeville for the purposes of providing land for anticipated community facilities such as police and fire stations, parks, schools, and road infrastructure. These land allocations are integral to the provision of adequate public facilities and infrastructure.

Table 10-2 City of Hardeeville Development Projects - Land Allocations

Development	Status	Type	Allocation for police site acreage	Allocation for fire site acreage	Allocation for park site acreage	Land Allocation for school site	ROW Allocation	Estimated Total Land Allocation
Tradition	Under Construction	PDD/DA	3	3	75	75	200	356
East Argent Tract	Under Construction	PDD/DA	3	3	75	75	79	235
Anderson Tract	Under Construction	PDD/DA	2	2	26	26	78	134
Hardeeville Tract	Under Construction	PDD/DA	3	3	75	75	107	263
Morgan Tract	Approved	PDD/DA	2	2	53	54	115	226
Del Webb	Under Construction	PDD/DA	0	2	26	0	-	28
Okatie Crossings	Under Construction	PDD/DA	0	0	0	0	20	20
Sherwood Village	Approved	PDD/DA	2	2	30	30	15	79
Grand Total			15	17	360	335	615	1,341

Tables 10-3 and 10-4 represent the anticipated development fees for each major development. The totals shown on Table 10-3 come directly from the approved development agreements which reflect the projected build out of the development. A straight-line projection was used to determine the amount of annual fees collected and assumes receipt of an equal amount of funds each year for the complete term of the agreement. The following projections help to organize and consider the timing and receipt of Development Fees.

Table 10-3 City of Hardeeville Development Projects - Total Anticipated Development Fees

Development	Status	Term (In Years)	Contribution for fire site	Contribution for police site	Contribution for onsite roads	Contribution for offsite roads	Contribution for park site	Contribution for Library	Contribution for school site	Contribution for employees	Anticipated Total Fees
Tradition	Under Construction	20	$ 3,040,000	$ 3,040,000	$ 21,992,500	$ 18,810,000	$ 6,042,000	$ 950,000	$ 4,750,000	$ 1,000,000	$ 59,624,500
East Argent Tract	Under Construction	20	$ 3,961,600	$ 3,961,600	$ 28,659,700	$ 24,512,400	$ 7,873,680	$ 1,238,000	$ 6,190,000	$ 1,000,000	$ 77,396,980
Anderson Tract	Under Construction	20	$ 1,244,160	$ 1,244,160	$ 9,000,720	$ 7,698,240	$ 2,472,768	$ 388,800	$ 1,944,000	$ 425,000	$ 24,417,848
Hardeeville Tract	Under Construction	30	$ 3,130,880	$ 3,130,880	$ 22,649,960	$ 19,372,320	$ 6,222,624	$ 978,400	$ 4,892,000	$ 1,000,000	$ 61,377,064
Morgan Tract	Approved	20	$ 2,144,000	$ 2,144,000	$ 15,510,500	$ 13,266,000	$ 4,261,200	$ 670,000	$ 3,350,000	$ 703,500	$ 42,049,200
Del Webb	Under Construction	10	$ 686,400	$ 686,400	$ 4,965,675	$ 4,247,100	$ 1,364,220	$ 214,500	$ 1,072,500	$ -	$ 13,236,795
Okatie Crossings	Under Construction	50	$ 198,640	$ 198,640	$ -	$ 1,711,716	$ -	$ -	$ -	$ 75,000	$ 2,183,996
Sherwood Village	Approved	20	$ 1,180,160	$ 1,180,160	$ 8,537,720	$ 7,302,240	$ 2,345,568	$ 368,800	$ 1,844,000	$ 388,000	$ 23,146,648
Grand Total			$15,585,840	$15,585,840	$111,316,775	$96,920,016	$30,582,060	$4,808,500	$24,042,500	$4,591,500	$303,433,031

Table 10-4 City of Hardeeville Development Projects - Annual Development Fee Projection

