



# Technical Data A

Each chapter contains an inventory and analysis of the existing and projected trends. The results of this analysis were used in the establishment of the needs for the community, goals and implementation strategies to achieve those goals.

This Appendix includes a more detailed inventory than is provided in each chapter. It includes additional background data, which may be of interest, but are not essential to the recommended implementation strategies.

## 2 Population

### Population Projections

A number of factors relate to the process of estimating or projecting population. Unlike many other communities, Bluffton possesses a certain present-day knowledge of its build-out population (carrying capacity) based upon approved development agreements and densities linked to respective annexations into the Town. Applying the US Census Bureau's average household size of 2.74 persons, results in a total build-out population of 60,803. Based on the mid-decade census (2.84 persons per household), the buildout population would be 63,022.

The actual population is variable because it is uncertain is how much of this housing will be dedicated to year-round residents versus seasonal occupants and whether the average household size will shift because of the type of housing built. This plan assumes the average will remain relatively even and homes will be occupied, either by the owner or a renter.

### Projection Sources and Techniques

Figure A2.1 exhibits the results of the three projection methods/ techniques used in establishing population projections. 2000 Census figures were used to develop the base (1999) population, while the 2009 population is based upon the assumed population growth rate of Bluffton Five-Year Revenue Forecast. This ten-year period was utilized in the population projections, as a growth rate between the previous

**Figure A2.1**

**Town of Bluffton Population Projections**

Year	Arithmetic	Decreasing Rate of Growth	Development Agreement Schedules	Average
1999	1,275	1,275	1,275	1,275
2003	4,688	4,859	9,492	6,346
2005	6,394	6,563	14,983	9,313
2010	10,660	10,585	26,362	15,869
2015	14,926	14,287	34,473	21,229
2020	19,192	17,694	41,459	26,115
2025	23,458	20,829	47,310	30,532

Source: Town of Bluffton Planning and Growth Management Department

ten-year period (1989-1999) would not be indicative of future growth patterns. The following methods were used to

project population:

**Arithmetic:** Assumes the average annual increment observed between the years of 1999-2009 continues at a constant rate. This method neglects fertility and death rates, economic conditions affecting growth, and exponential population growth. Simple arithmetic projections are used for quick and easy, but not necessarily accurate, projections.

**Decreasing Rate of Growth:** As a general rule, as a city's population becomes larger, the rate of growth from year to year is reduced. Growth also subsides as the saturation population (ie. "carrying capacity") is approached. The saturation population is the theoretical population who can live in a town based on the physical constraints of buildable land, zoning regulations and infrastructure available.

**Development Agreement Schedules:** Assumes a growth rate per the various development schedules of the respective development agreements. As a rule, an average household size of 2.74 was utilized during this calculation.

### **Projection Population in Beaufort County**

A regional plan of southern Beaufort County conducted with the partnership of the Town of Bluffton, Hilton Head Island and Southern Beaufort County is a valuable resource which focused on growth of the region over the next two decades. This plan identified two different sets of population, permanent and seasonal population. There are also constraints and build-outs which indicate how much population this area can accommodate before we reach the land's carrying capacity.

Based on research completed as a part of this regional plan, a build-out date of approximately 2020 is assumed for the Town of Hilton Head Island and 2018 for southern Beaufort County. The term 'build-out' is applied when the land's capacity to support more development is depleted, all available land is used making it more scarce and expensive to acquire.

Southern Beaufort County should be served by a centralized regional information system that monitors and tracks planned land uses; provides ongoing population and employment forecasts; measures and

predicts regional impacts of growth; and is integrated with other regional models such as environmental and transportation models. A regional demographic model of existing and forecasted population, including permanent and seasonal population, could be carried out through a multijurisdictional effort. Planning staff from the Town, Beaufort County and the Town of Hilton Head Island have collectively agreed to coordinate and provide data to Beaufort County to maintain this system.

## Age Distribution

Age Category	Bluffton		Beaufort County	South Carolina
	No.	Pct.		
<b>Under 5 years</b>	86	6.7%	6.7%	6.6%
<b>5 to 9 years</b>	93	7.3%	6.6%	7.1%
<b>10 to 14 years</b>	135	10.6%	6.4%	7.2%
<b>15 to 19 years</b>	94	7.4%	7.2%	7.4%
<b>20 to 24 years</b>	49	3.8%	8.3%	7.0%
<b>25 to 34 years</b>	161	12.6%	13.6%	14.0%
<b>35 to 44 years</b>	288	22.6%	13.6%	15.6%
<b>45 to 54 years</b>	157	12.3%	11.6%	13.7%
<b>55 to 59 years</b>	52	4.1%	5.3%	5.2%
<b>60 to 64 years</b>	46	3.6%	5.2%	4.1%
<b>65 to 74 years</b>	51	4.0%	9.4%	6.7%
<b>75 to 84 years</b>	49	3.8%	4.9%	4.1%
<b>85 years and over</b>	14	1.1%	1.3%	1.3%

\*The numbers indicate the actual population within each age category  
Source: US Census 2000

### 3 Cultural Resources

#### Contributing Resources

The 1994 survey evaluated 84 sites, primarily on Calhoun and Bridge Streets, in which 45 percent of the total number of significant structures are located. No sites were identified as having been constructed prior to 1800. Twelve were identified as being antebellum structures: the Huger-Gordon House, Seven Oaks, the Allen-Lockwood House, the Pope Carriage House, the Heyward House (including the two outbuildings), the John Seabrook House, the Card House, the Fripp House, the Church of the Cross, and the Campbell Chapel. The Isaac Garvey House is estimated to date back to 1860 and 1880. The remaining sites were estimated to have been constructed between 1880 and 1930. The Town has updated the documentation and has included additional contributing structures, which are a result of the 2001 PRESCON Historic Architectural Resources Survey Report. The structures numbered 1-38 in Figure 3.1 are those that were used in the consideration of the National Register District. The additional numbered buildings were considered “contributing structures” based upon age alone, 50 years or older.

In October 2001, PRESCON conducted a Historical Architectural Resource Survey to identify and document all historic architectural resources located within the Bluffton Conservation District. Properties identified as historic were photographed and catalogued to accompany the written documentation of the specifics of each structure. The PRESCON survey documents 33 structures considered historically significant within the Bluffton Conservation District.

Historic resources surveys were also prepared on the Shults and Palmetto Bluff tracts prior to their annexation into the Town. These reports indicated that there are no known cultural resources located within the Shults Tract, and there is little potential for the Shults Tract to contain significant cultural resources. The survey conducted on the Palmetto Bluff Tract identified 22 archaeological sites and 18 associated finds on a sampling of 10 surveyed separate parcels (502 total acres). While 18 of the 22 archaeological sites were considered eligible for inclusion in the National Register of Historic Places, none of the associated finds were considered eligible. From these results, surveyors determined that the Palmetto Bluff Tract could be divided

into areas of high and low potential for cultural resources with a high degree of accuracy. Care must be taken with future development in the Palmetto Bluff Tract to ensure that appropriate approvals have been obtained and recommendations have been fulfilled prior to developing sites.

## Heritage Tourism

The pressures associated with the area's rapid development, in which the Town of Bluffton has become the fifth largest town in South Carolina (by land area), threaten the perpetuation of the Town's cultural heritage. The community will seek to achieve a balance between economic vitality and development/ redevelopment to ensure that Bluffton's community character and historical heritage are preserved. The goal is to ensure that the community preserves its historic integrity while laying out a vision for the future.

A partnership was formed between the Town of Bluffton and the Bluffton Historical Preservation Society, Inc. (BHPS) which has made the Town a significant player in this region's heritage tourism industry. Bluffton possesses a diverse group of historic structures, but tourism was virtually non-existent due to under use and lack of promotion of the Town's historic resources. Before the two entities began to work together, the Town was simply passed through by visitors traveling between Savannah, Georgia and Hilton Head Island, South Carolina. This successful partnership between a small non-profit group and a governmental entity has produced a new burgeoning, low-impact industry that is now an integral component to this area's successful heritage tourism industry. For Bluffton, it has become an industry that will continue to provide a positive economic impact, both directly and indirectly, with benefits to all residents of the Town. Furthermore, the local historic preservation movement, with the Heyward House Historic Center as its centerpiece, unequivocally benefits all of the Town's residents by improving the community's intangibles, such as its quality of life and a retained sense of place.

The Hilton Head Island /Bluffton Chamber of Commerce have coordinated to create the South Carolina's Treasured Coasts campaign, which offers sample itineraries for activities visitors might partake in while vacationing in Bluffton and the surrounding area. The Town, Beaufort Historical Preservation Society and the Chamber work closely in promoting heritage tourism and representatives of each organization

currently participate in the Bluffton Marketing Committee, a committee of the Chamber intended to promote tourism and raise Bluffton's community profile as a destination for visitors. The BHPS worked closely with the Chamber in the development and printing of the Bluffton Walking Tour Map. The pamphlet guides visitors through the Bluffton National Register Historic District and gives historical information on the Town and its existing structures. The BHPS also leads guided walking tours through the Old Town by appointment.

