



# Town of Kiawah Island

## 2015 Comprehensive Plan

Adopted: \_\_\_\_\_

# FOREWORD

The *Town of Kiawah Island Comprehensive Plan* was initially adopted by the Town Council in 1994. Among other things, SC State Law § 6-29-510 requires that Planning Commissions review the Comprehensive Plan or elements no less than once every five years to determine whether changes in the amount, kind, or direction of development of the area or other reasons make it desirable to make additions or amendments to the plan. The *Town of Kiawah Island Comprehensive Plan* was last updated in 2010. This 2015 document incorporates the results of the Town of Kiawah Island Planning Commission's review of the comprehensive plan and satisfies SC State Law § 6-29-510 requirements.



[www.kiawahisland.org](http://www.kiawahisland.org)

The Planning Commission completed this 2015 review with input from the public and support and guidance from the professional staff of the Town of Kiawah Island and the Charleston County Planning Department. The Comprehensive Plan seeks to accomplish the Town's Vision - "The Town of Kiawah Island is a residential community incorporating a world-class resort and a unique, vibrant shopping village within a natural maritime setting that is being preserved and enhanced for current and future generations." - by articulating goals to guide future Town Council actions regarding the pattern and intensity of land use, the provision of public facilities and services, economic development, housing availability, and natural and cultural resources. In this plan, it is important to keep in mind that the Town of Kiawah Island is unique: most of the Town is within a private, gated community. Although zoning and development are governed by Town ordinances, the infrastructure inside the gate is owned and maintained by the Kiawah Island Community Association (KICA) and other private organizations. Among other changes, this 2015 review recognizes the following important 2010-2015 accomplishments, all of which were accomplished by the Town alone.

- Restoration of the east end of Kiawah Island's beach. This 2015 project invested \$538,000 to move 100,000 cubic yards of sand from onshore locations to successfully stop intensive erosion of the beach.
- In 2014, The Town acquired 27.7 acres of property, along the Betsy Kerrison Parkway at a cost of \$2 million. This property was then annexed into the corporate limits of the Town for the purpose of constructing a new Municipal Center.
- In 2014, the Town of Kiawah Island worked with McSweeney Engineers and Three Oaks Contractors to complete the asphalt pedestrian path into Beachwalker County Park. The path entrance provides beach access and reduces street parking. This project was funded from the County Transportation Tax Fund totaling \$60,000.

- Increased cultural activities available to the Town's residents and visitors coordinated through the Town Arts Council and other public and private organizations.
- In 2013, the Town of Kiawah Island annexed the Freshfields Village.
- Establishment of a regular solid waste recycling program in 2008 and its growth to over 250 tons recycled annually. In 2010 the Town was named as the winner of DHEC's Recycle Guys Distinguished Municipal Recycling Program.
- Increased emphasis on transportation, housing affordability, and priority investment and increased specificity related to goal accomplishment, such as time frames for actions and persons or organizations responsible for taking such actions, required by the 2007 South Carolina Priority Investment Act.



## History of Kiawah Island

Native Indians, reformed pirates, wealthy plantation owners, enterprising lumbermen, Kuwaiti investors: these are some of the predecessors to current-day Kiawah Islanders.

### Early History: Before 1717

Kiawah Island was named for the Kiawah Indians, who inhabited the island before the 1670 arrival of the English in South Carolina. Although generally settled near the Ashley River, the Kiawah Indians lived and traveled widely in the local area. They fished, hunted, and gathered food, herbs, and other materials for clothing, shelter, weapons, and tools from the marsh, island, river, and mainland environments. Communication and trade of their locally produced surplus were facilitated with other local tribes through tobacco sharing rituals. When the English arrived in 1670, Cassique, chieftain of the Kiawah Indians, led the colonists to settle at Charlestowne Landing, near the Indian settlement so that trading could easily occur. Today, this location is protected by South Carolina as a State Historic Site. In 1675, the Kiawah Indians ceded Kiawah Island to the English Lord's Proprietor, Anthony Ashley Cooper, Earl of Shaftsbury. The early settlers regarded the Kiawah Indians as friends; however, continued European occupation brought disease and warfare which dramatically reduced the Indian population. By 1685, the tribe had moved to Kiawah Island, before leaving in the 1690s.



The Lord's Proprietor granted the land, described as a 2,700 acre plantation, to Captain George Raynor in 1699. Raynor was a mariner, merchant, and assemblyman, who sailed out of Port Royal, Jamaica, a notorious Caribbean pirate town. Some suggest that Raynor was a reformed pirate who had been associated with Captain Kidd and had sought a quieter life as a planter and more legitimate businessman. In 1701, Raynor sold half of Kiawah Island to Captain William Davis, a fellow assemblyman and Johns Island landowner.

### The Plantation Era - Stanyarne, Gibbes, and Vanderhorst: 1717-1950

In 1717, John Stanyarne, a wealthy planter who lived on Johns Island, bought the half of Kiawah Island that had been owned by Captain Raynor and, in 1737, bought the remaining half that had been owned by Captain Davis. Stanyarne used his Kiawah plantation for cattle ranching and indigo production. In 1767, he built an overseer's house near the current location of Old Dock Road; 150 acres had been cleared for the indigo crops. Stanyarne died in 1772, leaving the western half of the island to his granddaughter, Mary Gibbes, and the eastern half to his other granddaughter, Elizabeth Vanderhorst. This division of Kiawah Island into two plantations would last until the early twentieth century.



## *Background - I*

Mary Gibbes married Thomas Middleton in 1774. She died in childbirth the following year, leaving the western half of the island to their daughter, Mary Gibbes Middleton. Elizabeth Vanderhorst and her husband, Arnoldus Vanderhorst II, built a home on the eastern half of Kiawah Island in 1775, most likely very near the present Vanderhorst house. Arnoldus Vanderhorst II was a general in the South Carolina militia serving under Francis Marion during the Revolutionary War and was Governor of South Carolina from 1794 to 1796. The British burned their home in 1781.

In 1797, Mary Gibbes Middleton married James Shoolbred, the British Consul for South and North America. They built an elaborate home along the Kiawah River in the Rhett's Bluff area. The Vanderhorsts began construction of a new home in 1801, the existing Vanderhorst house. Sea Island cotton was the major crop of the plantations and over 100 slaves tended and processed the crop. In 1808, Mary Middleton Shoolbred died, leaving the estate to her husband James, who died in 1848, leaving the western half of Kiawah to his children. Arnoldus Vanderhorst II died in 1815, leaving the eastern half of Kiawah to his brother, Elias Vanderhorst. During this time, the Shoolbred and Vanderhorst plantations continued to plant Sea Island cotton and suffered the vagaries of the weather and the boom-or-bust cycles of the cotton market.

During the war period in the mid-1860s, slaves were removed from Kiawah Island and Elias Vanderhorst's son, Arnoldus Vanderhorst IV, joined the Confederate service, seeing combat under General William Whiting. In 1863, he returned to Charleston to wed Adele Allison, a member of another large planter family. At various times during the war, both Confederate and Federal troops bivouacked on Kiawah Island. In 1862, Confederate troops occupied and ultimately destroyed the Shoolbred plantation and, in 1864, Federal troops nearly demolished the Vanderhorst plantation. After the war, the Vanderhorsts took loyalty oaths in order to have their lands restored and began to re-build their plantation to produce cotton with freed slave laborers. The cotton market continued to decline during the latter half of the 1800s. While managing their plantation for lessened demand, the Vanderhorst family also used their plantation for recreational pursuits including swimming, fishing, and hunting.





In 1874, Elias Vanderhorst died, leaving his plantation to Arnoldus Vanderhorst IV. He died seven years later, in 1881, as a result of an accident during a hunting expedition on the island. His wife, Adele Vanderhorst, and his mulatto son, Quash Stevens, then managed the plantation. In 1900, Adele Vanderhorst purchased the western half of the island from the Gibbes family, uniting Kiawah under a single owner for the first time since John Stanyarne's death in 1772. Arnoldus Vanderhorst V began to rent the Vanderhorst home as a lodge for hunters and, in 1911, daily passenger and freight service by boat from Charleston began. Adele Vanderhorst died in 1915 and left her estate, including Kiawah Island, to her six children. The heirs argued about how best to settle the estate for over 30 years. The plantation continued to produce Sea Island cotton and palm trees, and beginning in the 1920s, fruits and vegetables, and in the 1930s cattle.

In 1943, Arnoldus Vanderhorst V died and Charlie Scott, the last African American tenant farm worker on the island, was paid to serve as caretaker for the estate. The remaining heirs petitioned the Probate Court for instructions on how to settle Adele Vanderhorst's estate and in 1947 Judge William Grimball decreed that Kiawah Island would be sold.

#### **Early Development: 1950-1974**

In 1950, the island was sold to C. C. Royal, a lumberman from Augusta, Georgia, for \$125,000. While logging the island's pine trees, Royal took steps to modernize the island. In 1952, a causeway and bridge were built to connect the island to the mainland and provide access by car and truck. Electric lines were also brought onto Kiawah Island. In 1954, Royal began development of a small oceanfront community along Eugenia Avenue, named for his wife. Royal died in 1964 – 18 vacation homes were on the island - and in 1974, his heirs sold the island to the Kuwaiti Investment Company for \$17,385,000.

Great thanks and acknowledgements to Ashton Cobb's 2007 book, *Kiawah Island: A History*.

#### **Kiawah Island Developed as a Residential Resort Community: 1974-2013**

The Kuwaiti Investment Company undertook to develop Kiawah Island as a world-class resort and began efforts to plan, build, and manage the resort. In 1976, the Kiawah Island Resort opened, with the Kiawah Island Inn – including two swimming pools, two restaurants and a bar – and the Marsh Point (subsequently renamed Cougar Point) golf course designed by Gary Player. The Kiawah Island Company began to sell real estate. Also in 1976, the Kiawah Island Company and Charleston County opened Beachwalker Park, a public beach on the western end of the Island. In 1988, Kiawah Resort Associates (predecessor to Kiawah Development Partners) acquired the Kiawah Island Resort's golf courses, tennis facilities, town center, utility, and remaining land for development. In 1988, the Town of Kiawah Island was incorporated. Kiawah Resort Associates sold the resort assets to Landmark Land Company in 1989. Landmark Land Company filed for bankruptcy in 1991 and the Virginia Investment Trust purchased several resort assets in 1993 and the



Ocean Course in 1995. In 2004, a top-ranked luxury beach hotel with 255 rooms, The Sanctuary at Kiawah Island, opened. Resort and residential development continues to be sensitive to the island's natural setting and environment, earning the 1981 Izaak Walton League National Conservation Award for efforts to help protect the Atlantic Loggerhead Sea Turtle. In 1996 the Urban Land Institute Award was earned for Excellence in Large Scale Residential Development.

Golf remains a major theme in the recent development of the island. In 1981, the Turtle Point golf course designed by Jack Nicklaus opened, followed by the Tom Fazio-designed Osprey Point golf course which opened in 1988. The Pete Dye-designed Ocean Course opened in 1991 and immediately played host to the 1991 Ryder Cup where the United States team won the Cup for the first time in 10 years at the "War by the Shore." The private Kiawah Island Club developed two courses: the River Course designed by Tom Fazio opened in 1995 and the off-island Cassique course designed by Tom Watson opened in 2000. In addition to the 1991 Ryder Cup, the Island's courses have hosted numerous important golf tournaments through the years; some of these include: 1997 World Cup of Golf, 2001 UBS Cup, 2003 World Golf Championship – World Cup, 2003 Palmer Cup, 2004 UBS Cup, 2005 PGA Club Professional Championship, 2007 PGA Senior Championship, 2009 USGA Mid-Amateur Championship, and the 2012 PGA Championship. The PGA Championship is scheduled to return to the Ocean Course in 2021.

Since 1994, land use on the island has been subject to development agreements. Two have been signed with the Island's chief developer, Kiawah Resort Associates, in 1994 and 2005, and three with the Kiawah Island Golf Resort, in 2001, 2010, and 2013. These agreements specified development of selected parcels of land consistent with the Town's Comprehensive Plan and Land Development Regulations. In 2013, Buddy Darby of Kiawah Partners announced the sale of Kiawah Partners to South Street Partners of Charlotte, North Carolina. Included in this sale are the development companies, as well as Kiawah Island Real Estate, Kiawah Island Utility, The Kiawah Island Club, Freshfields Village, the Lodge at Doonbeg in Ireland, and Christophe Harbour in St. Kitts.

#### **Kiawah Development Partners (KDP): 2013-Present**

The Kiawah Development Partners have said "they are on pace with where they would like to be in the development of Kiawah Island." With regards to the land at Freshfields owned by KDP, they have voiced their plan to develop the land between BB&T and the real estate office and plan to develop more shops along the road that faces the lagoon and the area that sits behind La Tela restaurant. KDP still owns over 400 lots with sales averaging around 35 lots per year. Barring any major economic changes, it would take 12 years to sell those lots. 40 lots have sold at Ocean Park as of July 1<sup>st</sup>. KDP also announced their plans to go ahead with the roads and infrastructure improvements for Phase VIII in Ocean Park. The Marsh House and pool being built at Ocean Park is expected to open in the summer of 2016. Development of Cape Charles continues to be on track for 50 home sites. Once all lots owned by KDP are sold, KDP has multiple options



going forward which could include continued operations of Kiawah Island Club and Kiawah Real Estate or they could sell the club with the members having first right of offer. KIRE could also be sold if the right opportunity existed. KDP owns 18 acres next to Freshfields. No definitive decisions have been made for use of the 18 acres. Finally, Kiawah Development Partners owns the water and sewer company on Kiawah Island and would expect to sell it sometime during the next ten years.

### **Town of Kiawah Island Vision**

***THE TOWN OF KIAWAH ISLAND IS A RESIDENTIAL COMMUNITY INCORPORATING A WORLD-CLASS RESORT AND A UNIQUE, VIBRANT SHOPPING VILLAGE WITHIN A NATURAL MARITIME SETTING THAT IS BEING PRESERVED AND ENHANCED FOR CURRENT AND FUTURE GENERATIONS.***

The Planning Commission completed this 2015 review with input from the public and support and guidance from the professional staff of the Town of Kiawah Island and the Charleston County Planning Department. Accordingly, the Comprehensive Plan seeks to accomplish the Town's Vision by articulating goals to guide future Town Council actions regarding the pattern and intensity of land use, the provision of public facilities and services, economic development, housing availability, and natural and cultural resources.

The Town's goal is to provide its citizens and guests a safe and beautiful ocean-side environment in which to enjoy their lives and individual pursuits. It seeks to balance the development of high quality residential, commercial and resort properties in an environmentally compatible setting. The careful use of our precious land, forests, marshes and beaches is paramount to preserving the natural beauty characteristic of this low country community.

The Town believes that residences on the Island should work in harmony with their environment and be built to withstand the harsh forces of nature that can occasionally strike coastal communities. Yards, parks and beaches should remain relatively natural in composition and yet be well maintained. Buildings that are commercial in use should be attractively clustered and appealing to shoppers both inside and out.



## **PROFILE OF THE GOVERNMENT**

The Town of Kiawah Island, South Carolina, was incorporated by the State of South Carolina on September 13, 1988. The Town of Kiawah Island operates as a Mayor-Council form of government. The Town Council is composed of a Mayor and four Council Members. Terms for Mayor and Council Members are two years. The current term (2014-2016) is the fifteenth full administration.