Development	Status	Term	Contribution for fire site	Contribution for police site	Contribution for onsite roads	Contribution for offsite roads	Contribution for park site	Contribution for Library	Contribution for school site	Contribution for employees	Estimated Annual Contribution[1]
Tradition	Under Construction	20	$ 152,000	$ 152,000	$ 1,099,625	$ 940,500	$ 302,100	$ 47,500	$ 237,500	$ 50,000	$ 2,981,225
East Argent Tract	Under Construction	20	$ 198,080	$ 198,080	$ 1,432,985	$ 1,225,620	$ 393,684	$ 61,900	$ 309,500	$ 50,000	$ 3,869,849
Anderson Tract	Under Construction	20	$ 62,208	$ 62,208	$ 450,036	$ 384,912	$ 123,638	$ 19,440	$ 97,200	$ 21,250	$ 1,220,892
Hardeeville Tract	Under Construction	30	$ 104,363	$ 104,363	$ 754,999	$ 645,744	$ 207,421	$ 32,613	$ 163,067	$ 33,333	$ 2,045,902
Morgan Tract	Approved	20	$ 107,200	$ 107,200	$ 775,525	$ 663,300	$ 213,060	$ 33,500	$ 167,500	$ 35,175	$ 2,102,460
Del Webb	Under Construction	10	$ 68,640	$ 68,640	$ 496,568	$ 424,710	$ 136,422	$ 21,450	$ 107,250	$ -	$ 1,323,680
Okatie Crossings	Under Construction	5	$ 39,728	$ 39,728	$ -	$ 342,343	$ -	$ -	$ -	$ 15,000	$ 436,799
Sherwood Village	Approved	20	$ 59,008	$ 59,008	$ 426,886	$ 365,112	$ 117,278	$ 18,440	$ 92,200	$ 19,400	$ 1,157,332
Grand Total			$791,227	$791,227	$5,436,623	$4,992,241	$1,493,604	$234,843	$1,174,217	$224,158	$15,138,140

1- Annual Development Fees assume a straightline projection of anticipated total fees each year for the length of the term of the development agreement (5, 10, 20,30)

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Utilizing the assumptions in Table 10-4, Table 10-5 provides the next level of detail to more accurately portray the anticipated development fee funds available between fiscal year 2009 (ending June 30, 2009) and fiscal year 2018. For example, the "contribution years prior to 2019" column illustrates the anticipated delay in the timing of funds for Morgan and Sherwood tracts due to the progression of those projects and termination of funds for Okatie Crossings due to the 5-year total build-out of that project.

Table 10-5 Annual Development Fee Projection (FY2009 -FY2018)

Development	Status	Type	Estimated Annual Contribution	Anticipated Year Fees Begin	Anticipated Year Fees End [1]	Contribution Years Prior to 2019	2009-2019 Total Estimated Cotributions
Tradition	Under Construction	PDD/DA	$2,981,225	2009	2019	10	$29,812,250
East Argent Tract	Under Construction	PDD/DA	$3,869,849	2009	2019	10	$38,698,490
Anderson Tract	Under Construction	PDD/DA	$1,220,892	2009	2019	10	$12,208,924
Hardeeville Tract	Under Construction	PDD/DA	$2,045,902	2012	2019	7	$14,321,315
Morgan Tract	Approved	PDD/DA	$2,102,460	2015	2019	4	$8,409,840
Del Webb	Under Construction	PDD/DA	$1,323,680	2009	2019	10	$13,236,795
Okatie Crossings	Under Construction	PDD/DA	$436,799	2009	2014	5	$2,183,996
Sherwood Village	Approved	PDD/DA	$1,157,332	2015	2019	4	$4,629,330
Grand Total			$15,138,140				$123,500,940

1- Limited to 10 year projection. Actual Development Fees may continue beyond 2019 as shown in table 10-4

The Historical Ad Valorem taxes for the past five years were used to determine projected revenues for fiscal years (FY) 2009 through 2018. During the time period from FY 2004 to FY 2008 Hardeeville experienced an average annual revenue Increase of 21%. Table 10-7 uses the 21% annual increase to project future years. Ad Valorem Taxes are allocated through an annual budget process, but approximately 69% of annual Ad Valorem revenues were allocated to "Capital Outlay". The Capital Outlay funds are utilized for capital projects such as those shown in subsequent table 10-8.