The partnership between the Chamber of Commerce, Historical Society and the Town of Bluffton has only grown stronger over the last half decade as the Town government and staff of the Historical Society have worked together to establish the foundation of a healthy heritage tourism industry.

## Community Events

The following are regular community events:

- Christmas Parade
- Annual Bluffton Flower Show
- Every 3rd Friday: The Old Town Merchants Society sponsors this event that occurs every 3rd Friday with live music, food, and street performers.
- Fall Lecture Series: This is sponsored by the Preservation Society.
- Preservation Classic Golf Tournament: This tournament is held in October.
- Various Oyster Roasts
- Arts and Seafood Festival: This is held in the spring and is sponsored by the Rotary of Bluffton

Other events and activities include walking tours of the historic Old Town, as well as native guide tours, or eco-tours of the local marshes, creeks, estuaries, and rivers. There are also Civil War roundtable discussions and lectures, numerous art and photography galleries, and shows.

## Awards and Recognition

The Town of Bluffton and organizations within the Town have been acknowledged for cultural enhancement efforts:

**Corporate Stewardship Award:** This award recognizes a corporation that has made significant achievements or landmark efforts in support of historic preservation. It is given by the Office of the Governor, the Palmetto Trust for Historic Preservation, and the South Carolina Department of Archives and History (SCDAH). In 2005, this award was given to Palmetto Bluff, LLC, the developers of the Palmetto Bluff development. Surveys revealed that there are more than 150 archeologically significant sites on the property, including cemeteries. This spurred the developer to employ an on-site archeologist and develop a cemetery master plan. Palmetto Bluff provides hands-on educational opportunities for the boy and girl scouts, local school groups, and the general public.

Palmetto Bluff also received a 2005 Stewardship Development Award from the South Carolina Department of Natural Resources. This annual award recognizes residential, public and/or commercial-industrial projects in the State which exhibit the highest level of thoughtful stewardship of the environment through careful planning and construction.



**Preserve America Community:** In 2006, First Lady, Laura Bush designated Bluffton a Preserve America Community. Bluffton joins other communities with this designation that are committed to preserving their heritage while ensuring a future filled with opportunities for learning and enjoyment. This provides strong incentives for continued preservation of the cultural and natural resources. The goals of this initiative include a greater shared

knowledge about the past, strengthened regional identities and local pride, increased participation in preservation, and support for the economic vitality of communities. By receiving this designation, Bluffton receives National recognition for their efforts. The benefits of the designation also include: appropriate use of the Preserve America logo on promotional materials; notification to media, State tourism offices and visitor bureaus; and a listing in a directory to showcase preservation efforts and highlight heritage tourism destinations. It also allows Bluffton to apply for grants under the Preserve America grants program administered by the Department of the Interior.

There are other awards and acknowledgements that should be applied for which, if obtained, will only help to achieve the historical and

cultural goals of the community. The Distinctive Designations declaration from the National Trust for Historic Preservation is one such recognition. The communities who earn this designation must meet the following criteria: criteria: well-managed growth, a commitment to historic preservation with a protected historic core and meaningful context, interesting and attractive architecture, cultural diversity, activities for families with children, an economic base of locally-owned small businesses, and walkability for residents and visitors. Another recognition includes listing of more contributing structures on the National Register of Historic Places.

This section inventories existing natural resources, including the water resources, soils, flora and fauna, air quality and other aspects of our natural environment.

## 4 Natural Resources

### Weather and Climate

Other extreme weather events within Beaufort County include tornadoes, floods, earthquakes, wildfires, lightning, and storms involving hail and wind. Through September 2000, the SC Climatology Office reported the following statistics for extreme weather events for the County:

- 14 Tornadoes, costing \$1.612 million, resulting in 5 injuries and 1 death
- 40 Wind Events (winds exceeding 60 mph)
- 31 Hail Events
- 24 Lightning Events, costing \$804,000, resulting in 12 injuries and 2 deaths

### Water Resources

**New River:** It contains an abundance of brackish tidal marshes. Some of these waterways hold historic and cultural significance, as they were used in the early 1900's for rice production. Bluffton's New River Trail is the dividing line between the fresh and salt environs and the only public site to view the now abandoned rice fields. The New River watershed originates from the Great Swamp Watershed, a significant system containing 2,851.4 acres of estuarine waters. The associated salt, brackish, and fresh water ecosystems provide essential habitat for aquatic and bird species. The largest component, the saline ecosystem, contains three intermediately developed oxbow lakes.

**May River:** According to the May River Baseline Study, a substantial influx of either surface flow or shallow ground water was evident at the Pritchardville gauge station due to high annual runoff rates recorded during a period of drought. According to the Environmental and Ecological Assessment of the May River Report, the sandy soils of Bluffton may allow for more efficient transport of water through shallow groundwater. Water losses to deeper aquifers are limited, as more water flows to the receiving stream.

Two key recommendations from the May River Baseline Study are:

1. Delineate sub-watersheds in the May River Watershed. This was completed as a part of the County watershed study. The subwatersheds are illustrated in the May River Watershed Analysis draft, dated May 22, 2004.
2. Organize a watershed education campaign, including watershed and storm drain identification.

**Water Quality:** The following are recommendations from the May River Baseline Study which directly impact water quality. The two-year baseline study was completed in April 2003. The study was supported by NOAA, Beaufort County, Hilton Island Foundation, Beaufort County SAMP, and the Town of Bluffton.

1. Seasonal sampling of fecal coliform in conjunction with SCDHEC. SCDHEC currently monitors eight sites. Bluffton should request additional monitoring for Rose Dhu and Stony Creeks and the headwaters area. Analysis should also be performed to track the source of fecal loadings.
2. Test for atrazine as an indicator of surface runoff in future water quality testing. Other areas in the United States have been successful in requesting home improvement, hardware stores, and garden centers to discontinue the stocking of products containing atrazine which is harmful to shellfish.
3. Developments should monitor their stormwater lagoons effectiveness and the receiving waterways for fecal, nitrogen, and phosphorus loadings.
4. Water quality monitoring should be conducted more frequently than sediment and biotic sampling. Monitoring should be in conjunction with completion of developments and stormwater lagoon monitoring. Parameters should include dissolved oxygen, salinity, turbidity, chlorophyll-a, pH, nutrients, fecals, and organic carbon.
5. Every five years, sediment and biotic conditions should be assessed.
6. Continue and increase education campaign for vegetated buffers, pet waste disposal, proper hazardous waste disposal, stormwater pond maintenance, and proper lawn care.

In addition, Bluffton needs to continue protecting water quality with existing activities such as the following:

1. Work with the Stormwater Utility and the USC New River Campus to support a local, SCDHEC certified laboratory and the creation of a County protocol for water quality testing which may be cross referenced with state and national data.
2. Support environmental groups such as Lowcountry Institute, Friends of the Rivers, the Port Royal Sound Conservancy, Clemson Extension Service, and Beaufort Conservation District.
3. Strictly enforce buffers along waterways and wetlands.
4. Support the SCDNR SCORE project which replenishes oyster shell onto local mud bars and established beds and sponsors a volunteer monitoring program.

All development within Bluffton must adhere to the provisions outlined in the Beaufort County Best Management Practice (BMP) Manual. In December 2003, the manual was revised to address four important issues:

1. Fecal coliform, a pollutant in urban and wilderness stormwater runoff which impacts shellfish harvestability;
2. Littoral shelves and native plantings;
3. Maintenance agreements for stormwater facilities; and
4. Addition of the latest innovative technologies in stormwater treatment.

The revised manual was adopted with the caveat that monitoring of stormwater lagoons would occur to test the effectiveness of fecal coliform removal. The monitoring and evaluation was slated to be completed before August 2005.

Also in 2003, the South Carolina SeaGrant Consortium and Friends of the Rivers sponsored a program titled Nonpoint Education for Municipal Officials (NEMO). Representatives from the Town Council and Planning

Commission as well as Beaufort County staff and officials participated in the program. This program was offered again in 2007.

Recently, research has shown a relationship between bacteria loadings and turbidity. The state currently regulates erosion and sediment control standards. The Town has been advised to adopt standards to allow regulation at the local level. As the state of stormwater science progresses, the Town should assess needed improvements to its control standards.