The at-large elections are non-partisan and held in December. As of June 2014, there were 1,626 registered voters. These elected officials are volunteers who receive no compensation or salary. The Mayor and four Council Members comprise the legislative branch of the Town. It is their duty to set overall policy in matters concerning the operation of the Town's affairs.

The Mayor is further charged with the executive functions of Town management. He is responsible for coordinating and carrying out policies established by the Town Council and for seeing that duties of all Town employees are performed efficiently and effectively. The Town Administrator provides support and advice to the Mayor on these matters. Since incorporation, the Town has grown from one full-time position to 11 full-time positions.

The Town of Kiawah Island is unique among other South Carolina municipalities in that a private, non-profit organization, the Kiawah Island Community Association (KICA), provides many services that are typically performed by governments. Examples include most road and drainage maintenance, security, and recreation. The Town provides several services to its citizens including, but not limited to:

- Public Safety: island-wide law enforcement through contract with Charleston County Sheriff's office and code enforcement;
- Street and Drainage Maintenance: Beachwalker Drive and Kiawah Island Parkway from the roundabout at Betsy Kerrison Parkway to the front gate;
- Solid Waste Disposal: garbage, recycling, yard debris, brown trash and household hazardous waste collection and disposal for all residential properties;
- Planning and Zoning Administration: through agreement with Charleston County Planning;

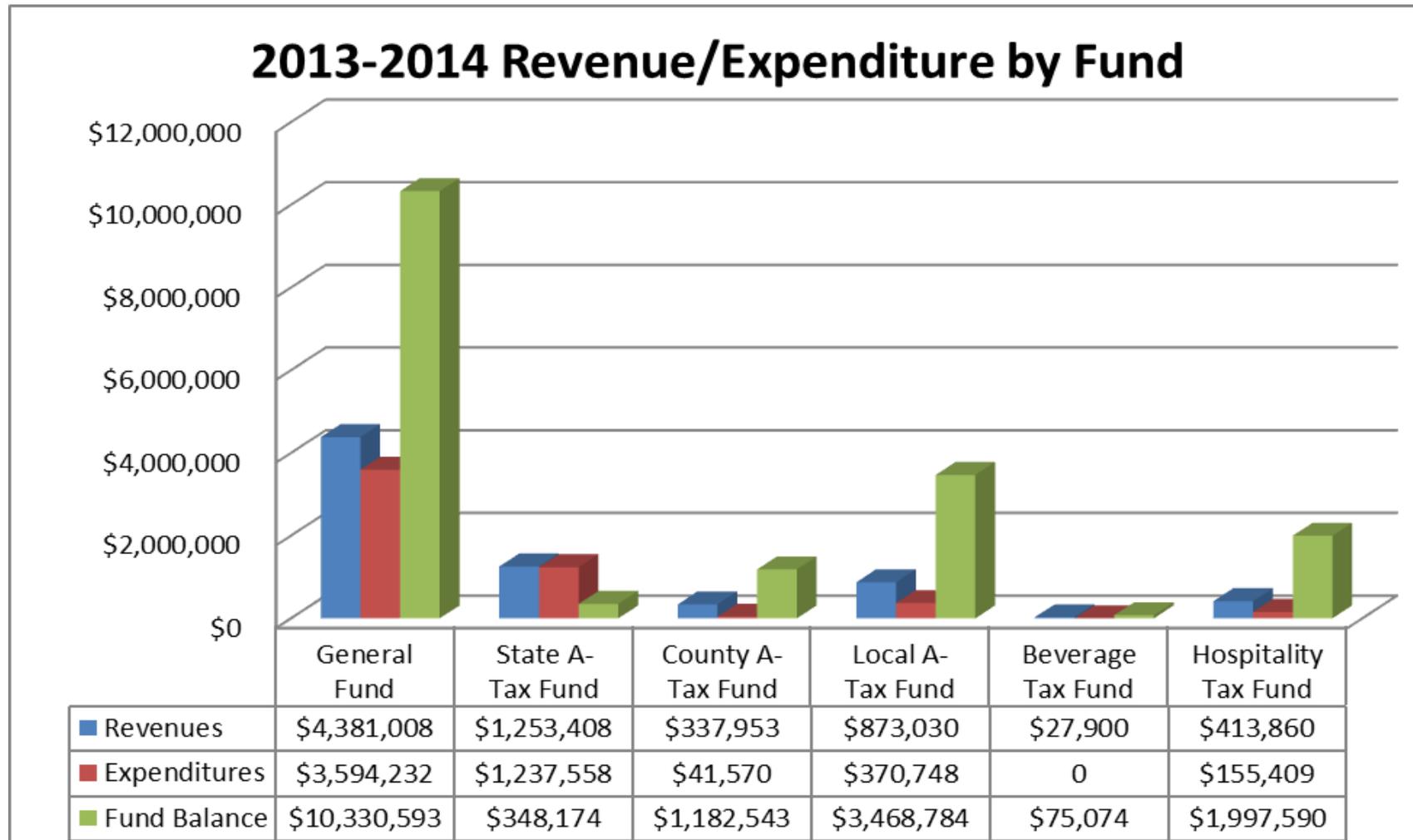


- Criminal Court Administration: As part of the unified judicial system in South Carolina, it hears and determines offenses of a civil nature which may be subject to a fine not exceeding \$500 or imprisonment not exceeding 30 days as well as cases arising under the ordinances of the municipality;
- Beach Maintenance and Safety: Beach patrol and solid waste collection; beach monitoring; repair and nourishment.
- Communications: Town website, E-Blasts, and quarterly newsletter (*Town Notes*);
- Wildlife Studies: Monitors, manages, and researches the Island's native wildlife species, and habitats while educating the general Island public in these areas.

The annual budget serves as the foundation for the Town of Kiawah Island's financial planning and control. All departments within the Town submit budget requests to the Town Administrator. The Treasurer then prepares a first draft and presents it for review to the Town's Ways and Means Committee. This committee is comprised of the Mayor and four Council Members. Any necessary revisions are made and a final draft is submitted to the Town Council for review and approval. A second reading is then held to approve the budget prior to the June 30 adoption deadline. A public hearing is held to receive citizen input prior to final adoption.



The Town operates on a general fund budget and has \$14 million in cash reserves. Revenues, expenditures and fund balances at the end of the year are shown below for the 2014 fiscal year.



Source: Town of Kiawah Island: Comprehensive Annual Financial Report, 2014



## **Committees**

The Town relies heavily on committees to conduct functions normally performed by departments of a Town government. The Town has committees as required by statute and also special committees to review and recommend policies, activities, and ordinances. These committees include the following:

### **The Arts and Cultural Events Council**

The Arts and Cultural Events Council for the Town of Kiawah Island shall work to enhance community, visitor and tourist appreciation and involvement in the visual and performing arts within the Town of Kiawah Island and its environs by providing a diversity of planned and budgeted programming, services, and cultural education for all members of the Kiawah community.

The Arts and Cultural Events Council shall;

- Develop long range plans and budgets annually
- Work to enhance community appreciation of arts and cultural events and involvement
- Work to enhance visitor and tourist appreciation and involvement
- Publish an annual report
- Develop relationships with local, state, regional, and national arts organizations
- Develop relationships with schools, businesses, and other organizations supporting the arts

### **Board of Zoning Appeals**

Board of Zoning Appeals (BZA) meets as needed and has three main purposes:

- To hear and decide appeals when it is alleged by the appellant that an administrative official has made an error (Administrative Review);
- To hear and decide applications for variance from the requirements of zoning regulations (Variances)
- To permit uses by special exception, subject to the terms and conditions for those uses as identified in the zoning regulations (Special Exceptions).

### **Construction Board of Appeals**

Town Council created the Construction Board of Appeals on May 6, 2014. The Construction Board of Appeals is empowered to hear appeals regarding decisions and interpretations made by the Town's Building Official. The Construction Board of Appeal's responsibilities include;

- Hear grievances and appeals regarding the application of the International Building Code, International Residential Code, International Mechanical Code, International Plumbing Code, International Fuel and Gas Code, International



Fire Code, International Energy Conservation Code, International Property Maintenance Code, International Existing Building Code, International Swimming Pool and Spa Code, and the National Electrical Code.

- Provide educational opportunities for contractors.

### **Communications Committee**

The mission of the Communications Committee is to assist the Town in effectively and efficiently communicating to the community via publications, electronic messaging, website, and social media. The Committee will perform the following functions:

- Develop and/or review timely printed and electronic articles including, but not limited to Town Notes, the Comprehensive Annual Financial Report, the Popular Annual Financial Report, and Annual Budget.
- Develop the layout and scope of Town Notes, focusing on current events and other items of interest to residents, guests, and local businesses; Town Council meeting minutes, events, and actions; and Administrator's report. Review article scope and content with the Administrator.
- Develop a quarterly communications plan.
- On special subject matter, when requested by the Mayor, Town Council, or Administrator, develop a strategic communications plan and related articles.
- Make recommendations for enhancing the Town's website and other forms of communications.

### **Environmental Committee**

The Environmental Committee was created by Resolution 2003-3 and serves the same purpose as the previously organized Wildlife Committee. The Committee is comprised of not less than six nor more than 10 residents and representatives from organizations with similar environmental interests. The primary objectives of the Environmental Committee include:

- To study and report on environmental issues as may be referred by the Town staff or Council.
- Act as an ombudsman for wildlife on the island and mediate interaction between people and wildlife.
- Provide public education and mediation (parks, nature trails and placards, informative literature and lectures, off-island public relations and on-island complaints).
- Monitor beach and marsh (turtle nesting, shorebird nesting, pollution by boats and docks, stranding of dolphins, and whales).
- Monitor ponds (water quality, crabbing, fishing, notification for alligator control, ducks, and observation blinds).
- Monitor health and population of birds and animals (bobcat, deer, fox, and raccoon).



- Make recommendations to Town Council on ways to improve the quality of environmental services and the cost effectiveness of such services, and whether such services should be performed by outside contractors or Town staff.

### **Planning Commission**

The primary objectives of the Planning Commission are to approve plats and make recommendations to the Town Council on planned development, zoning district and map amendments, zoning text amendments, and comprehensive plan amendments. It is comprised of 7 individuals who serve year round.

- Prepare the Towns Comprehensive Plan and periodically make recommended revisions of the Plan to Town Council.
- Prepare and make recommendations for implementing the Comprehensive Plan by the appropriate governing bodies including the following measures: Zoning Ordinances including zoning district maps, Subdivision and land development regulations, Capital Improvement Programs, Landscape Ordinances, and Official maps.
- All other policies and procedures to implement the adopted Comprehensive Plan elements including policies and procedures for expanding corporate limits.

### **Public Safety Committee**

Resolution 2003-3 formed the Public Safety Committee (PSC). This committee is responsible for assisting the Town in meeting its state-mandated responsibilities with regard to maintaining peace, order and law enforcement and to initiate and consider proposals and methods to upgrade and improve public safety on the Island. The Committee will perform the following functions:

- Coordinate Town public safety and security activities with all other island security services.
- Serve as liaison with the St. Johns Fire District, Charleston County Emergency Medical Services, and the Charleston County Sheriff's Office Supervisor of the Town's contracted CCSO deputies.
- Monitor the performance and activities of the Towns contract beach patrol service.
- Monitor the Code Enforcement activities of the Town for all areas within its jurisdiction.
- Devise a long-term island security plan
- Ensure that in the event of natural disaster, appropriate plans are in force to accommodate evacuation, emergency law enforcement and any other services required to ensure the personal safety of all citizens, property owners, and visitors to Kiawah Island, and to secure all properties within the boundaries of the jurisdiction of the Town.
- At the will and direction of Town Council, engage in any activities, investigations, analyses, etc. relating to public welfare and safety.



- Make recommendations to Town Council on ways to improve the quality of public safety on the Island.

### **Public Works Committee**

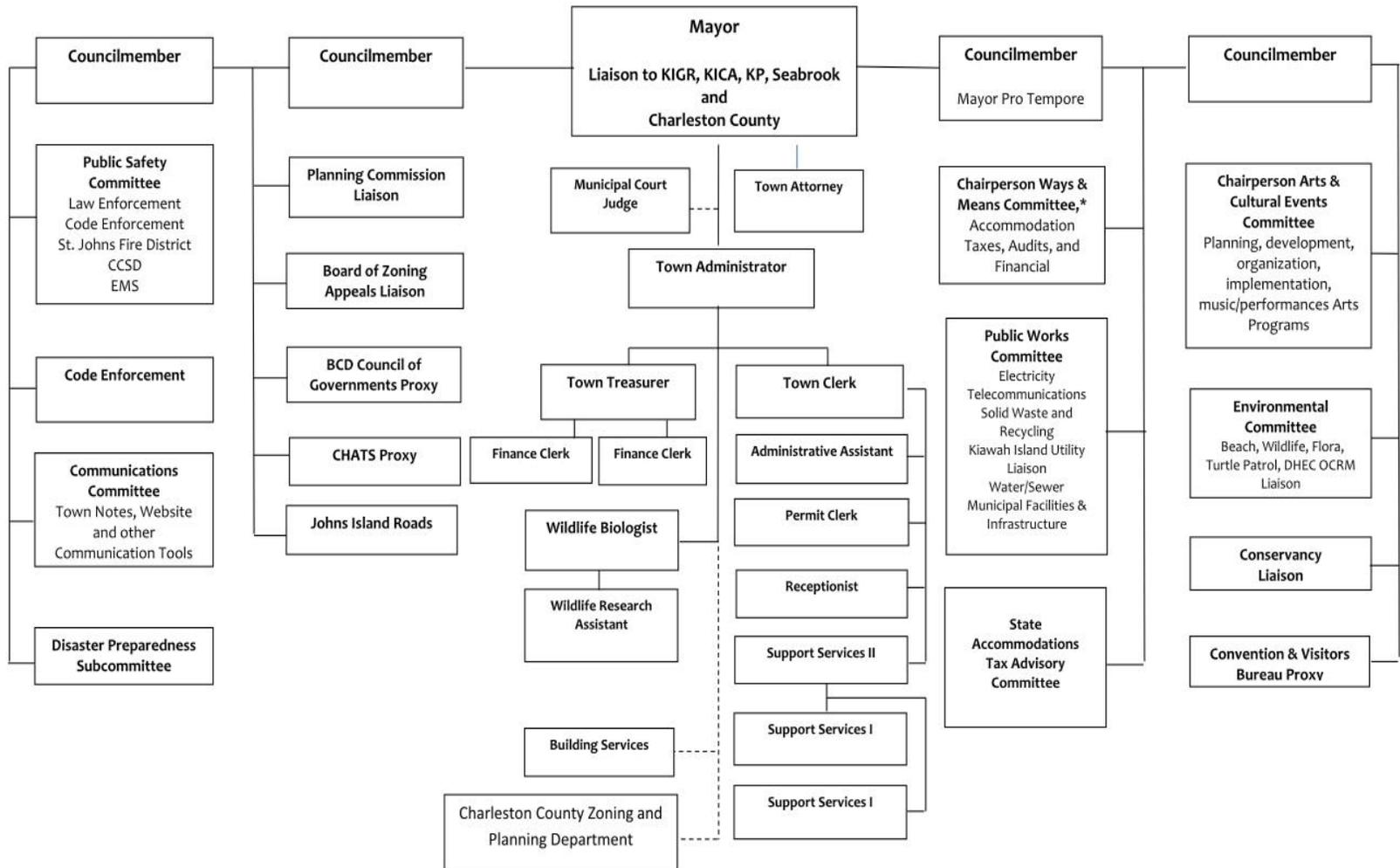
The mission of the Public Works Committee is to assist the Town in monitoring and making recommendations to improve solid waste services, infrastructure, facilities and utility needs and to recommend and consider proposals and methods to upgrade and improve public works related services on the Island. The Public Works Committee performs the following functions:

- Monitor the performance and activities of the Town Contractor as it relates to solid waste collection services.
- Monitor the activities of the utilities, including electric, water/sewer, cable and video providing service on the Island.
- Monitor the infrastructure conditions, repairs and replacement for Town owned infrastructure within its jurisdiction.
- Develop a long-term island infrastructure and facilitates master plan to be incorporated into the Town's Comprehensive Plan.
- At the direction of the Mayor, engage in activities, investigations, analyses, engineering studies etc. related to public works.
- Make recommendations to Town Council on ways to improve the quality of public works related activities as defined above on the Island.