Table 10-6 Hardeeville Historical Ad Valorem Taxes (FY2004 -FY2008)

	FY2004	FY2005	FY2006	FY2007	FY2008	5-Yr. Avg.
Ad Valorem Revenue	$803,872	$780,274	$1,106,738	$1,362,476	$1,639,360	$1,138,544
Previous Year % Change (Actual)	-	-3%	42%	23%	20%	21%

Table 10-7 Revenue Projections by Year (FY2009-FY2018)

Fiscal Year	Annual Development Fee Projection [1]	Annual Ad Valorem Revenue Projection [2]	Annual Capital Outlay Projections [3]	Total Annual Revenue Projections [4]	Anticipated Annual Capital Needs
FY2009	$ 9,832,445	$ 1,983,626	$ 1,368,702	$ 11,201,147	$ 4,793,862
FY2010	$ 9,832,445	$ 2,400,187	$ 1,656,129	$ 11,488,574	$ 11,345,000
FY2011	$ 9,832,445	$ 2,904,226	$ 2,003,916	$ 11,836,361	$ 22,295,000
FY2012	$ 11,878,347	$ 3,514,114	$ 2,424,738	$ 14,303,086	$ 53,095,000
FY2013	$ 11,878,347	$ 4,252,078	$ 2,933,934	$ 14,812,281	$ 33,436,000
FY2014	$ 11,441,548	$ 5,145,014	$ 3,550,060	$ 14,991,608	$ 33,995,000
FY2015	$ 14,701,340	$ 6,225,467	$ 4,295,572	$ 18,996,913	$ 32,795,000
FY2016	$ 14,701,340	$ 7,532,815	$ 5,197,642	$ 19,898,983	$ 32,758,000
FY2017	$ 14,701,340	$ 9,114,706	$ 6,289,147	$ 20,990,488	$ 1,995,000
FY2018	$ 14,701,340	$ 11,028,794	$ 7,609,868	$ 22,311,209	$ 866,000
10 Year Total	$123,500,940	$54,101,026	$37,329,708	$160,830,648	$227,373,862

1- Based on annual development fees for each project with consideration to anticipated contribution years in Table 10-5
2- Based on 5 year average historical growth fo 21%
3- Assumes Capital Outlay of 69% of Ad Volerum Tax Revenue based on 5 year historical average
4- Total Annual Revenue projections equals the sum of Annual Development Fee projection and Capital Outlay Projections

Potential Funding Sources

Alternative sources that can be utilized by the city have been analyzed and are detailed in Table 10-10, Potential Funding Sources. The table provides a list of Federal, State, local, and private sources of funding with a brief description of the fund as well as the types of projects that may be eligible under each specific category. It should be noted that this list is highly comprehensive but should not be viewed as exhaustive; additional funding sources may exist. Below is a sample taken from the potential funding sources table to illustrate the information contained within. Due to the size and format of the table, the complete table has been included as a separate exhibit within this document.

Table 10-10 City of Hardeeville- Potential Funding Sources

Source	Purpose	Website	Eligible Projects
Federal Sources			
Federal Highway Administration – Safe Accountable Flexible Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU)			
Congestion Mitigation and Air Quality Improvement Program	Reduction of transportation related emissions.	www.fhwa.dot.gov/safetealu/factsheets/cmaq.htm	Pedestrian connections; bicycle facilities; signalization
Highway Bridge Program	Improve condition of highway bridges through replacement, rehabilitation, and systematic preventive maintenance.	www.fhwa.dot.gov/safetealu/factsheets/bridge.htm	Bridge improvements
Interstate Maintenance Program	Resurfacing, restoring, rehabilitating, and reconstructing most routes on the Interstate System.	www.fhwa.dot.gov/safetealu/factsheets/im.htm	Resurfacing; widening
National Highway System Program	Improvements to rural and urban roads that are part of the National Highway System, including the Interstate System.	www.fhwa.dot.gov/safetealu/factsheets/nhs.htm	Resurfacing; widening
Railway-Highway Crossings Program	Reduce the number of fatalities and injuries at public highway-rail grade crossings through elimination of hazards and/or the installation/upgrade of protective devices at crossings.	www.fhwa.dot.gov/safetealu/factsheets/railcrossings.htm	Railroad crossing improvements; grade separations
Recreational Trails Program	Planning, design, construction, maintenance, and rehabilitation of multiuse trails.	www.fhwa.dot.gov/safetealu/factsheets/rectrails.htm	Pedestrian connections; bicycle facilities
Safe Routes to Schools Program	Enable and encourage children, including those with disabilities, to walk and bicycle to school; to make walking and bicycling to school safe and more appealing; and to facilitate the planning, development, and implementation of projects that will improve safety, and reduce, traffic, fuel consumption, and air pollution in the vicinity of schools.	www.fhwa.dot.gov/safetealu/factsheets/saferoutes.htm	Pedestrian connections; bicycle facilities