## Geology and Soils

On a broad geologic scope, Bluffton is situated on the Pamlico terrace. The Pamlico's elevations vary and lie below 25 feet, though higher elevations may be found along the ridge parallel to Hwy 170. Soil classifications include Santee (loamy surface and clayey subsoil), Buncombe (sandy throughout), Argent-Okeetee (loamy surface with clayey subsoil), Bladen-Coosaw-Wahee (combination of loamy surface with clayey subsoil and thick sandy surface with loamy subsoil), Wando-Seabrook-Seewee (sandy throughout), Coosaw-Williman-Ridgeland (sandy throughout), and Bohicket-Capers-Handsboro (mineral and organic soil of the salt and brackish marshes).

The limitation of the Buncombe, Wando, and Coosaw series is the elevation of ground water. When site-specific data shows the ground water elevation is low, these soils are appropriate for stormwater infiltration. Infiltration is a preferred method of stormwater treatment due to recent studies which report that the distribution of stormwater back into the land is more sustainable than funneling it through stormwater pipes and collection into lagoons. Therefore, Bluffton should develop a map which highlights more specific areas where infiltration can be used for stormwater treatment.

Unsuited for urban development are Santee, Bohicket-Capers-Handsboro, and Argent-Okeetee soils due to wetness, proximity of water table, and continuous flooding. As soil data is a fundamental tool for planning urban development, it should also be used as a guide for selecting areas suitable for stormwater infiltration (permeability), wildlife habitat, and forest preservation and regeneration. The Town should use existing Beaufort Jasper Soil Classification information to develop a map to aid in designating specific stormwater practices for specified areas, as well as locate ideal areas for conservation.

Bluffton has been progressive and addressed a water table elevation limitation on development within the Wando-Seabrook-Sewee and Coosaw-Williman-Ridgeland, by eliminating the use of septic systems. The Town requires all new development to be connected to the BJWSA system. Yet, many residences in Southern Beaufort County are utilizing septic systems that are not functioning properly or are in disrepair. A request from the public during the presentation of the May River Baseline Study was the distribution of a publication relaying information on maintenance and retrofitting existing septic systems with innovative, cost effective technologies to reduce seepage.

## Flora and Fauna

**Habitats:** The following habitats assemble Bluffton:

1. Bay Forest
2. Beech and Magnolia Hammock
3. Bottomland Hardwoods
4. Brackish Marshes
5. Depression Meadow
6. Intertidal Mud/Sand Flat
7. Maritime Forests
8. Middens
9. Oak Hickory Forests
10. Oyster Reefs
11. Pine Flatwoods
12. Pine-Saw Palmetto Flatwoods
13. Pine Savannah
14. Pocosin Shrub Pineland
15. Pond Cypress Pond
16. Pond Pine Woodland
17. Salt Flat
18. Salt Marsh
19. Salt Shrub Thicket
20. Tidal Freshwater Marsh
21. Upland Pine-Wiregrass Woodland
22. Urban/Suburban Forests
23. Non-native tree and shrub associations
24. Meadows – Vacant Lots

**Threatened and Endangered Species:** Bluffton recorded the following observations and occurrences of threatened and endangered flora and fauna:

1. Bald Eagle
2. Bird-voiced Tree Frog
3. Northern Yellow Bat (Verification needed)
4. Eastern Coral Snake
5. Eastern Diamondback Rattlesnake
6. Little Brown Myotis (Verification needed)
7. Carolina Pygmy Sunfish
8. Bluebarred Pygmy Sunfish
9. Eastern Woodrat
10. Swallow Tail Kite
11. Woodstork
12. Gulf Coast Mud salamander
13. Flatwood Salamander
14. Eastern Fox Squirrel
15. Loggerhead Sea Turtle
16. Manatee
17. Pondspice
18. Elliot's Milkpea
19. Lobelia
20. False Foxglove
21. Grape Fern
22. Rusty Lyonia
23. Large Stem Morning Glory
24. Needle Palm

## Forest Resources

**Maritime Forests:** Several professionals believe there is very little if any maritime forest within the Town limits. There is much evidence which suggests that Longleaf Pinelands dominated up to the waters edge in Bluffton except for the Coves. Therefore, for the purposes of the Comprehensive Plan, the reference to "maritime forest" should be interpreted as the range of Live Oaks, Sabal Palms, Holly, Red Bay and Slash Pine, etc which lie along the perimeter of salt water bodies within Bluffton.

Maritime forests are increasingly rare due to development pressures. These unique forests grow along bodies of saltwater and include

species which are adapted to sandy soil, salt spray, calcium rich soil and strong winds. Associated plants include Live Oaks, Sabal Palms, Yaupon Holly, Red Bay, and Slash Pine. The maritime forest provide rich habitat for wildlife and protect property from ocean storms. The maritime forest of Palmetto Bluff flourishes over the May, Cooper, and New Rivers. Preservation efforts have included compliance with the River Protection Overlay District and selecting a large estate lot type of development for the headwaters region. This would be an excellent site for a "School Forest" which would be available for education of Bluffton Students and environmental groups on this unique habitat. Another important educational element could be proper forestry management practices.

Though Palmetto Bluff has preserved much of its maritime forest, very little exists on the northern banks of the May River. Bluffton should work with the County to promote an educational campaign with a single purpose of replenishing the scenic and functional buffers of the northern banks of the May River. It proposes a challenge to replicate the forested banks which exist south of the May River. Planting trees and vegetation and complying with established buffer requirements could restore the scenic and functional forested buffer properties.

**Longleaf Pine Forests:** Longleaf Pine forests once dominated the Coastal Plains of South Carolina. The combination of soils, hydrology, and most importantly periodic burning, created this Longleaf and wiregrass habitat. The few remaining stands of Longleaf are primarily under the management of private landowners. The Longleaf pine forest supports a large and diverse plant and animal population. Over 40 species can be found in a 10 square foot area and well over 100 species may occur in a quarter of an acre. Many species are endemic to this habitat and once prevalent species are now extremely rare. Restoration and maintenance of the few remaining tracts should be a priority whenever possible given the necessity of periodic burning. By preserving this ecosystem, the Town is maintaining the one of the most significant elements of its natural heritage.

**Bottomland Hardwood Forests:** In Bluffton, pockets of bottomland hardwood forests are dominated by Water Oak, Cherrybark Oak, Laurel Oak, Red Maple, Magnolia, Black Willow, and Water Tupelo. Understory vegetation often consists of Dwarf Palmetto, deciduous holly, Yaupon, and many others. Within the Okatie watershed, bottomland hardwood forests consist of Pecan, Hickory, American Elm,

Water Oak, Live Oak, Magnolia, Sycamore, and Hackberry/Sugarberry. Animals utilizing this unique habitat include bald eagles, wading birds, ducks, woodpeckers, warblers, frogs, salamanders, turtles, snakes, alligators, bats, rabbits, beaver, squirrels, bobcats, foxes, river otters, raccoons, and deer. West of Hwy 170, the forested hardwood bottoms in the New River watershed were destroyed by timbering and silviculture activity. East of Hwy 170, just south of Hwy 278, large expanses of hardwood bottom forests remain and should be protected.

**Silviculture:** Silviculture is the science and art of cultivating forests based on the knowledge of the life history and general characteristics of forest trees; the principles, theories, and practices for protecting and enhancing the establishment, growth, development, and utilization of forests for multiple benefits. Good stewardship during forestry activity will protect water quality and some practices can be used to enhance wildlife habitats. Silviculture and forestry management should take into account ecological factors such as successional role of species, the potential for regeneration, the effects of competing vegetation, and the potential for damage from insects, pathogens, or weather. The South Carolina Forestry Best Management Practices protects the public realm from the visual and physical impacts of harvesting. Requirements include leaving buffers along waterways and roadways, preserving overstory trees, and protection of the forest floor. Bluffton's Tree Ordinance and all Development Agreements require either a permit or notification that states a minimum of fifteen trees per acre, at eight inches and greater in diameter at breast height, will remain in the disturbed area. Property located outside of areas under development agreements requires a two-year period before any development can commence after harvesting is complete.

The majority of Bluffton's annexed land was previously owned and managed by Union Camp for timber, not wildlife enhancement or sustainable development. The Town should educate developers and land owners on the importance of managing the forest to produce a sustainable environment for development. There are many examples of good forestry management coinciding with development in Southern Beaufort County, including places like Rose Hill and Belfair.

**Urban Forest:** Bluffton's Urban Forest is a unique form of habitat, harboring wildlife which have adapted to anthropogenic impacts. Bluffton needs to develop an urban forestry management plan which will provide instruction and guidance for the following:

1. Planting and mitigating for absence or loss of trees;
2. Establishing of a formalized tree replanting program;
3. Providing guidance for emergency situations;
4. Partnering with Beaufort County on funding for trees
5. Planning for the preservation and health of historically significant trees and stands; and
6. Enhancing the inherited managed silviculture pine forests with native hardwoods or preferably Longleaf.