### **Organizational Chart**

The organizational chart depicts the Town of Kiawah Island's government structure, chain of command and relationships that exist among the committees, employees and elected officials.

## Town of Kiawah Island Organizational Chart and Functions



Adopted January 6, 2015



*Profile of Town Government - II*



## POPULATION ELEMENT

### Background

The Population Element provides a basic picture of the population characteristics of the Town of Kiawah Island. This element examines historic trends and projections, household numbers and sizes, educational levels, income characteristics, age, gender, and racial composition. The majority of the information contained in the Population Element was compiled from the U.S. Bureau of Census 2010 and the American Community Survey 2009-2013 Five-Year Estimates.



Kiawah Island is different from many other communities in that the majority of the property owners in the Town do not live here full-time and a large portion of the housing is used as rental property. Also, with the large number of homes and Resort properties available to accommodate guests to the Island, the Island has a large tourist influx. Therefore, the Town's population can be divided into three groups: residents, non-resident property owners, and visitors. The Census data contained in this section only applies to the resident population, which is defined by the Census Bureau as "those persons usually resident in that particular area (where they live and sleep most of the time)." Data for non-resident property owners and visitors were obtained from the Kiawah Island Golf Resort (KIGR) and the Kiawah Island Community Association (KICA).

### Existing Conditions

#### Population Analysis

The Town's population varies dramatically during the year due to the seasonal nature of the community and Resort. The resident population of the Town, based on U.S. Census population, stood at 1,626 in 2010, an increase of 498 or 4 percent, from the 2009 population levels. Indicative of a resort community, the Town exhibits characteristics that contrast with County and State demographic variables, including a higher percentage of residents over the age of 65 (approximately 44 percent), higher educational levels (approximately 42 percent of residents hold a graduate or professional degree) and higher median family incomes (approximately \$160,000). Tourist and part-time resident



population numbers range from 8,000 to 10,000 people per day during the summer. Thus, summer population numbers are roughly 10 times higher than the number of permanent residents.

**Households: 1990-2010**

Comparing the 2000 and 2010 figures, Kiawah’s population both grew (households increased by 31 percent) and aged (households over age 65 increased by approximately 49 percent) (see Figure III.1 below). Also, Kiawah’s average household size, 2.00 persons, is much lower than the national, state and county averages (2.58, 2.81 and 2.36 persons respectively).

**Figure III.1 Households by Type: 1990-2010**

	1990	2000	2010	% Change (2000-2010)
Persons in Household	718	1,163	1,626	28
Total Households	320	557	813	31
Spouse	258	462	624	26
Child	123	101	144	30
Own Child Under 18	109	58	82	29
Other Relatives	8	30	30	0.0
Non-relatives	2	13	15	13
Family Households	272	474	644	26
Married Couple Family	258	462	624	26
Female, Householder, No Husband Present	13	6	13	54
Nonfamily Households	48	83	169	51
Householder Living Alone	43	73	155	53
65+ Years	20	41	81	49
Households with Individuals Under 18 Years	47	40	53	25
Households with Individuals 65+ Years	119	286	454	37
Average Household Size	2.24	2.09	2.00	-4.00
Average Family Size	2.43	2.25	2.24	-0.5

In figure III.1, a “family group” is any two or more people (not necessarily including a householder) residing together, and related by birth, marriage, or adoption. A household may be composed of one such group, more than one, or none at all. The count of family groups includes family households, related subfamilies, and unrelated subfamilies. A “family household” is a household maintained by a householder who is in a family group and includes any unrelated people (unrelated subfamily members and/or secondary individuals) who may be residing there. The number of family households is equal to the number of families. The count of family household members differs from the count of family members, however, in that the family household members include all people living in the household, whereas family members include only the householder and his/her relatives.

Source: United States Bureau of Census 1990-2010



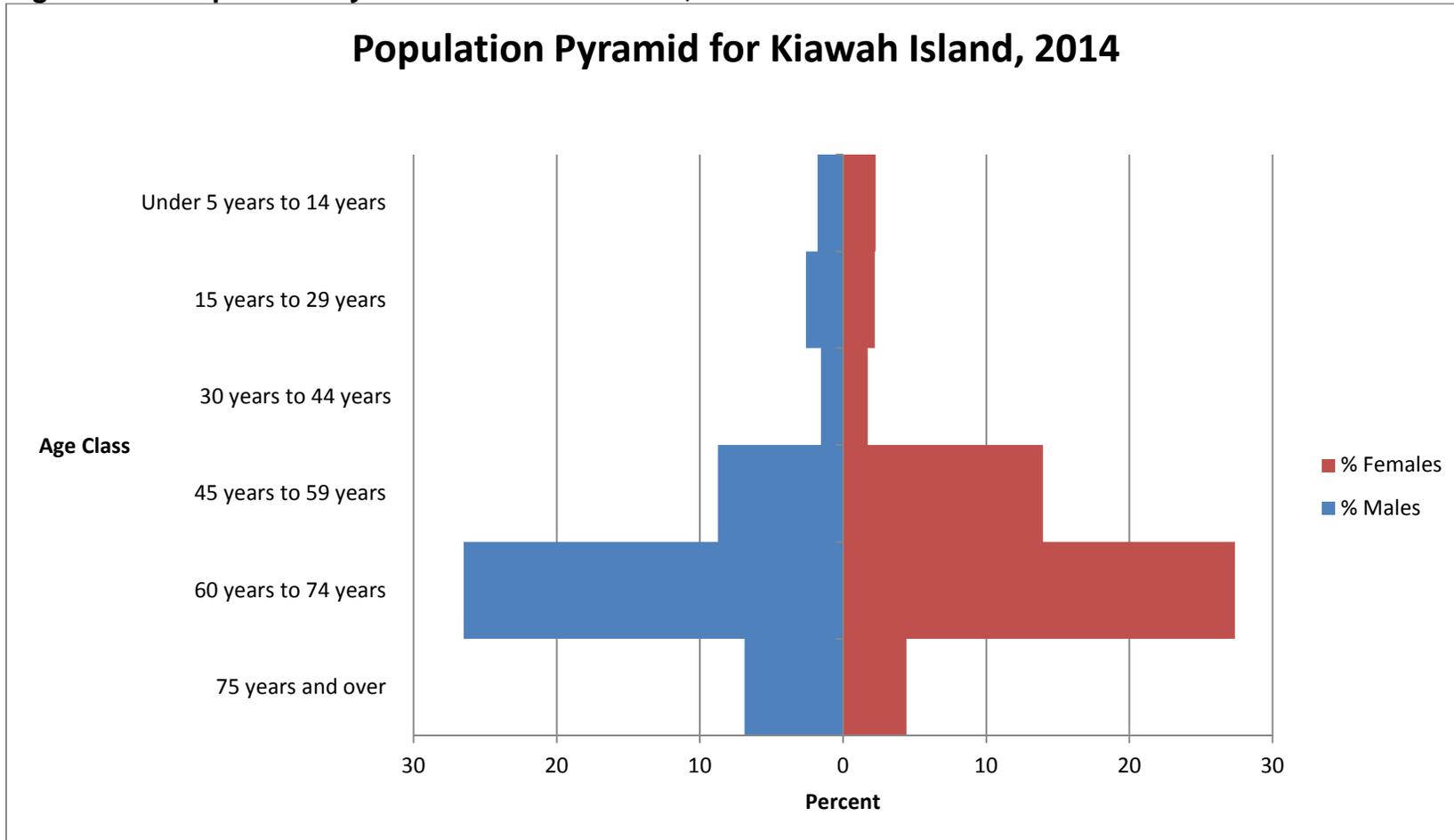
**Age and Gender Distribution: 2010**

Based on data collected from the 2010 Census, 528 Town residents (approximately 33 percent) were between the ages of 65 and 74 years. This is much higher than the proportions of aged populations in South Carolina (21 percent) and Charleston County (8 percent). Just over 760 residents (46 percent) in the Town were between the ages of 35 and 64 in 2010. The least represented age groups in the Town in 2010 include those age 75 years and over (184 residents, or 11 percent), and those under 35 years of age (154 residents, or 9 percent). The median age of Kiawah Island residents in 2010 was 63 years, which is much older than the county median age (37 years), the state median age (38 years) and the national median age (36 years).

The 2010 resident population was fairly balanced between males and females. There were 781 male residents, or 48 percent of the population, and 845 female residents, or 52 percent of the population. This balance is consistent with both the County and State figures. However, there were more male residents aged 65 years and older, representing 383 residents (23 percent) than female residents aged 65 years and older, representing 329 residents (20 percent). Generally, females exceeded males in the 65 years and older age bracket on the National, State and County level in 2010. Figure III.2 and III.3 further demonstrates the age and gender composition of the Town's population in 2010.



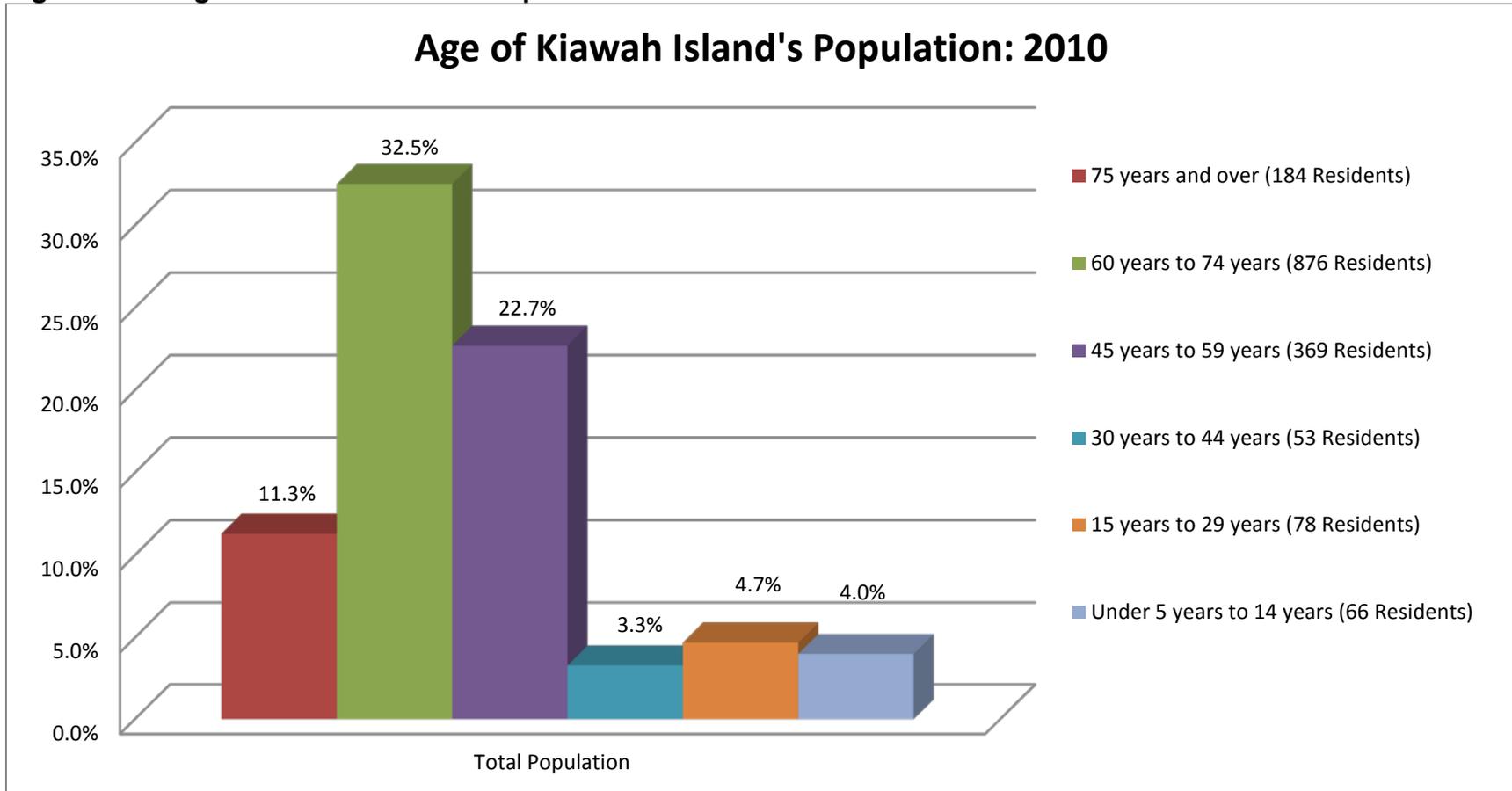
Figure III.2 Population Pyramid for Kiawah Island, 2014



Source: United States Bureau of Census, American Community Survey, 2009-2013 Five-Year Estimates