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Capital Project Needs

Throughout the first nine chapters of this Comprehensive Plan, a variety of capital projects have been identified. These projects are not all-inclusive of expenditures that should be anticipated by the City over the planning horizon. Rather, these are key capital projects that will serve to implement the vision of this Comprehensive Plan. Other annualized expenditures will be addressed through the development of the City's regular annual budget process.

Capital project needs are presented in Table 10-8 along with order-of-magnitude opinions of probable cost. For the majority of capital projects, costs were estimated using unit pricing values from locally and nationally published cost-estimating sources. For all other recommendations, costs where derived examining similar, prior efforts.

Table 10-8 City of Hardeeville Capital Projects

Capital Projects		Anticipated Annual Obligation									
Project	Estimated Project Cost *	FY 09-10	FY 10-11	FY 11-12	FY12-13	FY13-14	FY14-15	FY15-16	FY16-17	FY17-18	FY18-19
Stormwater Infrastructure [1]	$1,000,000		-	$250,000	$250,000	$250,000	$250,000	-	-	-	-
Police Headquaters Upfit [4]	$150,450	$150,450	-	-	-	-	-	-	-	-	-
Tradition Fire Station	$1,200,000	$1,200,000	-	-	-	-	-	-	-	-	-
Public Works Facility [4]	$398,412	$398,412	-	-	-	-	-	-	-	-	-
Downtown Fire Station	$1,200,000	-	-	$1,200,000	-	-	-	-	-	-	-
Millstone Landing Improvements [1]	$500,000	-	$500,000	-	-	-	-	-	-	-	-
Heyward House [1]	$600,000	-	-	-	-	$600,000	-	-	-	-	-
Intersection Improvements [3, 4]	$4,450,000	$445,000	$445,000	$445,000	$445,000	$445,000	$445,000	$445,000	$445,000	$445,000	$445,000
Renovation, Expansion, and Construction other Fire Stations [4, 9]	$2,400,000	-	-	-	-		$1,200,000	-	-	$1,200,000	-
US 17 Streetscape Improvements [4]	$941,000	-	$300,000	$300,000	$300,000	$41,000	-	-	-	-	-
Construction of Exit 3 and Associated Improvements [8]	$120,000,000	-	-	-	$24,000,000	$24,000,000	$24,000,000	$24,000,000	$24,000,000	-	-
Extension of US 278A [1]	$40,000,000	-	-	-	$8,000,000	$8,000,000	$8,000,000	$8,000,000	$8,000,000	-	-
Sidewalk Improvements [2]	$1,000,000	$100,000	$100,000	$100,000	$100,000	$100,000	$100,000	$100,000	$100,000	$100,000	$100,000
Improvements to Exits 5 [5]	$713,000	-	-	-	-	-	$250,000	$250,000	$213,000	-	-
Improvements to Exits 8 [5]	$571,000	-	-	-	-	-	-	-	-	$250,000	$321,000
Widening of US 17 [6, 10]	$52,500,000	$2,500,000	$10,000,000	$20,000,000	$20,000,000	-	-	-	-	-	-
Widening of I-95 [7, 10]	$170,000,000	-	-	-	-	-	-	-	-	-	-
	$224,784,000	$4,793,862	$11,345,000	$22,045,000	$52,845,000	$33,186,000	$33,995,000	$32,795,000	$32,758,000	$1,995,000	$866,000

Based on prior experience with similar projects.
Based on constructing 625 feet of sidewalk each year for the next 10 years at $160 per linear fc
Based on improving one intersection every year for the next 10 years at a cost of $445,000.
Detailed opinion of probable cost included in Appendix A.
Based on estimate included in the I-95 Interchange Assessment, Lowcountry COG, November 20

6 Based on SCDOT estimate of $50-$55 million in 2008 dollars.
7 Based on SCDOT estimate of $160-$180 million in 2008 dollars.
8 Based on estimate included in SIB application, 2009
9 Based on 1 fire station every 2-3 years for the next 10 years at a cost of $1.2 million.
10 Outside agencies responsible for these projects

Unless noted above all costs are in 2009 dollars and do not include inflationary factors.