## 5 Housing

### Age and Condition

Substandard housing is defined as dwelling units that do not provide adequate shelter. Figure A5.1 shows several factors measured by the US Census Bureau that can be used as indicators of substandard housing conditions. The most direct Census indicator of substandard housing is the incidence of incomplete plumbing and/or kitchen facilities. Of the 501 housing units in 2000, only two units had incomplete plumbing and two had incomplete kitchens. Housing conditions data for Beaufort County reflected low substandard housing figures as well (A5.2), with less than 1%. These figures are well below state and national figures. However, surveys of homes completed during a Community Development Block Grant application process by the Low Country Council of Governments resulted in the discovery of a number of homes with incomplete or very dysfunctional plumbing facilities.

Another factor that may indicate the adequacy of housing is the source of heat for a dwelling unit. According to the 2000 Census, most units in Bluffton relied on electricity for heating (85%). While Beaufort County had 213 units without sources of heat as shown in Figure A5.1, all units in Bluffton reported a source of heat.

**Figure A5.1**

**Town of Bluffton Census Indicators of Substandard Housing**

	1990		2000		1990-2000	
	No.	Pct.	No.	Pct.	Difference	Pct. Change
<b>Total units</b>	305	100%	501	100%	196	64%
<b>Incomplete Plumbing</b>	0	0.0%	2	0%	2	--
<b>Incomplete Kitchen</b>	0	0.0%	2	0%	2	--
<b>Source of Heat</b>						
<b>Utility gas</b>	2	0.7%	7	1%	5	250%
<b>Bottled, tank, or LP gas</b>	53	17.4%	79	16%	26	49%
<b>Electricity</b>	35	11.5%	428	85%	393	1,123%
<b>Fuel oil, kerosene, etc</b>	1	0.3%	0	0%	-1	-100%
<b>Wood</b>	4	1.3%	0	0%	-4	-100%
<b>None</b>	0	0.0%	0	0%	0	--

Source: US Census 2000, 1990

**Figure A5.2**

**Beaufort County Census Indicators of Substandard Housing**

	1990		2000		1990-2000	
	No.	Pct.	No.	Pct.	Difference	Pct. Change
Total units	45,981	100%	60,509	100%	14,528	32%
Incomplete Plumbing	210	0.4%	139	0%	-71	-34%
Incomplete Kitchen	210	0.4%	130	0%	-80	-38%
<b>Source of Heat</b>						
Utility gas	3,968	8.6%	5,559	12%	1,591	40%
Bottled, tank, or LP gas	4,563	9.9%	3,170	7%	-1,393	-31%
Electricity	20,854	45.4%	36,103	79%	15,249	73%
Fuel oil, kerosene, etc	847	1.8%	281	1%	-566	-67%
Wood	367	0.8%	186	0%	-181	-49%
None	45	0.1%	213	3.8%	168	373%

Source: US Census 2000, 1990

Recent housing surveys conducted for Community Development Block Grants (CDBGs) and HOME programs show that some homes in Bluffton need repair work so that they can meet acceptable standards. Others must be demolished because they are beyond repair and water and sewer must be provided to those units that are lacking. There may also be unidentified homes in need of repair or public services. Because low incomes make it difficult for many families to afford necessary repairs or to move to better housing, there are several grant programs available to address both the rehabilitation of substandard housing and the replacement of dilapidated dwellings.

The two programs mentioned above, CDBG and HOME are administered nationally by the U.S. Department of Housing and Urban Development (HUD) through funds passed through the State and administered locally through the Lowcountry Council of Governments (LCOG). These programs are specifically targeted to families of low and moderate income. The Town should aggressively seek CDBG, HOME and other housing-related grants and become a clearinghouse for the information needed for applications.

In ten years, Bluffton's median home value increased by 142% while gross median rent increased by 74%. This does not follow the same trend, while median home value for homes within the Town of Bluffton was considerably less than the County's, the median gross rent for 2000 for the Town was greater than in the County.

According to the South Carolina Association of Realtors (SCAR), the home sales in South Carolina are experiencing a trend similar to the National trend of decreased sales from 2005 to 2006. The national sales market was down 1.9% in October of 2006 from October of 2005. During the same time period, South Carolina also experienced a decline in sales, which were down 3.6%; however the median sales price for the state increased by 7.9% to \$164,000 for the 2006 year to date as of October 2006

## **Affordable Housing Organizations**

Bluffton should consider ways to promote the development of new housing, with special consideration given to affordable units. Non-profit organizations such as Habitat for Humanity, which builds affordable homes, should be approached to complete additional projects in the Town. These organizations are extremely knowledgeable in providing homes for low income families and may be willing to assist and or partner with the Town in rehabilitation projects.

There are many resources for information on affordable housing programs, including grant and loan programs, and many non-profit organizations. The Town should maintain a close relationship with members of the Beaufort County Housing Authority and consult with them on a regular basis. In addition, the following organizations are instrumental in their lead on affordable housing programs. It is imperative that the Town build relationships with these groups and others in order to most efficiently and appropriately deal with the issue of affordable housing options in the community. The groups all listed below have complementing interests in affordable housing. The groups offer different services and programs, applicable to different income levels and groups. All are vital in accomplishing affordable housing efforts.

## **Federal Agencies**

### **US Department of Housing and Urban Development (HUD):**

HUD's mission is the expansion of the supply of affordable housing for low-income families. HUD has designated the Office of Community Planning and Development, the Office of Housing, and the Office of Public and Indian Housing as the administrators of all programs designed to increase the stock of housing affordable to low-income households.

**Office of Affordable Housing Programs (OAHP):** This office under HUD administers three separate programs:

- **HOME Program:** This program provides funds to PJs (Participating Jurisdictions). The PJs can use these funds to help renters, new home buyers, or existing homeowners. PJs have a great deal of flexibility in designing their local programs.
- **SHOP Funds:** SHOP provides funds for non-profit organizations to purchase home sites and develop or improve the infrastructure needed to set the stage for sweat equity and volunteer based homeownership programs for low income families.
- **Homeownership Zone:** This program allows communities to reclaim vacant and blighted properties, increase home ownership, and promote economic revitalizations by creation entire neighborhoods. Money has not been allocated to this program since 1997; however, the program is still listed.

## State Agencies

### **South Carolina State Housing Finance and Development**

**Authority:** This agency administers a number of state and federal programs, distributing the funds to the appropriate agencies. One such program is the First Time Home Buyers program, which is available for low to low-moderate income families and persons. It includes a fixed, below market rate interest rate mortgage loan and down payment and closing cost assistance up to \$4,000.

## Local Agencies

**Town of Bluffton:** The Town of Bluffton will support the affordable housing efforts by acquiring property within the Town that should be used for affordable housing efforts. This also includes encouraging developers to donate to various groups or developers dedicated to building affordable housing. Bluffton will also be an information source as to the available community programs. An affordable housing bank should also be managed by Bluffton to cover impact fees incurred for construction of new affordable housing units.

**Beaufort County Housing Authority:** The Beaufort County Housing Authority is the local office for the State Housing Authority. They

administer the Section 8 housing program and public housing. The Section 8 housing program is tenant based housing, it follows the tenant, and is not considered to be public housing. Approximately 250-280 vouchers are distributed to qualifying families each month. It is up to the individual to find a landlord who is willing to accept the voucher. At this time there is no public housing in Bluffton, there is on Hilton Head Island and in Beaufort. There are currently no plans to construct any new public housing units in the area.

**Beaufort County Community Services:** Within the Community Services Division in Beaufort County, a staff person is designated as the Housing Coordinator. This person oversees all affordable housing projects and initiatives within the County. The various municipalities, towns and cities have on-going housing related activities. Therefore, constant communication between the local government entities is imperative. The County Housing Coordinator's essential job functions are to:

- work with developers and others in identifying and analyzing potential affordable housing projects;
- disseminate and present program information on housing to elected officials, community organizations, developers and the general public;
- plan, develop and implement strategies to seek and secure funding to assist in the development of affordable housing;
- research and analyze housing rehabilitation needs when appropriate to enhance the affordable housing program;
- facilitate and conduct public meetings with federal, state and local housing officials, private sector organizations, the media, and the general public on issues involving affordable housing.

## **Non-Profit Organizations**

**Habitat for Humanity:** Habitat for Humanity is a non-profit organization whose mission is to eliminate substandard housing and homelessness, and to break the cycle of poverty that inadequate housing fosters. The local office for Habitat is the Hilton Head Island (HHI) Regional Habitat for Humanity, which was founded in 1990. Hilton Head Regional Habitat is a nonprofit, ecumenical Christian housing ministry that has built seventy six (76) homes in the Hilton Head and Bluffton areas, providing affordable housing to over 250 people in need. It depends on local banks, skilled workers,

landowners, faith-based organizations, and Habitat home owners and other volunteers working in partnership to provide the means, land, and materials to build homes for carefully screened applicants. Habitat does not simply 'give away' homes, but requires that applicants put in 300+ hours of labor and pay closing costs, attend eleven (11) mandatory workshops, and zero interest loans.