Figure III.3 Age of Kiawah Island's Population: 2010



Source: United States Bureau of Census 2010

**Racial Composition: 2010**

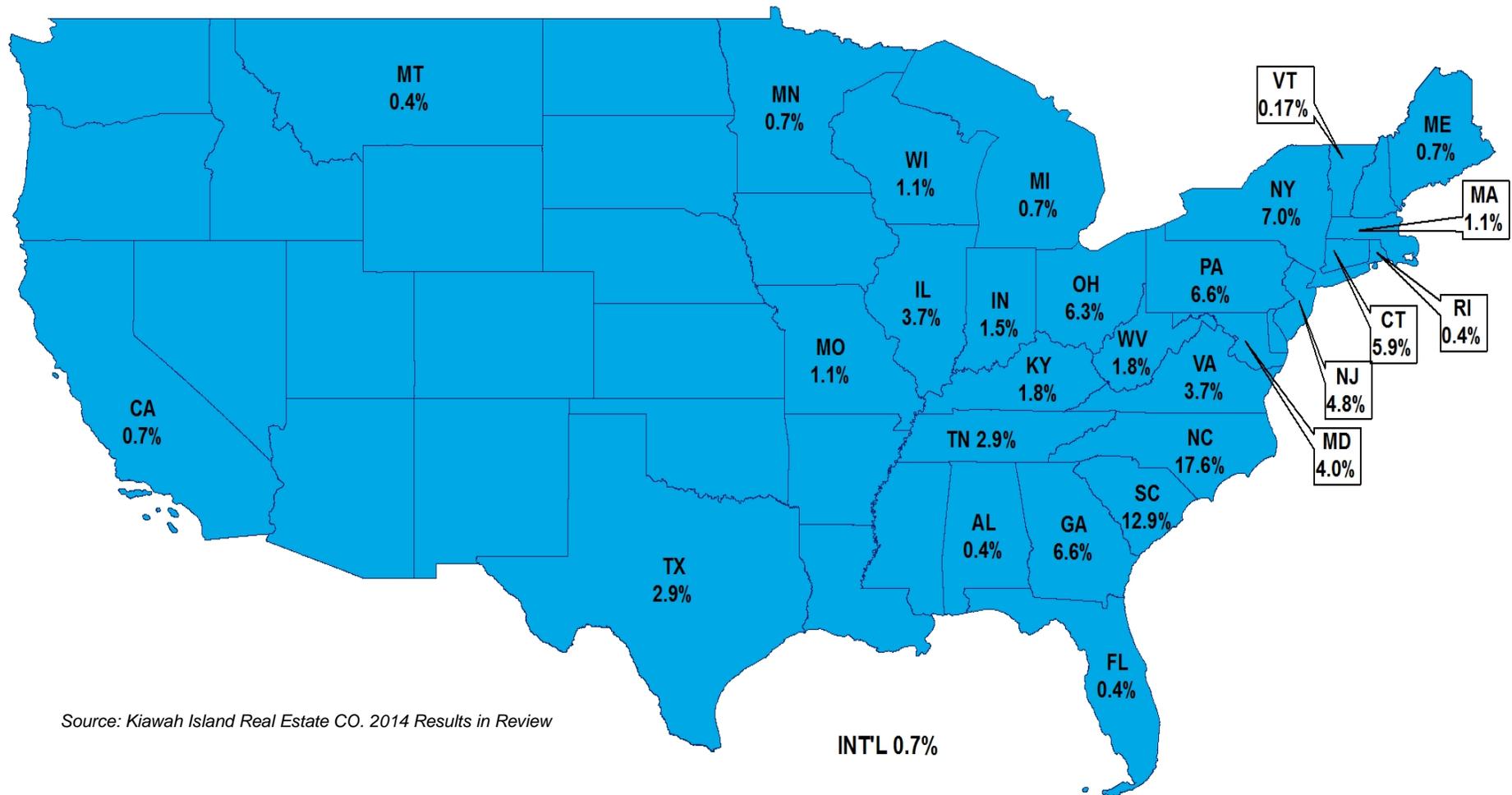
The majority (97 percent) of Town residents in 2010 were White. This lack of diversity is not consistent with that found on National, State, and County levels in 2010. The remaining three percent of Town residents includes African Americans (2 percent) and Asian American (1 percent).



### State of Origin: 2014

Many of the Town's residents come from a number of different states. Approximately 68 percent of the residents in the Town are not originally from the Carolinas. Figure III.4 below shows the state of origin for the Town's population.

**Figure III.4 State of Origin for Kiawah Island Residents, 201**



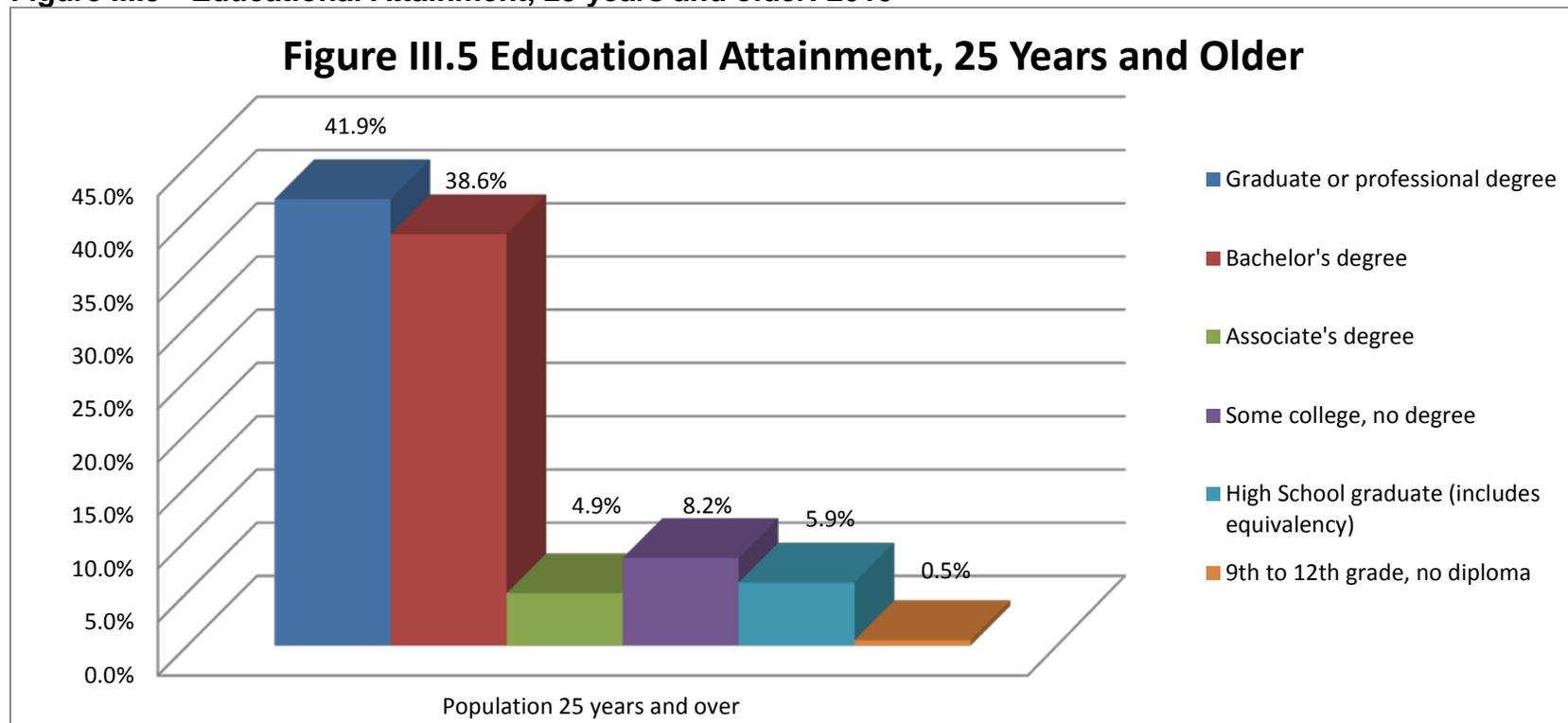
Source: Kiawah Island Real Estate CO. 2014 Results in Review



**Educational Attainment: 2010**

The resident population of The Town of Kiawah Island is highly educated. Of all the residents over the age of 25 years (1,273 of the 1,626 total residents) in 2010, 495, or 39 percent, had a bachelor's degree and 533, or 42 percent, had a graduate or professional degree. There was a 6 percent increase in the number of residents that held graduate or professional degrees between the 2000 and 2010 Census. Comparatively, only 14 percent of County residents, that were over the age of 25 in 2010, held a graduate or professional degree, and only 11 percent of the Nation's residents, that were over the age of 25 in 2010, held a graduate of professional degree. Figure III.5 presents this information.

**Figure III.5 Educational Attainment, 25 years and older: 2010**



Source: United States Bureau of the Census 2010



**Income 1999-2013**

The median reported income for households on Kiawah Island in 2013 was \$160,083, which is 67 percent higher than the National median household income (\$53,046), 72 percent higher than the State’s median household income (\$44,779) and 68 percent higher than the County’s median household income (\$50,792). Refer to Figure III.4 for more information on the household incomes. Just under 63 percent of Kiawah Island’s households reported having social security income and just under 53 percent reported having retirement income other than social security income (*Source: American Community Survey 2009-2013 Five-Year Estimates*).

**Figure III.6 Household Income in 1999-2013**

	1999		2013	
	Number	Percent	Number	Percent
<b>Households</b>	557	100	661	100
Less than \$10,000	35	6.3	47	7.1
\$10,000-\$14,999	22	3.9	20	3
\$15,000-\$24,999	30	5.4	10	1.5
\$25,000-\$34,999	54	9.7	0	0
\$35,000-\$49,999	39	7	20	3
\$50,000-\$74,999	95	17.1	38	5.7
\$75,000-\$99,999	82	14.7	41	6.2
\$100,000 to \$149,999	107	19.2	117	17.7
\$150,000 to \$199,999	28	5	105	15.9
\$200,000 or more	65	11.7	263	39.8

*Source: United States Bureau of Census, American Community Survey 2009-2013 Five Year Estimates*

**Population Estimates**

Each year the U.S. Bureau of the Census estimates the population of Census geographical divisions such as cities and towns. Figure III.7 shows the estimates for 2001 through 2013. Unlike the brisk growth experienced in the 1990’s,



Kiawah’s resident population is estimated to have slightly declined from 2000 to 2009, and then slightly increased from 2009 to 2013, as shown in Figure III.7.

**Figure III.7 Town of Kiawah Island Resident Population Estimates, 2000-2013**

Year	Total Resident Population
April 1, 2000 (Census 2000)	1,163
April 1, 2000 (Estimate Base)	1,163
July 1, 2000	1,160
July 1, 2001	1,145
July 1, 2002	1,149
July 1, 2003	1,152
July 1, 2004	1,156
July 1, 2005	1,150
July 1, 2006	1,130
July 1, 2007	1,117
July 1, 2008	1,121
July 1, 2009	1,129
April 1, 2010 (Census 2010)	1,626
April 1, 2010 (Estimates base)	1,626
July 1, 2011	1,658
July 1, 2012	1,687
July 1, 2013	1,711

Source: United States Bureau of Census, American Community Survey 2009-2013 Five-Year Estimates

**Kiawah Island Community Association Membership Study**

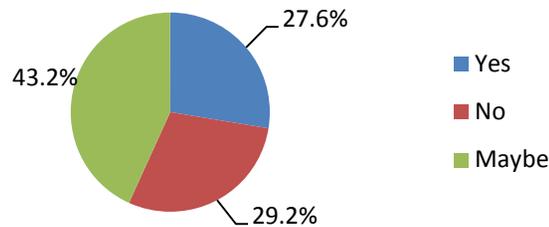
The Kiawah Island Community Association (KICA) conducted a survey among its membership (Kiawah resident and non-resident property owners) in 2013 and asked a question regarding the likelihood Kiawah Island would become their future primary residence. Of the 1,619 respondents, approximately 32 percent stated that Kiawah Island is currently their primary residence, while approximately 69 percent stated that the Town of Kiawah Island is not their primary residence. Of the 69 percent that stated that the Town of Kiawah Island is not their primary residence, 28 percent said the Town would become their primary residence; 30 percent said it would not become their primary residence; and 43 percent



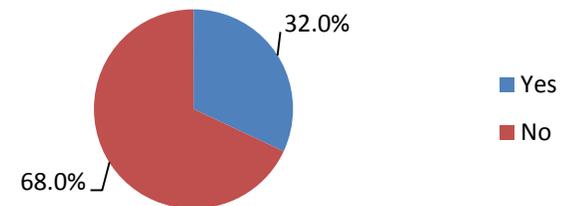
responded that they did not know if it would become their primary residence in the future. A breakdown of these responses is shown in Figures III.8 and III.9 below. This survey also found that members who own undeveloped lots are more likely than others to say they definitely or probably will become permanent residents. Villa or condo owners are also more likely than others to say they definitely or probably will not become permanent residents.

Figure III.8 and III.9 KICA Membership Study: 2014

### Likelihood of Kiawah Becoming Future Residence



### Kiawah Island already Primary Resident



Note: The total number of respondents was 1,619  
Source: 2013 KICA Membership Study

### Needs Assessments:

- The non-resident population fluctuates dramatically on a seasonal basis creating the need for different facilities and services;
- The resident population tends to be older, more affluent, and better educated than national, state, and local averages, thus creating the need for different services and facilities than seen in other communities; and
- The affluence and high profile nature of segments of the Island’s population create a heightened sensitivity to security related issues.



## **Goals**

To help the Town further realize its Vision, the following goals should be considered when evaluating proposals for change:

- 1. Provide residents, non-resident property owners, and visitors with a safe and secure environment and high quality community facilities.**
- 2. Develop more accurate data on property owner and visitor populations in order to assess and project the need for community services and facilities.**
- 3. Develop strategies that consider the needs of an older and aging segment of the population.**



## ECONOMIC DEVELOPMENT ELEMENT

### Background

The Economic Development Element considers labor force and labor force characteristics, employment by place of work and residence, and an analysis of the community's economic base. This section provides an analysis of the Town of Kiawah Island's economy and the Town's impact on Charleston County's overall economy.

### Existing Conditions

The economic activities associated with the Town of Kiawah Island are intertwined into the fabric of the overall regional economy. Although the Town represents only 1.2 percent of the County's land base and 0.4 percent of the population (approximately 2 percent of households), its measurable impact is considerable. The Town alone contributes 8.7 percent of the property tax in Charleston County. Moreover, the Charleston Metro Chamber of Commerce reports that Kiawah Island Golf Resort ranks among the major employers in the region with approximately 1,500 employees.



In addition, Kiawah Island Golf Resort ranks in the top 10 of Charleston County principal taxpayers. The Resort is a magnet for high-end tourism and sporting events. For example, several major golf events, such as the World Cup, Ryder Cup, 2007 Senior PGA Tournament, and the 2012 PGA Tournament were all sponsored by the Resort. In April of 2015, the Kiawah Island Golf Resort along with the Professional Golfers' Association (PGA) of American announced that the PGA Championship will return to the Ocean Course in 2021. These events spotlight the region on the international stage and not only impact the economy, but also showcase the entire Lowcountry as a desirable place to live, work, and visit.