Action Plan

Upon identifying the funding sources, an Action Plan (Table 10-9) has been developed by city staff to move projects forward. This plan includes a project description, implementation time period, potential responsible parties, and challenges to implementation. A total of 17 projects have been identified, listed, and described in the table. The time period for implementation for each project has been categorized as Short-Term, Medium-Term or Long-Term. Although timing is essential, the key to this plan is the coordination of the potential responsible parties and management of challenges that may exist or arise. It is expected that unforeseen obstacles and challenges may arise and alter the timing and order of projects. Managing this coordination and overcoming such obstacles will allow all jurisdictions to work together on funding sources, data availability, rights-of-way acquisition, and prioritization. It is the intent of this document to serve as a guide for planning future growth and capital improvements, but this list should not be viewed as a restrictive list encompassing all potential projects and activities for the City of Hardeeville.

Table 10-9 City of Hardeeville Action Plan

Priority #	Project	Project Description	Time Period	Potential Responsible Parties*							Challenges to Implementation
				COH	COE	BC	DEV	JC	COG	DOT	
1	Stormwater Infrastructure	Upgrade of Stormwater Infrastructure	Short	x					x		Inventory, Mapping, Data Availability
2	Police Headquarters Upfit	Renovation of 36 Martin Street for Police Headquaters and Municipal Court	Short	x							None
3	Tradition Fire Station	Construction of Tradition Fire Station	Short								
4	Public Works Facility	Creation of a new 3,600 square foot public works facility at municipal complex	Short	x							None
5	Downtown Fire Station	Renovation/ Expansion of Downtown Fire Station	Short								
6	Millstone Landing Improvements	Redevelopment of the Millstone Landing Site to accommodate patrons	Short	x	x						None
7	Heyward House	Preservation and restoration of the Historic Heyward House	Short	x							None
8	Intersection Improvements	Intersection upgrades to improve level of service and increase efficieny	Medium	x						x	Timing
9	Renovation/Expansion/Construction of other Fire Stations	Fire Stations to be located strategically throughout the city	Medium	x			x				Timing
10	US 17 Streetscape Improvements	Continuation of US 17 Streetscape enhancement to Exit 8	Medium	x					x	x	Consideration for future road widening
11	Construction of Exit 3 and Associated Improvements	Construction of Exit 3 interchange and Associated Improvements	Medium	x			x	x	x	x	Timing
12	Extension of US 278A	Extension of US 278A from Bluffton Parkway	Medium	x		x	x	x	x	x	Acquisition of ROW; Timing; interjurisdictional coordination
13	Sidewalk Improvements	Improvements to pedestrian circulation in the downtown central business district	Medium	x					x		None
14	Improvements to Exits 5	Alter Exit 5 to accommodate pedestrian traffic	Long	x						x	Limited ROW,
15	Improvements to Exits 8	Alter configuration of Exit 8 to improve level of service and increase efficieny	Long	x		x		x	x	x	Prohibitive configuration;Primary access point from Southern Beaufort County; Interjurisdictional coordination; limited alternate routes
16	Widening of US 17	Increase US-17 from two lanes to four lanes	Long	x						x	Timing; interjurisdictional coordination
17	Widening of I-95	Increase I-95 from four lanes to six lanes	Long	x						x	Timing; interjurisdictional coordination

*** COH**- Hardeeville, **COE**-Corps of Engineers, **BC**- Beaufort County, **DEV**- Private Developer, **JC**- Jasper County, **COG**- Lowcountry Council of Governments, **DOT,** South Carolina Dept of Transportation