The Brendan Woods development is an example of a Habitat for Humanity Community in the Town of Bluffton. By spring 2007, there will be 61 affordable homes within the Brendan Woods community. The only other Habitat community located in Southern Beaufort County is New Hope Village, located just outside the town limits, with a total of 12 homes. Habitat for Humanity would like to continue to construct more homes as well as rehabilitate existing dilapidated housing within the community; however, they are facing the hurdle of high land prices and acquisition.

**Low Country Community Development Corporation (LCDC):**

The Lowcountry Community Development Corporation, Inc. (LCDC) is a non-profit organization with a primary focus on affordable housing. Their programs include housing repair grants; homebuyer education/financial literacy classes; and down payment assistance grants. They are a five-county regional agency assisting the entire Lowcountry community to achieve a better quality of life. LCDC has helped numerous families in the Lowcountry, including Bluffton, to purchase homes and maintain their homes in good repair. LCDC receives funding from the State Housing Finance and Development Authority's Housing Trust Fund, the Federal Home Loan Bank of Atlanta, banks, and private investors. The LCDC averages 20 new homeowners, 200 homebuyer program graduates, and 12 completed rehabilitation projects each year, since 2000.

## 6 Economic Development

### Commuting Patterns

Figure A6.1 illustrates where Bluffton residents work.

Place of Work	1990	2000
<b>Worked in state of residence:</b>	325	691
<b>Worked in county of residence</b>	319	683
<b>Worked outside county of residence</b>	6	8
Source: US Census 2000, 1990		

### Local Economy

According to 2004 Economic Census data the greatest number of commercial establishments in Bluffton was in the Construction and Retail industries. This is consistent with expectations for an area known for tourism that is also experiencing growth in residential and commercial development.

Industry Code	Industry Code Description	Total Establishments
23	Construction	217
44	Retail Trade	196
54	Professional, Scientific, & Technical Services	67
72	Accommodation & Food Services	54
56	Administrative & Support & Waste Management & Remediation Services	53
62	Health Care & Social Assistance	49
53	Real Estate & Rental & Leasing	44
81	Other Services (except Public Administration)	40
52	Finance & Insurance	33
42	Wholesale Trade	30
31	Manufacturing	20
71	Arts, Entertainment & Recreation	15
51	Information	10
48	Transportation & Warehousing	8
61	Educational services	5
55	Management of Companies & Enterprises	3
22	Utilities	2
99	Unclassified Establishments	2
11	Forestry, Fishing, Hunting, & Agriculture	1
<b>Total</b>		<b>849</b>
Source: U.S. Census Bureau		

Bluffton also analyzed its 2006 business license list in table A6.3. Although any organization conducting business in Bluffton is required to have a business license and therefore all licensed businesses are not within the Town limits, the table below provides an interesting overview of the range of organizations doing business in the Bluffton area. As with the 2004 Economic Census information, the greatest number of business licenses were issued to the Construction industry in 2006. Also similar to 2004 information, the second greatest number of business licenses were issued to Retail businesses. Third and fourth in number of business licenses were the Administrative and Support and Waste Management and Remediation Services industry and Professional, Scientific, and Technical Services industry respectively.

**Figure A6.3**

**Number of Bluffton Business Licenses by Industry, 2006**

Industry Code	Industry Code Description	Number of Bluffton Business Licenses
23	Construction	736
44-45	Retail Trade	131
56	Administrative & Support & Waste Management & Remediation Services	118
54	Professional, Scientific, & Technical Services	117
53	Real Estate and Rental & Leasing	103
81	Other Services (except Public Administration)	84
62	Health Care & Social Assistance	74
72	Accommodation & Food Services	47
52	Finance & Insurance	27
71	Arts, Entertainment, & Recreation	21
42	Wholesale Trade	17
51	Information	17
33	Primary Metal Manufacturing	15
48	Transportation & Warehousing	10
61	Educational Services	9
32	Wood Product Manufacturing	7
92	Public Administration	6
11	Agriculture, Forestry, Fishing & Hunting	2
49	Transportation & Warehousing	1
55	Management of Companies & Enterprises	1
<b>Total</b>		<b>1543</b>
Source: Town of Bluffton Business License Database		

**Figure A6.4**  
**Town of Bluffton Permitted Commercial Density, 2007**

Planning Area	Commercial Acres
<b>Old Town</b>	3 Acres
<b>Bluffton Village</b>	5 Acres
<b>Buck Island/ Simmonsville</b>	271 Acres
<b>Buckwalter</b>	628 Acres (125 Acres convertible)
<b>Jones Tract</b>	240 Acres (100 Acres convertible)
<b>Kent Estates</b>	3 Acres
<b>New Riverside</b>	190 Acres
<b>Palmetto Bluff</b>	180 Acres
<b>Shults Tract</b>	230 Acres
<b>Village at Verdier</b>	5 Acres
<b>Willow Run</b>	11 Acres
<b>Total</b>	<b>1766 Commercial Acres</b>

Source: Town of Bluffton

## Regional Economic Development Partners

In addition to increasing the potential for funding multi-jurisdictional projects, regional economic development programs can eliminate duplicated efforts and can result in better coordinated services. A description of programs that Bluffton should maintain on-going communication with is as follows:

**South Carolina Department of Commerce:** The Department of Commerce implements a number of state and federal programs for economic development. Technical assistance includes leadership programs, the South Carolina Economic Developer’s School, and workforce training programs. The department supports product development of industrial parks and speculative buildings, and community development through downtown development and rural infrastructure programs. The department also administers a variety of federal and state grants.

**Greater Beaufort–Hilton Head Economic Partnership:** The Partnership addresses Beaufort County’s economic development activities, supporting existing industries and assisting prospective Beaufort County businesses with their relocation and expansion efforts. The Partnership follows the Six-Point Pathway for economic development:

1. Foster a competitive business environment.
2. Promote a quality workforce.
3. Maintain and grow our vibrant communities.
4. Preserve and expand an effective infrastructure.
5. Sustain the environmental stewardship.
6. Encourage businesses that are contemplating relocating or expanding operations to consider Beaufort County, South Carolina.

The organization's underwriting partners include the Town of Bluffton, Beaufort County Council, local chambers of commerce, universities and colleges, hospitals, real estate, development and utility companies. The Partnership participates in BLuffton's Economic Development Committee and is a significant contributor to the efforts of the Talent Development, Marketing Plan, Prospect Strategy and State Connections task forces, particularly assisting Bluffton in establishing the Tech Park at Buckwalter Place.

**The Creative Coast Initiative:** The Creative Coast Initiative (TCCi) works to improve the quality of life in the Savannah area by building a diverse, innovative and higher-wage economic future that greatly increase opportunities for everyone. The organization works to foster a dynamic business climate for creative, knowledge-based jobs. The organization's focus area includes the Bluffton area, Hilton Head Island and Beaufort. TCCi works to raise the profile of the Lowcountry as a smart place to work, live and play, and to make the connections that bring knowledge-based jobs and workers to the region. Bluffton could benefit from a more formalized partnership with this organization.

**Beaufort Regional Chamber of Commerce:** The mission of the Beaufort Regional Chamber of Commerce is to lead the enhancement, expansion and diversification of the business community throughout the Beaufort region. The Chamber provides its 950 members with several services, including networking opportunities, training for small businesses, advocacy for local businesses with local, state and federal governing bodies, and tourism services. The Beaufort Regional Chamber of Commerce is the designated marketing organization for tourism to the City of Beaufort, the Town of Port Royal and the unincorporated areas of Beaufort County. The Chamber partners with a wide variety of non-profit organizations and businesses to market the hospitality industry and to attract visitors through Destination Beaufort,

Travel Guide and other publications. The Beaufort Regional Chamber is an ally of Bluffton's in business retention and tourism efforts.

**Hilton Head Island - Bluffton Chamber of Commerce:** An organization of over 1,750 members and 25 staff, held the honor of National Chamber of the Year in 2000 and 2006. The Chamber serves its members and the area through several divisions. Membership Development provides programs and services to members and continually works to increase membership. The Visitor & Convention Bureau cultivates convention business and tourism. The Workforce Development & Education division implements initiatives to prepare students and jobseekers for the workplace and assists members to recruit, retain and develop their workforce. Government Relations serves as a liaison between the business community and local, state and federal officials, working cooperatively to ensure a healthy business environment. Communications coordinates local and national public relations and oversees special events, and Finance & Administration manages the operations of the organization. The Chamber also staffs and organizes a number of committees to promote and coordinate the efforts of local businesses, such as the Bluffton Marketing Committee which focuses on the branding of Bluffton and cooperative marketing to increase tourism to the Bluffton area.