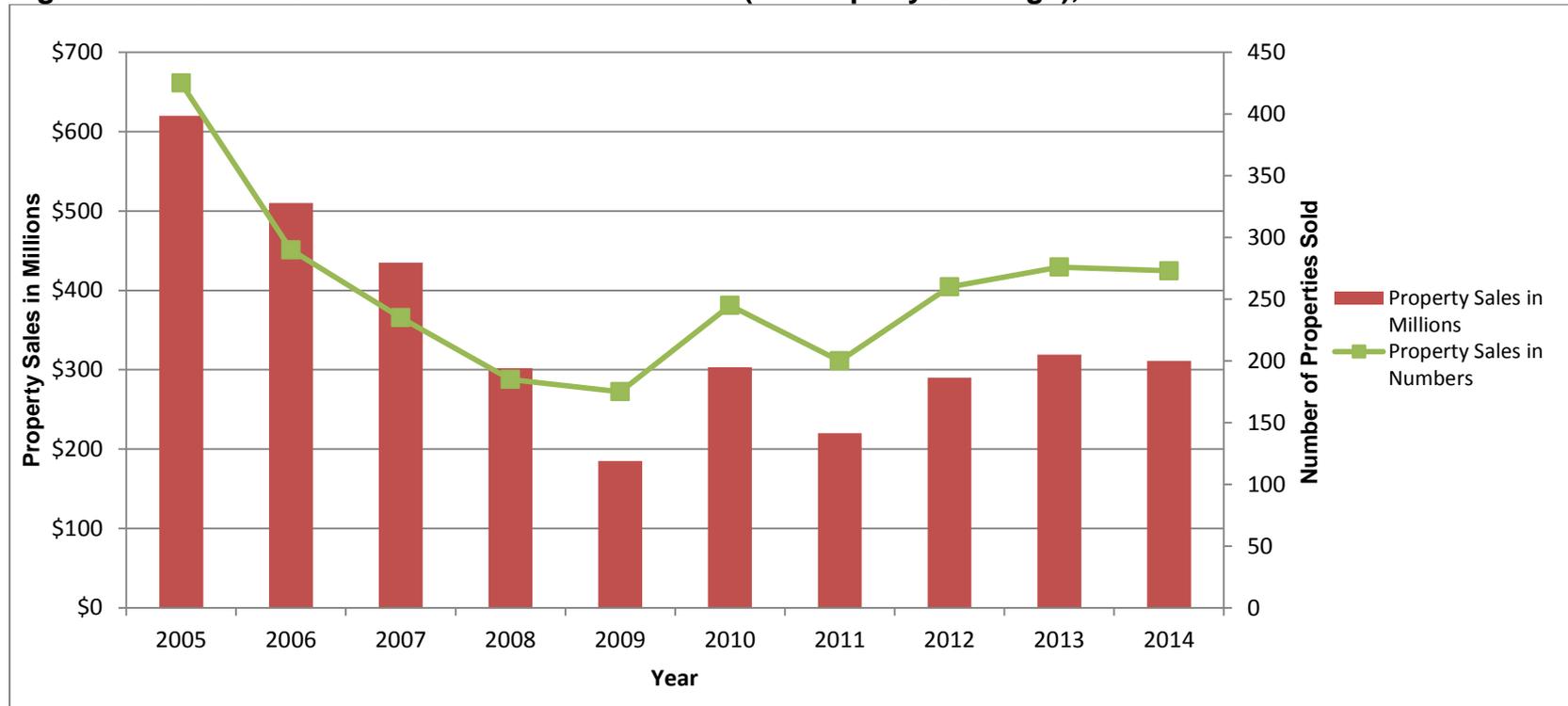
### Real Estate Sales

Real estate sales on Kiawah Island exert a large and measurable economic impact ranging from real estate agents, legal services, office staff, banking and insurance services, and property management employees. Following up on a resurgent 2013, the Kiawah Island property market remains strong with a total closed sales volume of over \$300 million representing approximately 250 properties on Kiawah Island. Lot sales-the vast majority of which were resales-were especially strong, with sales up approximately 7 percent in 2014 and dollar value up over 17 percent. This marks the fifth straight year lot sales have increased year over year. Villas, Cottages, and resale Homes have remained fairly consistent since 2011, where the market saw a dramatic decrease in sales. *Barron's* PENTA magazine (sent to Wall Street Journal subscribers



with the newspaper’s Friday, March 6<sup>th</sup> issue), addresses this success in the article entitled, “Top 20 Second-Home Resorts”. This article notes that, “New land sales and new building permits in Kiawah Island, South Carolina point to further strength in 2015.” Figures IV.1 and 2 present the 10 year sales trends for all properties sold on Kiawah Island as well as the 5 year sales trends for lot sales, villas and cottages sales, as well as homes sales on Kiawah Island.

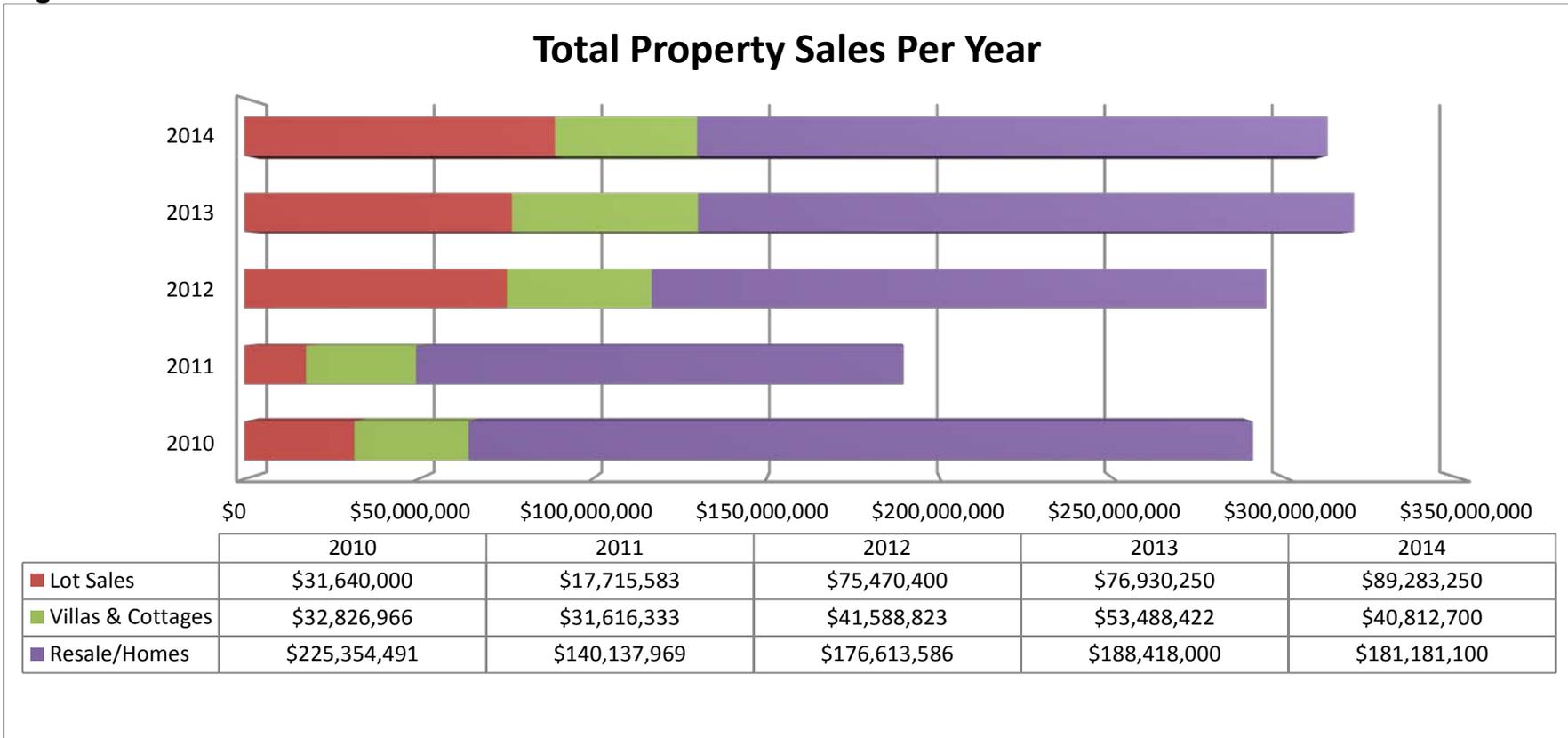
**Figure IV.1 10 Year Sales Trends on Kiawah Island (All Property Closings), 2005-2014**



Source: Kiawah Island Real Estate CO.2010-2014 (All sales by all real estate companies)



Figure IV.2 2010-2014 Kiawah Island Real Estate Sales

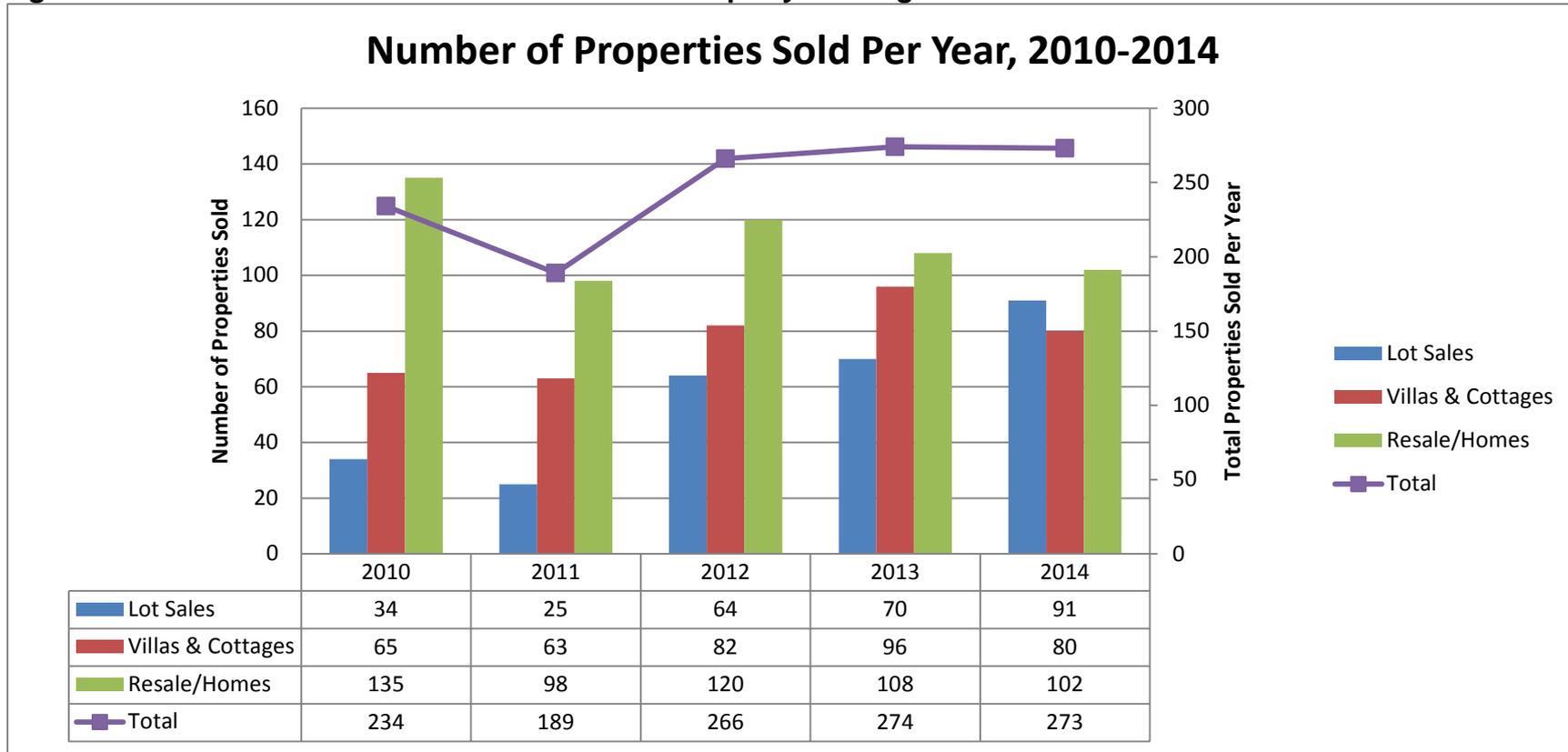


Source: Kiawah Island Real Estate CO.2010-2014 (All sales by all real estate companies)

The mix of property types sold on Kiawah Island in 2014 was somewhat different from that of 2013. While sales of lots increased, sales of single family homes were relatively flat (102 in 2014 versus 108 in 2013) and the number of cottages and villas sold decreased by 16 percent due to lower inventory levels, which declined by almost 25 percent after a surge in sales in 2013. Figure IV. 3 presents the number of properties sold on Kiawah Island from 2010 to 2014.



Figure IV.3 2010-2014 Kiawah Island Real Estate Property Closings

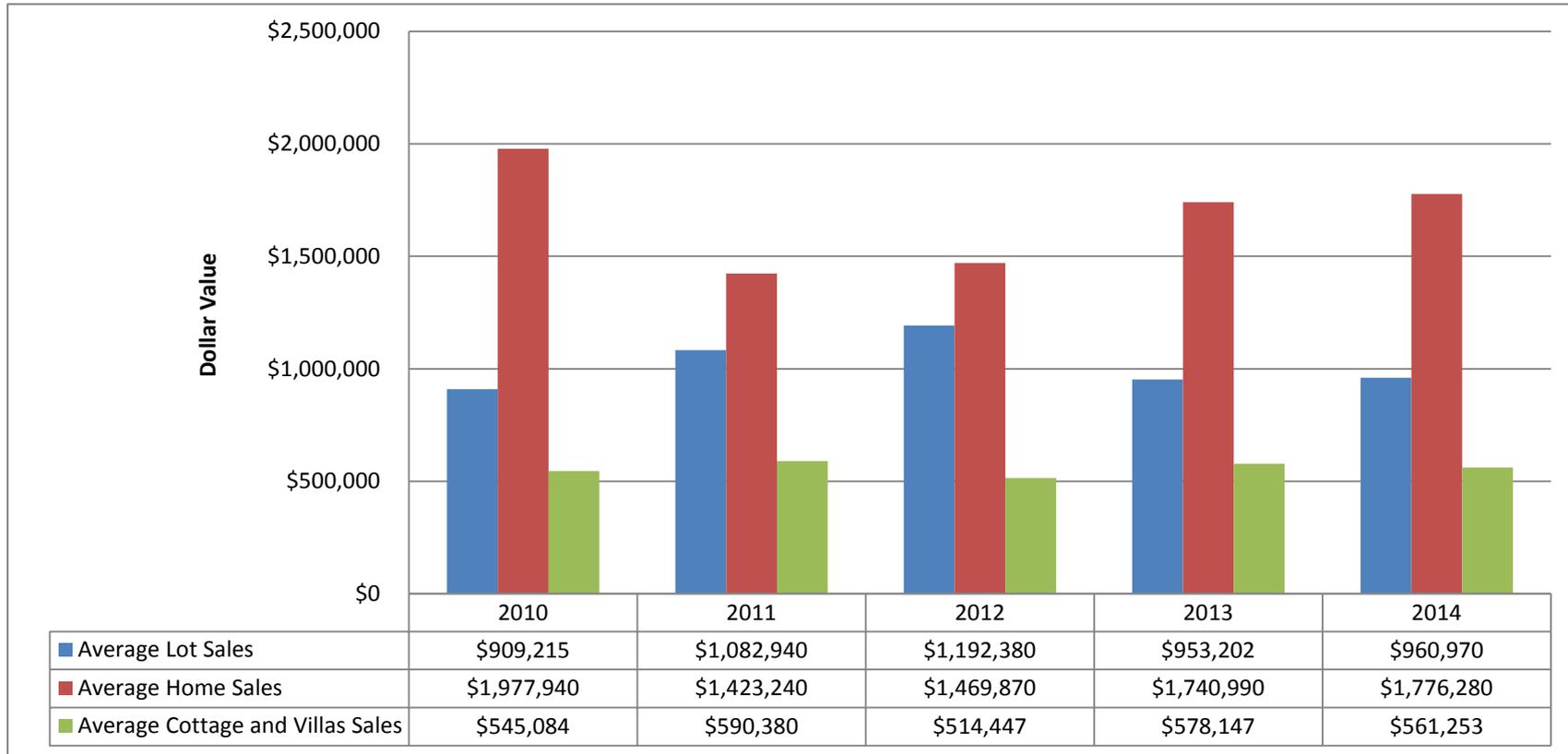


Source: Kiawah Island Real Estate CO.2010-2014 (All sales by all real estate companies)

The average price for a single-family home in 2014 was \$1.75 million, which is slightly higher than the 2013 average and much higher than the 2012 average of just under \$1.5 million. Average cottage and villa pricing in 2014 was just over \$500,000, in line with 2013 and 2012. Average lot price (excluding larger, unplatted tract sales in both years) were up only 1 percent to \$960,000 in 2014. This information can be found in Figure IV.4.



**Figure IV.4 2010-2014 Kiawah Island Average Property Sales**

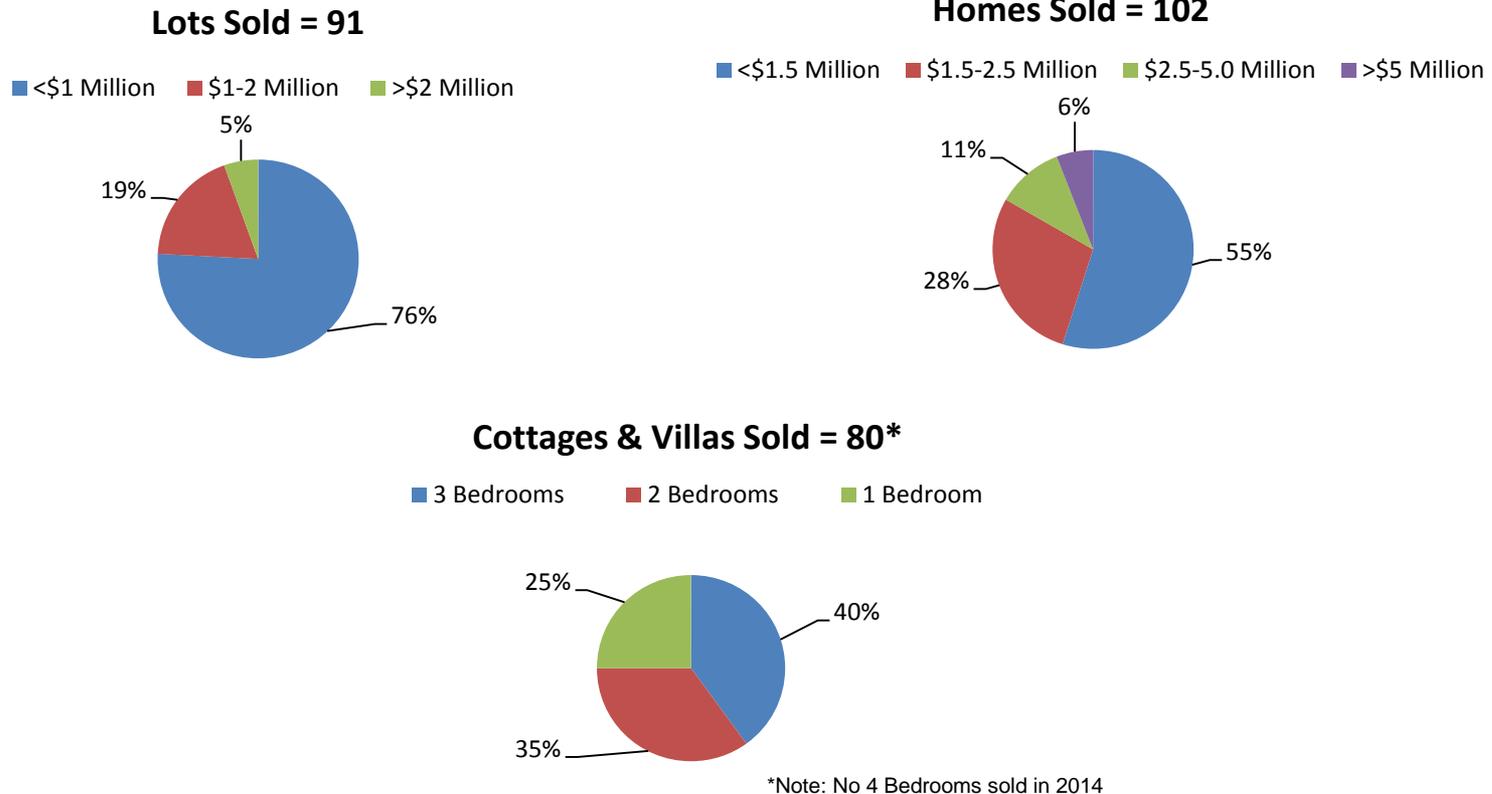


Source: Kiawah Island Real Estate CO.2010-2014 (All sales by all real estate companies)

Figure IV.5 shows that in 2014, the Kiawah Island property market saw the sale of 91 lots, 102 homes, and 80 cottages and villas. Despite selling an impressive number of properties, the amount of homes sold decreased by 3 percent from 2013 and the amount of cottages and villas decreased by 16 percent from 2013. Still, the Kiawah Island property market remains strong with a total number of property closings reaching 273 properties in 2014. The majority of cottages and villas sold (40 percent of the total) were 3 bedrooms; the majority of lots (76 percent of the total) sold for less than \$1 million; and finally the majority of homes (55 percent of the total) sold for less than \$1.5 million.



**Figure IV.5 2014 Kiawah Island Property Closings**



Source: Kiawah Island Real Estate CO.2014 (All sales by all real estate companies)

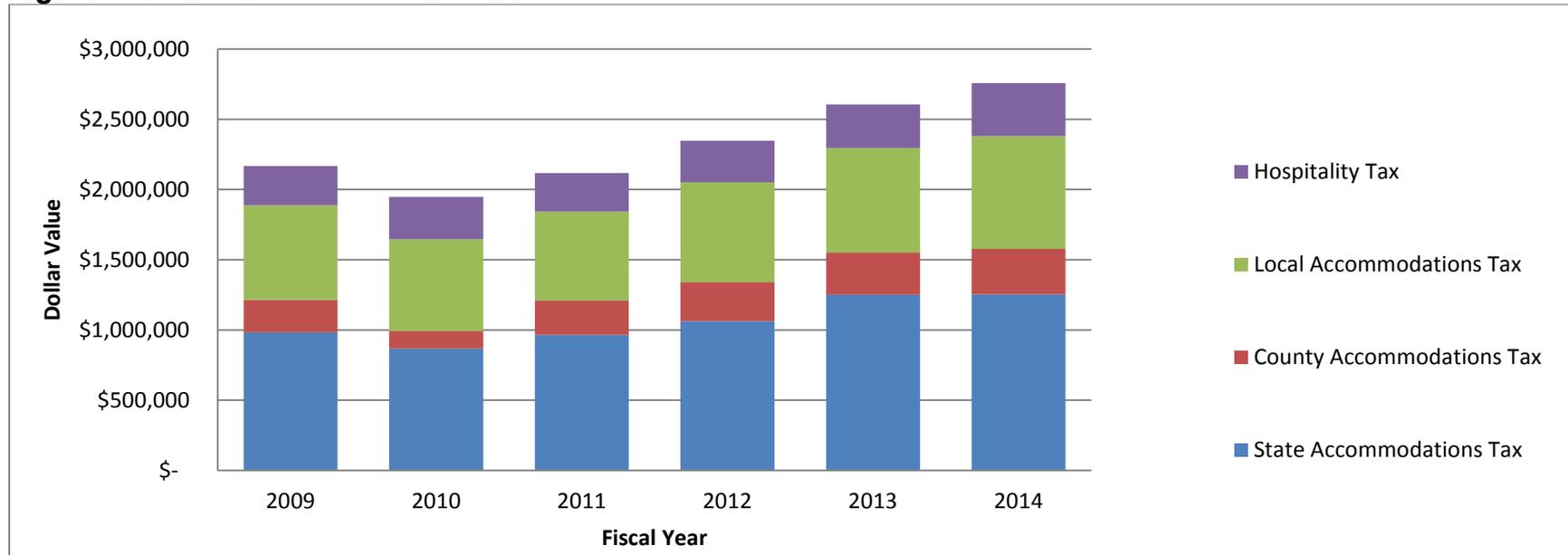
## Financial Benefits

### Tourism Related Revenue

The reciprocal benefits to the Town from tourism are recognized in the form of Accommodations and Hospitality taxes to the Town. These include State, County and Local Accommodations Taxes, and Hospitality Taxes. Figure IV.6 depicts the trends in these revenues as related to tourism.



**Figure IV.6 Tourism Related Revenue**



Source: Town of Kiawah Island Comprehensive Annual Financial Report, 2009-2014

The funds are classified as special revenue funds and may only be used for purposes outlined by the State including, and are limited to law enforcement; traffic control; public facilities; highway and street maintenance; as well as the continual promotion of tourism. The funds must not be used to supplement services normally provided by the Town, but only to promote tourism and enlarge its economic benefits through advertising, promotion, and providing those facilities and services which enhance the Town’s ability to attract and support tourists. Annually, a committee of individuals as required by law allocates State Accommodations Taxes for those communities receiving more than \$50,000 in revenue. The committee recommends funding to organizations like the Kiawah Island Golf Resort, beach patrol, and public access events. Also, the committee recommends funding for police protection provided by the Charleston County Sheriff. Specifically, these funds may be used for tourism-related expenditures including:

- Advertising and promotion of tourism to develop and increase tourist attendance;
- Promotion of the arts and cultural events;

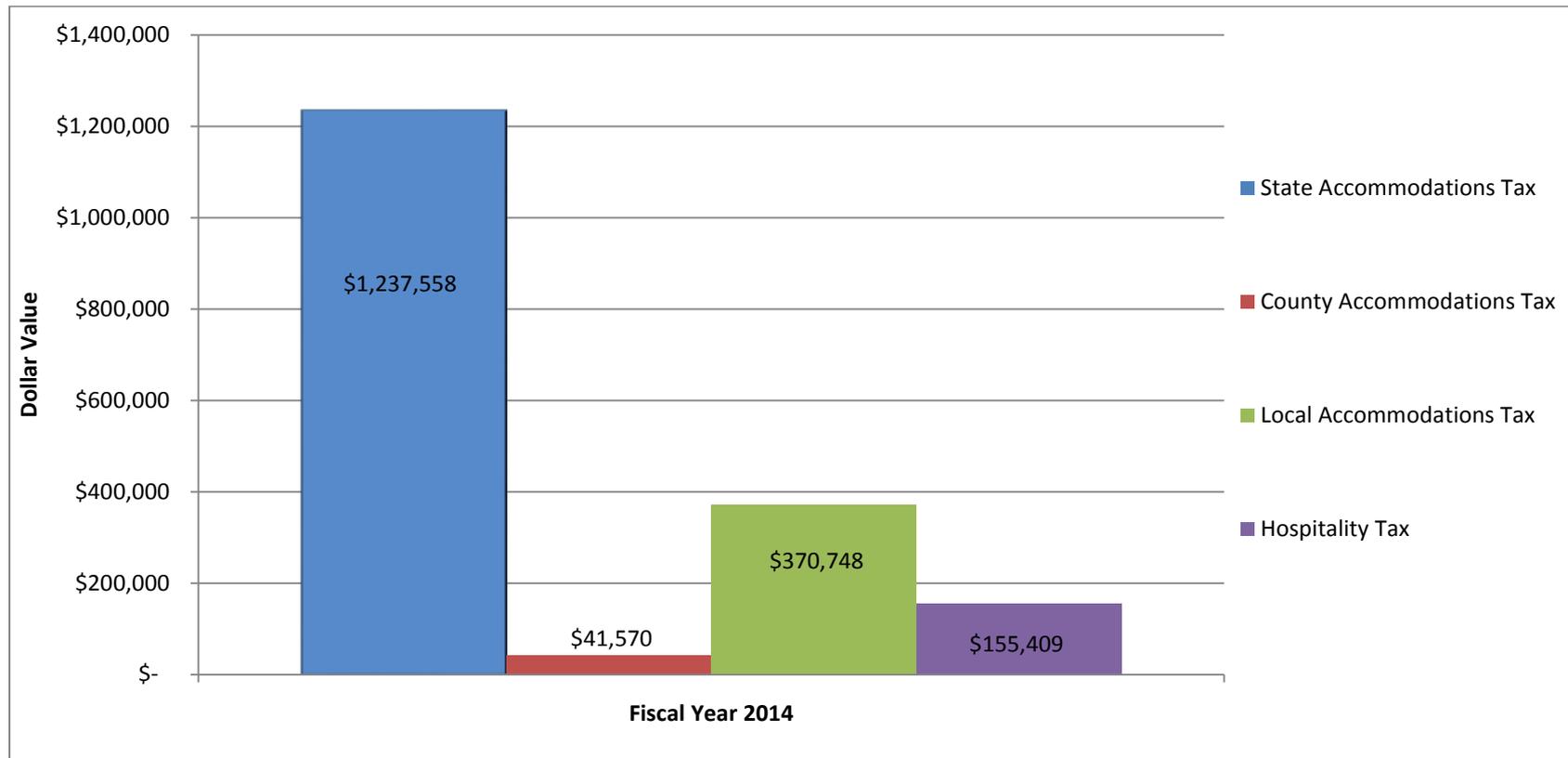


- Construction, maintenance, and operation of facilities for civic and cultural activities including construction and maintenance of access and other nearby roads and utilities for the facilities;
- The criminal justice system, law enforcement, fire protection, solid waste collection, and health facilities when required to serve tourists and tourist facilities, the amount of funding being based on the estimated percentage of costs directly attributed to tourists;
- Public facilities such as restrooms, dressing rooms, parks, and parking lots;
- Tourist shuttle transportation;
- Control and repair of waterfront erosion;
- Operating visitor information centers.

Figure IV.7 depicts the amount of special revenue expenditures for these funds through June 30, 2014.