**Old Town Bluffton Merchants Society:** This groups mission to establish Old Town Bluffton as a destination for residents and tourists by highlighting its unique historical, cultural and shopping opportunities. The organization's area of focus spans north to south from the Bluffton Parkway to the May River and east to west from Burnt Church Road to Buck Island Road, although as Bluffton expands so does the focus area. The group partners with and leverages the resources of the Chamber of Commerce including direct marketing funding, cooperative marketing, town festivals and events. Members of the organization include restaurants, banks, realtors and churches as well as retail merchants. The group has created a shopping map that identifies the locations of shops, restaurants, as well as other members of the society. The group works in cooperation with the Heyward House as their Welcome Center, including the Heyward House in events and marketing materials.

**Bluffton Historical Preservation Society:** The mission of the Bluffton Historical Preservation Society (BHPS) is to protect, preserve, and promote the cultural heritage and history of St. Luke's Parish

(est.1767) through education, marketing, hands-on preservation of buildings and sites, maintenance of an historical archive, and operation of Heyward House Historic Center. Over the past two and a half decades, the Society's efforts have led to a whole host of achievements such as the creation of the Bluffton National Register Historic District and a recent passage of a historic preservation ordinance protecting the historic resources, character, and sense of place of Old Bluffton. The Society also marks important buildings throughout the District and presents the annual Calwell Award for excellence in individual preservation efforts in Bluffton. The Society will continue to serve the community by educating the residents and its' visitors about the historical and architectural legacy of Bluffton and working toward the preservation of its historic built environment. BHPS is a valuable partner of Bluffton's in promoting historical tourism.

**Educational Partners:** A significant factor for business development is local education and training opportunities. Bluffton is fortunate to be close to many educational institutions, some of which are listed below:

- University of South Carolina – Beaufort and New River (USCB)
- Technical College of the Lowcountry
- Savannah College of Art and Design
- Georgia Tech at Savannah
- Academy of Career Excellence

Bluffton should support local educational institutions, establish close ties with them and knowledge of their curricula, and create mutually beneficial partnerships. The presence of colleges and universities can create a creative and innovative culture in a town that should be encouraged. Satellite classrooms and internship opportunities could be created to encourage the integration of the colleges and universities and their students into the town. Bluffton should explore the potential relationships between the curricula of the schools with industries targeted for attraction to the area, such as Information Technology, Mariculture, Economic Development, Medical Imaging and other professional and technical programs.

**Others:** As the region grows and changes, Bluffton will need to expand its economic development network to include the City of Hardeeville's economic development staff, and other potential regional, state and federal partners.

## Government Functions

Bluffton follows the council-manager form of government. The powers of each are as follows. (Forms and Powers of Municipal Government, University of South Carolina, MASC, 2004).

**Mayor:** The Mayor presides over meetings (by tradition), calls special meetings, designates a temporary judge and acts and votes as a member of council. In this system, the mayor has no administrative powers and has no additional statutory authority beyond that of other council members.

**Council:** In the council-manager form of government, the council has all legislative and policy powers. It employs a manager, an attorney and a judge, elects the mayor pro tempore, establishes departments and functions, and adopts a balanced budget. The council also authorizes bond issues, investigates departments, adopts the official map, provides for an annual audit, exercises general police powers, appoints boards, appoints a temporary manager and may require surety bonds.

**Manager:** The Town Manager is the chief executive and head of the administrative branch. He or she appoints and removes employees and sets salaries. The manager also prepares and administers the annual budget, makes financial reports, advises council on departments and appointments, and designates a manager during temporary absence.

## Elections and Representation

Bluffton Town Council includes a mayor and four council members who serve staggering four-year terms. Town elections take place every two years and council members serve at-large, instead of a by ward representation. In an at-large election, all registered voters in the Town may vote for one candidate for each open seat.

In South Carolina, the terms of office (two or four years), type of election (partisan or non-partisan), times for filing and times for primaries, elections and runoff elections are set by ordinance. Elections are conducted by a three-member election commission appointed for six-year terms, or, with the consent of the county, a municipality may

transfer authority to conduct elections to the County Elections Commission. Bluffton has transferred this authority in 2006 and will also change to odd-year elections effective in 2009.

## United States Postal Service

The Bluffton branch of the United States Post Office (USPS), located in Bluffton Village, serves the residents of southern Beaufort County with the exception of Hilton Head Island and areas along SC 170. Within the service area, the office delivers mail to 19,027 households and 937 businesses. Of the 19,027 residential deliveries, 2,832 are delivered to neighborhood central pickup locations. The Bluffton Branch USPS also houses 2,205 post office boxes within its main office, with almost 99% currently rented.

## Information Technology

**Recurring 3-Year Plans:** A series of 3-Year IT Plans are needed to provide systematic replacement of obsolete equipment. In an effort to increase productivity by the reduction of the use of obsolete equipment a significant portion of Bluffton's technological equipment should be replaced within any three year period.

**Fiber-Optics:** As a result of a cooperative effort between Bluffton, its consultants and Beaufort County, the major Town facilities are connected via fiber-optic cable. Fiber-optic cable has increased the Town's capabilities to share and manage data. Accessibility to fiber-optic services should be a primary consideration in evaluating the viability of all future governmental locations.

**Data Storage:** Bluffton's data is backed-up nightly. This information is stored on digital tapes at offsite locations. To protect against possible loss by breach of security or natural disaster a second copy of the data should be transferred nightly to a second remote location. Additionally, Bluffton should look to partner with other cities in an effort to offer reciprocating service agreements activated by the occurrence of worst case scenario acts of terrorism or natural disasters.

**State Reporting:** State required procedures for digitizing and reporting records are currently beyond Bluffton's capabilities. Scanning equipment and additional server capabilities will be necessary in the short term to digitize, submit, access and safely store archival data.

**Accessibility:** Added productivity and communications should be developed by increasing the capabilities of Bluffton's network and Ethernet based services. Within the Town's network, staff files are stored on Bluffton's servers. This allows staff to access files from any computer in the network. Local files are automatically synchronized with Bluffton servers to provide automatic an instantaneous backup. Data is readily available and accessible from any workstation. Continuing advances in network services should continue to be explored. Bluffton's website should continue to develop as the Town's clearinghouse for information. Ecommerce and other interactive solutions should be actively pursued to engage and service the citizens of Bluffton.

**Security:** Security has become increasingly important. Bluffton should continue to include new security measures in every annual budget. IT Policy documentation should be revised on an annual basis to best reflect effective and safe, computer and phone usage. Specific security measures should be kept confidential as allowable by law.

**Automated Solutions:** In an effort to maintain an efficient municipal government, a number of automations will be required to stay current with best practice solutions for public safety, governmental finance, record keeping, and public information. Software and/or custom databases for financial control, inventory, licensing, permitting, computer forensics, Police Records Management (RMS), Computer Aided Dispatch, and Geographic Information Systems should be considered. Bluffton should pursue solutions which integrate in real-time and actively interface with the internet and other new handheld electronic services.

**Staff Training:** New technologies have the potential to revolutionize the way government functions. In the near future many cost-saving solutions will become available. It is important that Bluffton creates and maintains training programs designed to increase the efficiency of staff. At the same time, it is equally important to create a culture of computer-users where use of technology increases fellowship and accomplishment directly relates to personal and professional advancement.

**Strategic Visioning:** Bluffton should develop a strategic plan that includes specific and measurable goals to implement a collective vision

for Information Technology and Information Services. All elements of mission, vision values and charter should be considered.

## Utilities

**Water and Wastewater:** The Beaufort Jasper Water and Sewer Authority (BJWSA) provides water and sewer to the majority of Bluffton's residents, as well as water for fire protection for all residents of the Town. BJWSA has commissioned a Water and Wastewater Master Plan to develop a plan for meeting customer needs. The key points of the Master Plan are to:

- Optimize infrastructure investments in BJWSA's capital improvements program
- Enhance the efficiency of overall operations
- Establish additional criteria to guide developers who propose adding local infrastructure for conveying proposed demands and loads through BJWSA's distribution and collection systems.

The Master Plan divides the areas served by BJWSA into corridor allocation areas (CAAs) to facilitate planning. The CAAs that are within or partially within the Town are Palmetto Bluff, Cherry Point, Buckwalter, Bluffton Area and Route 278 West. Population projections in the CAAs are the basis for which future water demands and wastewater loads are estimated. Accurate projections are essential for a valid system-wide needs plan. The Town's assistance with providing demographic projections, permitted densities and local insight can aid this process.