**Figure IV.7 FY2014 Special Revenue Fund Expenditures**



Source: Town of Kiawah Island's Comprehensive Annual Financial Report, 2014

Examples of recent expenditures from these funds include:

- The State Accommodations tax helps fund and sponsor the Charleston Area Visitors Bureau and many other tourist projects;
- County Accommodations taxes are used to maintain community facilities like the Municipal Center and beach accesses;

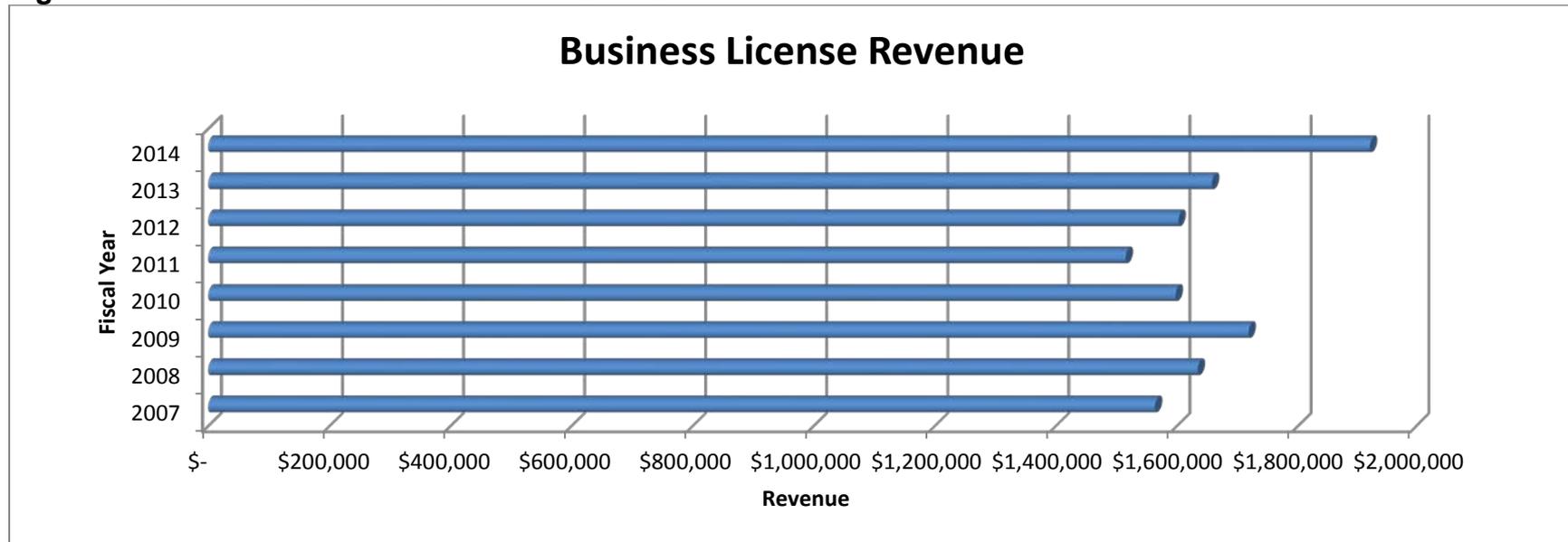


- Local Accommodations taxes helped pay for the 2006 East End Beach Restoration Project and are beginning to help pay for the 2015 East End Beach Restoration Project. This tax also helps pay for the Kiawah Island Parkway Pedestrian Walkway and the updating of the Parkway, which includes landscaping;
- Hospitality taxes help provide for public road maintenance, including landscaping, such as the Beachwalker Drive Landscaping Project.

### Business License Revenues

The Town also receives Business License Revenues from firms that provide services on the Island. The Town needs to remain focused on this key revenue stream since legislative acts, at the State level, arise that may diminish the essential revenue stream. Figure IV.8 depicts the amount of business license revenue the town received from 2007 through 2014.

Figure IV.8 Business License Revenues: 2007-2014



Source: Town of Kiawah Island Comprehensive Annual Financial Report, 2007-2014.

### Freshfields Village

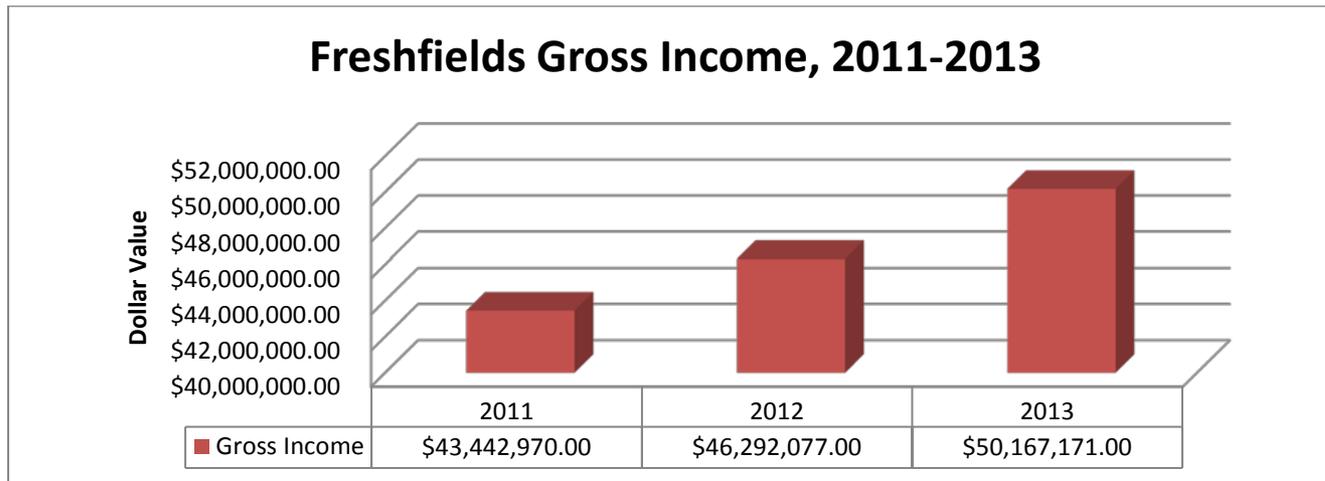
In 2013, the Town received an application of annexation from the owners of Freshfields Village and its surrounding area. In December of that year, the Town Council voted to annex this area. The purposes for annexing Freshfields were to help



protect the property values and quality of life on and near the island; to protect and enhance the Town's financial stability, and to help control the environment immediately surrounding the approach to the island. With annexation, the Town has access to additional revenues in the form of State/Local Option Sales Tax, Accommodation Taxes, and other revenue associated with operating businesses. When the Town annexed this land, a number of uses were revised or deleted in order to preserve the character of the Village. Also, a number of new uses were permitted including outdoor recreation and entertainment and special events and performances, all enhancing the Village. It is important to note that the updated Master Plan is conceptual and subject to change if needed to meet unique market opportunities, conditions and/or regulatory standards. Upcoming developments within the Village include two restaurants, two specialty retail shops, and two additional parking lots.

Freshfields Retail Village is a mixed-use village center serving the combined needs of the Johns Island, Seabrook Island and Kiawah Island communities. This retail village is a significant source of economic activity in the Town, as it includes a broad range of retail sales and services, and residential uses that provide the islands' residents and guests with a community center of activity within a beautiful walking environment. Freshfields consists of approximately 60 acres generally bound by Seabrook Island Drive and Kiawah Island Parkway on the north and open farm fields on the remaining property lines. The main intent was to create an active village center that combines the best of sales and services for necessities (groceries, pharmacy, dry cleaning, hardware and professional offices) as well as shopping, entertainment, and medical center (restaurants, specialty retail, movies, etc.) within a pleasant walking environment. Currently there are 55 businesses operating in the Freshfields Retail Village and 3 other businesses are coming soon.

The County of Charleston first approved Freshfields as a Planned Development District (PDD). The applicants requested a PDD classification in order to allow a flexible mixed-use development over a multiple phase time period. More specifically, the applicants sought to have greater choice in the type of environment and living units available to the public, more open space, a creative approach to the use of land and related physical development and finally to efficiently use the land resulting in a smaller network of utilities and streets, and thereby lower housing costs. When the PDD was originally approved it allowed for a number of different uses within the development. These included agricultural uses, residential uses, civic/institutional uses, and commercial uses.



Source: Charleston County Assessor's Office, Freshfields Gross Income-2011-2013

## Labor Force Characteristics

The 2013 U.S. Census is the most recently published data source reflective of the labor characteristics for the Town of Kiawah Island. In 2013, 423 Town residents were employed in the civilian labor force, of which 255 were males and 168 were females. What may surprise individuals is the number of residents, 16 years and older that are included in the Labor Force. Currently, 32 percent of the population 16 years and over are in the Labor Force (423 out of 1316 residents). One major reason the Town's citizens might find this percentage surprising is because of the advances in Technology and its impact on the "Work-From-Home" Revolution. According to a CNN article written in 2012 entitled *Work from Home Soars*, the number of Americans working from home has increased by 41 percent in the last decade. The availability of high-speed Internet and services such as Skype, which allow for at-home virtual meetings, have made working from home much easier. What is also important to note is that seniors are more likely to work from home than any other demographic. According to the same article above, about 1 in 10 people working exclusively from home were over the age of 65. This is an important statistic because approximately 48 percent of the Town of Kiawah Island is over the age of 65 years. Ultimately, the United States Census Bureau, American Community Survey 2009-2013 Five-Year Estimates found that approximately 23 percent of the Town of Kiawah Island Labor Force works from home (94 residents). Figure IV.10 provides a breakdown of the resident labor force in the Town.



**Figure IV.10 2013 Total Population (Residents) and by Sex**

	Total		Male		Female	
	#	%	#	%	#	%
<b>Population 16 Years and Over</b>	1316	100	663	100	653	100
<b>In Labor Force</b>	423	32.1	255	38.4	168	25.7
<b>In Armed Forces</b>	0	0	0	0	0	0
<b>In Civilian Labor Force</b>	423	32.1	255	38.4	168	25.7
<b>Not In Labor Force</b>	893	67.9	275	86.7	317	48.5

Source: U.S. Census Bureau, American Community Survey 2009-2013 Five-Year Estimates

\*The "In Labor Force" row reflects the number of persons employed by the Armed Forces plus those employed in the civilian labor force (not in the Armed Forces).

As shown in Figure IV.11, the majority of the 2013 resident labor force, or 88 percent, worked in management, professional, and related fields or sales and office professions. Relatively few residents were employed in the service, construction, or production industries.

**Figure IV.11 Occupations of Kiawah Island’s Employed Labor Force (16 years and older [423 residents] in 2013)**

Occupation	Total # Employed	% of Total Labor Force
<b>Management, Professional, &amp; Related</b>	<b>218</b>	<b>52.2%</b>
<b>Sales and Office</b>	<b>146</b>	<b>34.9%</b>
<b>Service</b>	<b>47</b>	<b>11.2%</b>
<b>Construction, Extraction, &amp; Maintenance</b>	<b>7</b>	<b>1.6%</b>
<b>Other</b>	<b>5</b>	<b>1.1%</b>
<b>Production, Transportation, &amp; Material Moving</b>	<b>0</b>	<b>0.0%</b>
<b>Total</b>	<b>423</b>	<b>100%</b>

Source: U.S. Census Bureau, American Community Survey 2009-2013 Five-Year Estimates

The majority of the resident labor force commutes to work alone by driving a car, truck, or van. A small percentage of employees carpool or use public transportation to work on Kiawah Island. The fluctuation in gas prices in 2008-2009 may have caused an increase in the number of employees carpooling to work. In 2009, the Kiawah Island Golf Resort



petitioned CARTA, Charleston Regional Transportation Authority, to evaluate the feasibility of reintroducing a route to service Johns Island, Wadmalaw Island, and Kiawah Island.

## **EMPLOYMENT**

### **Kiawah Island Golf Resort**

The Kiawah Island Golf Resort ranks among the major employers in the region. As noted in the beginning of this element, figures obtained from the Charleston Metro Chamber of Commerce indicate that the Resort is a major employer in the region with approximately 1,100 employees. Of those 1,100 employees, about 800 are full-time employees while 300 are part-time employees. Generally, individuals who work in the Town do not reside within the Town. The Kiawah Island Golf Resort depends heavily on seasonal employees during the tourist season, primarily between June through August. During the peak season (June through August), the Kiawah Island Golf Resort employs around 1,500 to 1,600 employees. This number falls back down to 1,100 employees during the off-season (fall and winter). The Kiawah Island Golf Resort also hires approximately 200 international employees during its peak season. The majority of these employees are nonagricultural service employees while a handful are student employees. Their nonagricultural service employees are from a range of different countries including Jamaica, Romania and the Philippines. The rest of the Resorts seasonal staff are students who are enrolled at a European Hospitality school from all over the globe. The international employees are housed at an apartment complex in West Ashley and they pay for their own housing and transportation that the Resort provides via buses and vans throughout the day. These international employees typically work for 6 to 9 months depending on the needs of the Resort.

### **Kiawah Island Community Association**

The Community Association is another of the Island's employers with 102 full-time employees. These employees include landscapers, security officers, and administrative personnel. The Sandcastle (a community facility for KICA members) also contributes to the island's economy as it is frequently rented for special events and weddings.

### **Kiawah Development Partners**

Kiawah Development Partners, Kiawah Island Club, Kiawah Island Utility, and Kiawah Island Real Estate have approximately 600 employees in the peak season and 450 in the off-season.



### **Other Service Providers**

Every day a large number of service providers - contractors and sub-contractors, repair personnel, cleaning and maintenance persons, landscapers and many others – provide services on Kiawah Island. Their earnings contribute significantly to the region’s economic base.

### **Property Tax**

Even though the Town of Kiawah Island represents 1.2 percent of Charleston County’s land base, as of FY 2014, Kiawah property owners contributed \$52,769,808 or 8.7 percent to the County’s operations.

### **Summary**

Most of the economic impact for Kiawah Island is derived from tourism, residents, real estate sales, property taxes and construction related activities. The County provides some direct services to the Town of Kiawah Island. The single largest direct service provided is planning and land use. Indirect services also include emergency management and flood management. Other governmental services are provided by the Town of Kiawah Island without the need of imposing property taxes. The Town provides for public safety, health and welfare for the community. The Town contracts for Island-wide police coverage with the Charleston County Sheriff’s department. The Town also contracts with a private firm for garbage, recycling and yard debris collection on the Island. The Town maintains several public roads on the Island. Emergency services are provided by the Charleston County EMS and the St. Johns Fire District.

The Kiawah Island Community Association also provides services on the Island including premise security, biking paths and bridge maintenance and the maintaining of all signage as well as landscaping and maintenance of all the private roads behind the main gate.

The Island’s utilities are provided by private entities including the water and sewer service which are provided by Kiawah Island Utility, electric service provided by Berkeley Electric Cooperative, and television and telephone providers such as Comcast and AT&T. In addition, since there are few school-age children resident in the Town, there are no public schools or school bus services within the Town of Kiawah Island.



### **Needs Assessments:**

The following are the key needs related to the Economic Development Element:

- There can be an inherent tension between the economic and other benefits associated with the commercial activities of ongoing development, tourism and high quality resort facilities, and the residential character and commitment to preserving the Island's natural beauty reflected in the vision statement;
- The Town of Kiawah Island supports a largely service-based economy, supported by employees from areas outside the Town limits.

### **Goals**

To help the Town further realize its Vision, the following goals should be considered when evaluating proposals for change.

- 1. Provide a balance between preservation of natural resources and economic development.**

## NATURAL RESOURCES ELEMENT

### Background

Kiawah Island, the largest barrier island in the state of South Carolina, is located just south of Charleston. The Island has a rich variety of maritime habitats and scenic natural resources that include over 10 miles of beach, a broad salt marsh with tidal creeks, freshwater wetlands, and extensive maritime forest and shrub thickets.



In 1975, the Kiawah Island Company introduced plans to develop Kiawah Island as a scenic residential and Resort community, which capitalized on its natural beauty. Residential areas are interlaced with recreational open space, a system of lagoons and ponds, wildlife corridors and nature trails that are functional and aesthetically pleasing. The intra-Island brackish and fresh water ponds serve multiple purposes including storm water retention and removal. Roadway and other pavement runoff are naturally filtered through the marshes, protecting river and ocean water quality.