Currently, BJWSA has a number of projects listed in the Water and Wastewater Master Plan (November 2005). The following are water distribution system projects planned for Bluffton:

1. 2005 Transmission Main Project in New Riverside/Palmetto Bluff (Palmetto Bluff)
2. 2015 Transmission Main Project along SC 46 (Palmetto Bluff, Buckwalter, Bluffton Area)
3. Proposed/Expanded EST- 2010 (Cherry Point)
4. Proposed ESTs 2015 (Cherry Point)
5. Proposed/Expanded EST 2010-2030 (Buckwalter)
6. Proposed ESTs 2020 (Route 278 West)
7. Proposed ESTs 2015 (Bluffton Area)

8. (2) Proposed/Expanded EST 2010

**Electricity:** Electricity is supplied to Bluffton by South Carolina Electric & Gas (SCE&G) and Palmetto Electric.

- **SCE&G:** SCE&G is the principal subsidiary of SCANA Corporation, a \$9 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 300,000 natural gas customers in a service area of more than 22,000 square miles in central and southern South Carolina.

The company also generates, transmits, distributes and sells electricity to approximately 620,000 retail and wholesale customers throughout South Carolina. SCE&G's major projects impacting Bluffton are proposed utility substations to increase reliability in the provision of electricity.

SCE&G and Bluffton need to continue coordination and communication to ensure long-range plans and goals are consistent. Problems can arise when development plans change from their original approval, so SCE&G should be consulted during review of proposed revisions.

SCE&G and Bluffton also need to coordinate for substation locations and design. There are approximately 4,200 customers on the main Bluffton circuit, while the standard is 1,500. Without additional substations to limit the amount of customers per circuit, many customers could potentially lose power with a problem in a single area.

- **Palmetto Electric Cooperative:** Palmetto Electric Cooperative is another provider of electricity in the Town of Bluffton. Palmetto Electric is one of South Carolina's customer-owned utilities.

## 8 Land Use

### Town Limits and Annexation

Figure A8.1 shows how, as a result of the annexations between 1997 and 2006, Bluffton has changed.

**Figure A8.1**

**Town of Bluffton Annexations and Area 1997-2006**

Year	Annexation	Annexation Acreage	Total Year Annexation Acreage	Cumulative Town Acreage	Cumulative Square Miles
1997	"One Square Mile"	640.00	640.00	640.00	1.00
1998	Palmetto Bluff	20,660.00	21,330.00	21,970.00	34.33
	Shultz Tract	620.00			
	McCracken Property	25.00			
	Folan/Burr	25.00			
1999	Hodge Property	0.72	135.96	22,105.96	34.54
	Hidden Lakes PUD	111.69			
	Clark Quality Construction	1.35			
	Sauls Funeral Home	22.20			
2000	Buckwalter Tract	5,688.00	10,109.08	32,215.04	50.34
	Jones Estate	4,402.00			
	Bluffton Village	3.92			
	Vaux Property	0.84			
	SCE&G Property	14.32			
2001	Maye River Baptist	17.45	283.29	32,498.33	50.78
	Beaufort County School	95.84			
	Shults Tract / Goethe Road	170.00			
2002	Robertson	11.72	181.21	32,679.54	51.06
	Village of Verdier	125.51			
	Lot 26 / Able Street	0.50			
	Johnson Tract East	19.00			
	Johnson Tract West	24.48			
2003	Willow Run PUD	162.64	254.50	32,934.04	51.46
	Ulmer Property	10.03			
	Wellstone	22.98			
	Graves Tract	58.85			
2004	Brown Property	14.00	145.82	33,079.86	51.69
	St. Matthew's Baptist Church	1.02			
	Kent Estates	130.80			
2005	Oakley Property	0.89	1,202.80	34,282.66	53.57
	Buck Island / Simmonsville	1,142.00			
	Rose Dhu	59.91			
2006	Callison Lane	13.97	18.33	34,300.99	53.60
	Jacoby	2.69			
	Giddy-Up	1.67			
			<b>Total</b>	<b>34,300.99</b>	<b>53.60</b>

Source: Town of Bluffton

Within the BIS annexation, there is a mix of General Residential, Light Industrial, Village Commercial, Regional Commercial and Planned Unit Development. Other traditionally zoned parcels are north of the Old Town where the classifications are predominantly General Residential, Single-Family Residential and a small section of Light Industrial. Spaced throughout the remainder of the Town are small areas of Community Preservation, General Residential, Office Commercial and Village Commercial.

There are several Planned Unit Developments within Bluffton as approximately ninety (90%) is within PUD zoning classification. Several large annexations have significantly increased the sized of the town and have been zoned PUD. Major PUD Concept Plans have been produced for Shults Tract, Hidden Lakes, Buckwalter, Willow Run, Village at Verdier, Kent Estates, Jones Estate, New Riverside and Palmetto Bluff.

## Zoning and Regulation

**Current Zoning:** Bluffton currently has sixteen zoning districts (including a Form-Base Code) and three overlay districts and includes standards and permitted uses for each district. A list of the districts is listed below:

1. Single-Family Residential (SF)
2. General Residential (GR)
3. Agricultural (AG)
4. Mixed Use (MU)
5. Light Industrial (LID)
6. Planned Unit Development (PUD)
7. Conservation Preservation District (CPD)
8. Village Commercial District (VCD)
9. Regional Commercial District (RCD)
10. Office Commercial District (OCD)
11. Transitional District (TR)
- 12-16. Form-Based Code Transect Zones

Overlay districts include:

1. Highway Corridor Overlay District (HCOD)
2. Historic Preservation Overlay District (HPOD)
3. River Protection Overlay District (RPD)

**Zoning Ordinance Review and Revision:** The State of South Carolina adopted the Local Government Comprehensive Planning Enabling Act in 1994. This Act not only describes and requires comprehensive planning for jurisdictions with land use regulations, it also specifies the “functions, powers, and duties” of planning commissions, boards of appeal, and boards of architectural review. It also prescribes some aspects of zoning ordinances, specifically instituting the use of special exceptions rather than conditional uses. Zoning Ordinances are required to conform to the 1994 Act. The Zoning Ordinance was revised in October of 2005, and should be revised on a set schedule to ensure regulations are consistent present conditions.

Zoning can be considered as the Town’s tool by which it implements its vision of land use within the Town’s boundaries. Land use does not always completely conform to this vision or to zoning. Some land uses are in existence at the time of the Town’s zoning is developed and approved. These “grandfathered” uses are allowed to continue with restrictions on future growth and replacement. Sometimes an existing zoning district has become inappropriate due to changes in the Town, which is usually apparent by numerous requests for rezoning in a specific area. At other times, a zoning ordinance may need to be reviewed to keep up with changing lifestyles and regional development trends. Or, as in Bluffton’s case, a new planning enabling act developed by the State which requires changes to the ordinance so that the Town will be in compliance with the new regulations.

## 9 Transportation

### Jurisdiction over Roads

The categorizing of the Old Town roads results from extensive interviews with the South Carolina Department of Transportation (SCDOT), as well as Beaufort County Administration, Engineering and GIS departments. Categorization also resulted from close examination of maps of the Town of Bluffton at various points, starting with the official survey map of 1913. Map (9.2) shows road responsibility and unclassified roads. Because of the high amount of unclassified roads in the Old Town, it is the focus of the map. The following roads make up Bluffton’s transportation network.

**State Highways:** There are a number of State highways within Bluffton. SCDOT acknowledges the streets listed in Figure A9.1 as a part of its system.

1	Able St	18	Hilderbrand
2	Allen St	19	Jason St
3	Alljoy Rd	20	Lawrence St
4	Bluffton Rd	21	Lawton St
5	Boundary St	22	May River Rd
6	Bridge St	23	Okatie Hwy
7	Bruin Rd	24	Palmetto Bluff Rd
8	Buck Island Rd	25	Pin Oak St
9	Burnt Church Rd	26	Pritchard Farms Rd
10	Cecil Reynolds Dr	27	Pritchard St
11	Church St	28	Red Cedar St
12	Confederate Ave	29	Shults Rd
13	Dr Mellichamp Dr	30	Simmons ville Rd
14	Drayson Cir	31	Thomas Heyward St
15	Fording Island Rd	32	Ulmer Rd
16	Gibbet Rd	33	Water St
17	Goethe Rd	34	Whispering Pine St

Source: SCDOT

**Beaufort County Roads:** The County acknowledges maintenance of the following road segments:

1	Ballfield Rd	15	Lake View Ct
2	Baylor Dr	16	Laurel Ct
3	Bluffton Pky	17	Old Miller Rd
4	Brendan Ln	18	Palmetto Bluff Rd
5	Buckeye St	19	Phoenix Rd
6	Buckwalter Pky	20	Pritchard St
7	Bush Ln	21	Quinn Ct
8	Davis Rd	22	Sassfras St
9	Fifth Ave	23	Stock Farm Rd
10	Fourth Ave	24	Taylor Ct
11	Goethe Rd	25	Third Ave
12	Grande Oaks Dr	26	Tower Rd
13	He Mccracken Cir	27	Windrush Ln
14	Kitty Rd	28	Hilderbrand
Source: Beaufort County			

One area of inconsistency is the segment of Goethe Road between Dr. Mellichamp Drive (S-586) and Hilderbrand (S-40). The County claims Goethe from May River Road north to Dr. Mellichamp while the State claims Goethe from Bluffton Road south to Hilderbrand. This small segment will need to be claimed by one of the entities.

While Beaufort County maintains its own roads, it does in fact perform maintenance on other roads within the Old Town through a “rocking program.” Counties in South Carolina have traditionally performed limited maintenance of roads (gravel, scraping, ditch maintenance, etc.) that are not accepted as part of the county system. A number of Old Town roads have received service under this program. The number of roads still receiving this type of county maintenance must be determined through additional communication with county officials.

**Town Streets:** Bluffton acknowledges that it is responsible for the maintenance of Calhoun Street. The Town claimed Calhoun Street during the lighting and sidewalk improvement projects which took place in 2002.

**Private Roads:** Many of the new Planned Unit Developments in the Bluffton have privately built and maintained roads. While these roads

can be publicly accessed, maintenance is not the responsibility of the State, County or Town.

**Orphan Streets:** Orphan streets are existing unclassified streets that are in use by motorists, cyclists and pedestrians, but have not been claimed by SCDOT, Beaufort County or the Town. The Town is to decide what is to be done, from seeking county acceptance of the road or accepting it as a Town street. Orphan streets within the Old Town are the following:

<b>Figure A9.3</b>		
<b>"Orphan Roads" in the Old Town Area</b>		
	<b>Name</b>	<b>Segment (if applicable)</b>
1	Stone Street	Entire Street
2	Guerrard Avenue	Entire Street
3	Wharf Street	Entire Street
4	Robertson Street	Entire Street
5	Colcock Street	Entire Street
6	Dubois Lane	Entire Street
7	Pope Lane	Entire Street
8	Allen Street	West of Calhoun
9	Water Street	West of Calhoun, East of S-66
10	Green Street	Entire Street
11	Hickory Trace	Entire Street
12	Lawton	East of S-66
13	Maiden Lane	Entire Street
14	Bridge Street	West of S-31
15	Red Cedar Street	North of S-754
16	Whispering Pine Street	North of S-754
17	Pin Oak Street	North of S-754
Source: Town of Bluffton		

**Ghost Streets:** Ghost streets within the Old Town also warrant Town action. Ghost streets are shown on various maps and surveys of the Old Town, but no longer appear on the ground as public ways. These streets are not in use. Bluffton acknowledges these streets, but will not abandon them unless petitioned. Further identification and research should be carried out on ghost streets. The following are considered ghost streets.

	Name	Segment (if applicable)
1	Robertson Street	West end
2	Colcock Street	North end
3	Jason Street	East end
4	Maiden Lane	South of turn
5	Able Street	West end

Source: Town of Bluffton

## Road Classification

Figure A9.5 presents road network information, including functional class, number of lanes and medians.

Road Name	Limits	Functional Class	Lanes	Median
SC 46- May River Road	County Line to SC 170	Principal Arterial	2	no
SC 46- May River Road	SC 170 to Bruin Road	Minor Arterial	2	no
S-120- Bruin Road	Burnt Church to SC 46	Major Collector	2	no
SC 46- Bluffton Road	Calhoun St. to US 278	Minor Arterial	2/4	no
SC 170- Okatie Highway	SC 46 to US 278	Principal Arterial	2	no
US 278- Fording Island Rd.	County Line to Simmons ville	Principal Arterial	4	yes
US 278- Fording Island Rd.	Simmons ville to Moss Creek	Principal Arterial	6	yes
S-29- Buck Island Road	US 278 to SC 46	Major Collector	2	no
S-474- Simmons ville Road	US 278 to Buck Island Rd.	Major Collector	2	no
S-163- Burnt Church Road	Alljoy Rd. to Burnt Church Rd.	Major Collector	2	no
Buckwalter Parkway	SC 46 to US 278	Major Collector	2	no
Bluffton Parkway	SC 170 to Burnt Church	Minor Arterial	4	yes
S-34- Gibbet Road	SC 170 to SC 46	Minor Collector	2	no
Old Miller Road	SC 46 to Grande Oaks	Minor Collector	2	no

Source: Town of Bluffton

## Existing and Projected Traffic Volumes

A list of planned and programmed construction projects at the time this plan was prepared is include don Figure A9.6 on the following page.

Figure A9.6

**Needed Road Capital Improvements And Cost To Address Future Demand, 2006-2025**

Recommended Projects	Description	Costs	Added Lane Miles	Added Lane Capacity	Added Vehicle Miles Capacity
<b>US 278 Capacity and Safety Improvements</b>					
Buck Island Rd. to McGarveys Corner	Widening to 6 lanes with median	\$22,500,000	8.26	9,000	74,340
US 278/SC 170 interchange	Interchange Re-configuration	\$10,000,000	1.46	5,000	7,300
McGarveys Corner to Jasper Co. line	Widening to 6 lanes with median	\$15,000,000	4.37	9,000	39,330
<b>Subtotal</b>		<b>\$47,500,000</b>	<b>14.09</b>		<b>120,970</b>
<b>US 278 Frontage Road and Parcel Interconnectivity</b>					
Meggett Tract Commercial to Buckwalter Parkway	Frontage Road, South Side	\$900,000	0.42	5,450	2,289
Berkeley Hall to Bluffton Fire District Station	Frontage Road, North Side	\$1,600,000	0.91	5,450	4,960
Graves Road Re-alignment	Re-alignment of intersection with Hampton Parkway	\$1,000,000	0.58	5,450	3,161
Rose Hill to Buck Island Road	Parcel interconnectivity, South Side	\$1,100,000	0.46	5,450	2,507
<b>Subtotal</b>		<b>\$4,600,000</b>	<b>2.37</b>		<b>12,917</b>
<b>Other Arterial Road Network Capacity Improvements</b>					
SC 170- McGarveys Corner to Tide Watch Dr.	Widening to 6 lanes with median	\$6,000,000	1.76	9,000	15,840
SC 170- Tide Watch Dr. to SC 462	Widening to 6 lanes with median	\$5,000,000	4.37	9,000	39,330
SC 170- SC 46 to McGarveys Corner	Widening to 4 lanes with median	\$20,000,000	8.83	12,250	108,168
SC 46/SC 170 to Jasper County	Widening to 4 lanes with median	\$10,000,000	4.17	12,250	51,083
SC 46- Bluffton Village to US 278	Widening to 4 lanes with median	\$6,000,000	2.08	8,010	14,581
Bluffton Parkway- Simmonsville Road to SC 170	New Construction, 4-lanes with median	\$17,380,000	22.73	8,000	181,840
Bluffton Parkway Ext.- Burnt Church Road to Mackays Creek & Buckwalter to Buck Island	New Construction, 4-lanes with median	\$60,000,000	19.77	8,000	158,160
<b>Subtotal</b>		<b>\$124,380,000</b>	<b>63.71</b>		<b>569,002</b>
<b>Collector Road network Capacity Improvements</b>					
Bruin Rd. Ext. Burnt Church Rd. to Buckingham Plantation	New Construction, 2-lane Connector	\$15,000,000	5.49	5,450	29,921
Buckwalter Parkway, US 278 to Bluffton Pkwy	Widening to 4 lanes with median	\$5,700,000	3.26	8,050	26,243
Buckwalter Parkway, Bluffton Parkway to SC 46	Widening to 4 lanes with median	\$7,600,000	3.3	8,050	26,565
Simmonsville Road- US 278 to Bluffton Parkway	Widening to 5 lanes	\$8,000,000	1.59	8,500	13,515
Foreman Hill Road Extension	New Construction, 2 lane connector	\$2,800,000	1.97	1,500	2,955
Burnt Church Road- Bluffton Pkwy to Bruin Road	Widening to 4 lanes with median	\$5,000,000	1.67	8,500	14,195
Old Miller Road Extension	New Construction, 2 lane connector	\$1,000,000	1.17	5,450	6,377
Buck Island Road- US 278 to Bluffton Pkwy	Widening to 5 lanes	\$8,000,000	2.08	8,500	17,680
<b>Subtotal</b>		<b>\$53,100,000</b>	<b>20.53</b>		<b>137,451</b>
<b>Total Cost to address Needs, 2006-2025</b>		<b>\$176,480,000</b>	<b>80.17</b>		<b>702,889</b>

Source: Beaufort County Roads Impact Fee Update Support Study: South Beaufort County Service Area