As a result of environmentally sensitive planning, Kiawah Island has been recognized nationally for its creative balance between natural and developed areas by the Urban Land Institute and the American Planning Association. Map V.1 below shows the parks, trails and open spaces that exist in the Town as of November 2

- |                                  |                               |                              |                                   |                           |
|----------------------------------|-------------------------------|------------------------------|-----------------------------------|---------------------------|
| 1 BEACH                          | 7 EAST BEACH TENNIS           | 13 LITTLE BEAR ISLAND        | 19 OCEAN MARSH ROAD BEACH PARKING | 25 TURTLE POINT GOLF      |
| 2 BEACHWALKER PARK               | 8 FALCON POINT/SUMMER ISLANDS | 14 MARSH ISLAND PARK         | 20 OCEAN OAKS                     | 26 WEST BEACH TENNIS      |
| 3 CANVASBACK MINIPARK            | 9 GLOSSY IBIS MINI PARK       | 15 MARSH VIEW TOWER OVERLOOK | 21 OSPREY POINT GOLF              | 27 WILLET POND            |
| 4 COUGAR ISLAND                  | 10 IBIS POND                  | 16 MINGO POINT               | 22 PROPERTY OWNERS REC CENTER     | 28 RIVER COURSE CLUBHOUSE |
| 5 COUGAR POINT GOLF              | 11 KIAWAH BEACH CLUB          | 17 NIGHT HERON PARK          | 23 RHETT'S BLUFF                  |                           |
| 6 EAST BEACH CONFERENCE/TOWN CTR | 12 BASS POND                  | 18 OCEAN COURSE GOLF         | 24 THE PRESERVE                   |                           |



Map V.1:  
Town of Kiawah Island  
PARKS, TRAILS, AND OPEN SPACE SYSTEM

ADOPTED 12/07/2010  
ORDINANCE 2010-10

PRINTED 12/07/2010

CHARLESTON CO PLANNING DEPT,  
F:  
MUNICIPAL\_INFO  
Town of Kiawah  
2010 Kiawah Comp Plan Review  
MapUpdates  
KiaParktrails10

THIS MAP HAS BEEN PREPARED FROM DEEDS, PLATS, AND  
OTHER PUBLIC RECORDS  
AND DATA RECORDED TO DATE.  
PROPERTY LINES DEPICTED DO NOT NECESSARILY  
REPRESENT ACTUAL LAND SURVEYS. THIS MAP IS NOT A  
LEGAL DOCUMENT. GRID IS BASED ON THE SOUTH  
CAROLINA STATE PLANE COORDINATES

## Existing Conditions

### Beach and Dune Preservation

Oceanfront beach and dunes serve several important functions. These include storm protection for upland areas, habitat for a variety of plant and animal species (very important for daytime resting cover for bobcats), nesting habitat for sea turtles and recreation for Town residents, property owners and guests.

The beach and dune system is currently in very good shape and is monitored annually by Dr. Tim Kana of Coastal Science and Engineering (CSE). The beach is currently divided into 6 reaches or zones (Figure V.2) and annual erosion and accretion rates are calculated each year. This is done by conducting beach profile monitoring at 61 locations along the beachfront. Between 2012 and 2013, all reaches accreted sand with the exception of the Lagoon and Stono Inlet reaches. These 2 reaches are located on the eastern end of Kiawah and are very dynamic due to their location near the Stono River Inlet. Neither of these reaches is adjacent to any homes or structures.



Figure V.2. Map of Kiawah Island showing the location of the 6 beach reaches used for monitoring and reporting erosion and accretion rates.

### **2006 East End Beach Restoration Project**

In 2006, the Town conducted a large scale Beach Restoration Project on the eastern end of Kiawah Island. This project successfully stopped intensive erosion on the eastern end of the island adjacent to the Ocean Course clubhouse. A total of 550,000 cubic yards of sand was moved onto the beach by land-based equipment. The total project cost was \$3.6 million, the majority of which was paid by the Town of Kiawah Island. Financial contributions to the project also came from the Kiawah Island Golf Resort, Kiawah Island Community Association, as well as the Kiawah Resort Association. The mitigation plan for the project required monitoring of habitat changes (including ground elevation surveys and aerial orthophotography) and periodic piping plover surveys of the project area through 2012.

### **2015 East End Beach Restoration Project**

The eastern end of Kiawah Island experienced severe erosion during 2014-2015, mainly due the presence of a tidal inlet located parallel to the beach adjacent to the Ocean Course driving range. The Town applied for federal and state permits to close the tidal inlet, excavate a new inlet a half-mile to the east, and renourished portions of the eroded areas in May of 2014. The restoration to take place in May of 2015 and moved 100,000 cubic yards of sand. Mitigation requirements for this project are similar to the 2006 project and involve macroinvertebrate monitoring, piping plover surveys, sea turtle nest monitoring, and aerial photography. The total cost of the project including follow up monitoring was \$1 million.

### **Baseline and Setback Lines**

The South Carolina Office of Coastal Resource Management as required in the 1990 Beach Management Act establishes baseline and setback lines. No new development is allowed seaward of the setback line and existing structures located in these areas typically cannot be rebuilt if destroyed. The baseline is set at the “crest of the primary dune” for most areas. Setback lines are drawn 20 feet landward of the baseline for stable and accreting beaches. In erosional areas, the setback line is located landward of the baseline a distance equal to 40 times the annual long term erosion rate.

The baseline and setback lines for Kiawah Island were created in July 1991 and must be revised every 8-10 years. Kiawah’s lines were revised in September 1999 and again in October 2009. At this time, there are no homes or structures seaward of the setback line.

### **Critical Habitat Areas**

In October 2009, Town Council designated both ends of Kiawah’s beach as critical habitat. The critical habitat designation prohibits pets from entering these areas at any time. Both areas provide vital habitat for a variety of

shorebirds, including: piping plovers, Wilson's plovers, American oystercatchers, least terns, Black skimmers, and red knots. An interactive map of these areas, including all beach pet restrictions, can be found on the following web page: <http://www.wildlifeatkiawah.com/dogleash.html>.

### **Maritime Forest Preservation**

The extensive maritime forest and understory serve to enhance Kiawah's natural beauty and shelter a diversity of wildlife. As Island development progresses, careful attention and planning must be given to preserving and maintaining maritime forest, understory, and the quality of the Island's lakes and ponds. Data obtained from wildlife research and monitoring efforts should be used to help plan future developments to minimize impacts to native wildlife species.

### **Invasive Plant Control**

Invasive exotic plants species can cause considerable damage to native ecosystems. On Kiawah Island, the Chinese Tallow Tree has emerged as a significant threat to freshwater wetland areas as well as other habitat types. The Town of Kiawah Island began a Tallow Tree Control Program in 2013. A contractor was hired to kill Tallow Trees in specific areas using herbicides. During 2013, 130 acres as well as all leisure trail and road right-of-ways were treated and an additional 240 acres were treated in 2014. Follow up treatments will be necessary in the future to prevent Tallow Trees from recolonizing these areas.



### **Wildlife Management on Kiawah Island**

An extensive environmental inventory of Kiawah Island was conducted in 1975. This study examined all portions of Kiawah, "pre-development," and provides good baseline documentation for use in tracking changes as a result of development. Since 1990, there has been a committee of citizens and experts that has been at the forefront of managing and surveying the island's wildlife species. From 1990-1994, the Wildlife and Fisheries Committee had responsibility. In 1994, this responsibility was taken over by the Town's Wildlife Committee, renamed in 2003 to the Environmental Committee.

In September 2000, the Town hired a full-time wildlife biologist to oversee all wildlife management and research activities on the island. In addition, an assistant wildlife biologist position was created and filled in August 2008 to help with and expand existing wildlife research and monitoring efforts.

Surveys of wildlife abundance have been conducted since 1990, although most surveys were initiated in 1996. The Town, with support from the Kiawah Conservancy, has conducted five (5) major wildlife research projects to better understand the island's native wildlife species.

## Wildlife Research on Kiawah

### Deer Ecology Study (1996-1998)

This study was conducted as part of a Master of Science (MS) project at the University of Georgia (UGA). James D. Jordan working under Dr. Robert J. Warren at UGA conducted the project. The project was designed mainly to provide a baseline ecological assessment of deer and bobcat populations on the island.



### Results and recommendations

- Deer are very abundant on Kiawah Island (100 deer per square mile)
- Deer-vehicle collision rates are high on Kiawah Island (50 or more per year)
- Bobcats serve as the primary natural predator on deer
- Bobcats are more abundant in undeveloped areas of Kiawah

### Fertility Control Study (1999-2002)

This study was conducted by James D. Jordan working as a consultant for the Town of Kiawah Island, with support from Dr. Robert J. Warren at UGA. The project was designed to test the efficacy of a fertility control drug (prostaglandin) in controlling deer numbers within the central portion of Kiawah Island.

### Results and recommendations

- Fertility control was effective initially and reduced fawn numbers by an average of 50% each year compared to the control area
- Fertility control is not feasible long term because deer quickly learn to avoid being treated
- Fertility control was not necessary based on increasing bobcat predation rates on deer fawns which provided a better, more natural control of rising deer numbers

- Future research should focus on bobcats and their role in controlling deer numbers

### **Bobcat Ecology Study (2000-2001)**

This study was conducted as part of a Master of Science (MS) project at the University of Georgia (UGA). The project was conducted by John C. Griffin working under Dr. Robert J. Warren at UGA and James D. Jordan (Town of Kiawah Island biologist). The project was designed mainly to provide a more in depth look at the bobcat population on the island. Twelve bobcats were captured and fitted with very high frequency collars and tracked for 1 year to determine home range size and general habitat requirements.



### **Results and recommendations**

- Bobcats in developed areas exerted greater movements and higher mortality rates than bobcats in less developed areas
- Bobcats in developed areas had home ranges that were almost twice the size of bobcats in less developed areas
- Bobcats feed primarily on rodents but deer are an important component of their diet
- Future research should look at predation rates on deer fawns

### **Predator-Prey Ecology Study (2002-2005)**

This study was conducted as part of a Doctorate project at the University of Georgia (UGA). The project was conducted by Shane B. Roberts working under Dr. Robert J. Warren at UGA and James D. Jordan (Town of Kiawah Island biologist). The project was designed to determine predation rates on deer fawns (2002-2005) and to replicate the 2000 Bobcat Ecology Study with the addition of gray foxes (2004-2005). A total of 124 fawns were fitted with very high frequency collars and monitored between 2002 and 2005. In addition, 16 bobcats and 5 gray foxes were fitted with very high frequency collars and monitored for 1 year.

### **Results and recommendations**

- Bobcats are the most important predator of deer fawns on Kiawah, responsible for killing 70 of 124 fawns monitored during the study (56% predation rate)
- Bobcat population has low mortality rate
- Bobcat reproduction rate is high
- Gray fox population has a high mortality rate (40%)

- Future research should focus on maintaining bobcat numbers

### **Bobcat GPS Study (2007-2015)**

Primarily the Town's wildlife staff conducted this study, with support from the Kiawah Conservancy. The project was designed primarily to determine fine-scale habitat use by bobcats on Kiawah using GPS collars. These collars provide much more accurate locations and allow Town biologists to collect many more locations than conventional very high frequency studies. A total of 64 bobcats (5 in 2007, 8 in 2008, 10 in 2009, 6 in 2010, 8 in 2011, 9 in 2012, 6 in 2013, 6 in 2014, and 6 in 2015) have been captured and fitted with GPS collars during this project. More than 75,000 individual locations have been obtained during this study. Data was also used to prepare a detailed Bobcat Management Plan for the island, which includes the designation of Important Bobcat Areas (IBA) and an action plan to protect and enhance these areas. This document was created in 2008 and updated in 2011 and 2014. The current version can be downloaded here: <http://www.wildlifeatkiawah.com/linked/2014bobcatmanagementplan.pdf>



### **Results and recommendations**

- Bobcats spend the majority of daylight hours in patches of thick cover and do not move very often
- Daytime cover is critical for bobcats and this cover consists primarily of dense scrub-shrub habitat found primarily in the secondary dunes and along marsh edges
- Denning cover is very important for bobcats and bobcats typically seek larger, more secluded patches of undeveloped cover for denning
- Bobcats move throughout developed portions of the island during nighttime hours in search of food and often use road buffers and corridors for travel

### **Wildlife Population Monitoring**

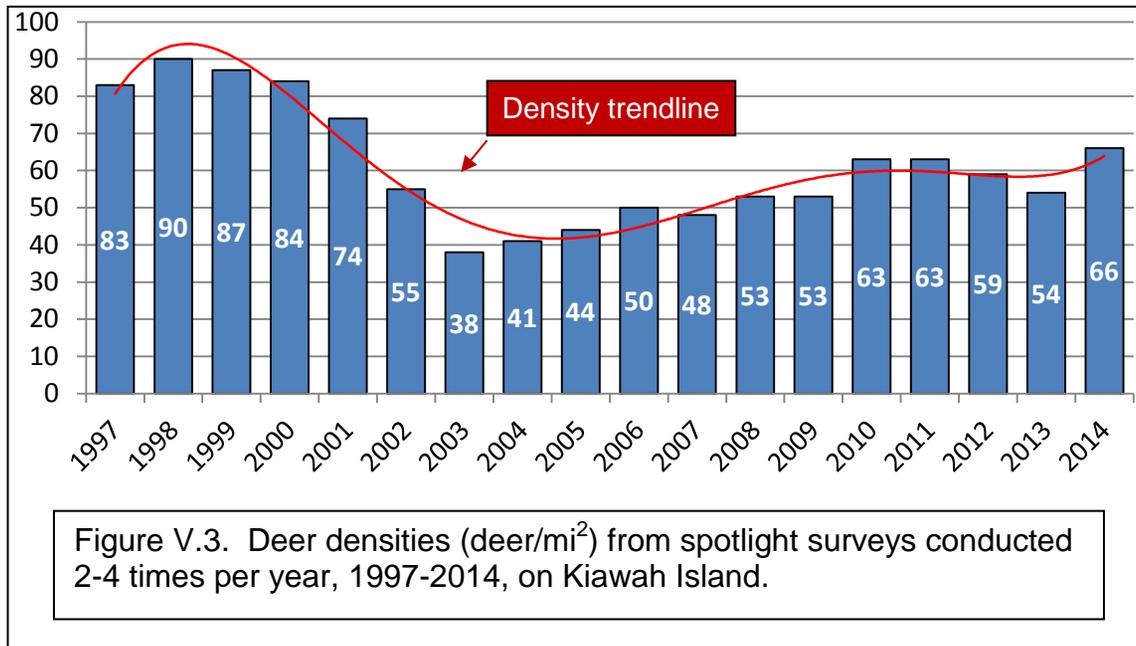
Town biologists conduct a variety of surveys to determine population size and health of many of the wildlife species that live on Kiawah Island. Many of these surveys are conducted in coordination with state and federal agencies as well as other island entities.

### **White-tailed Deer**

In 1975, deer were common on Kiawah Island although no detailed population estimates were obtained. Likely, deer were not as abundant pre-development since the habitat was not ideal. Activities associated with development, such as removal of trees and the creation of openings in the forest, allowed the growth of vegetation preferred by deer. This boosted the carrying capacity of the Island (i.e., the number of deer) that the Island could support. In addition, fertilization and irrigation further increased the quality of the food sources available to deer. The current deer population estimate on Kiawah is 500.



Spotlight surveys were used beginning in 1990 to track changes in abundance of deer on Kiawah. Initial surveys estimated a deer population of 100/square mile. Island residents and volunteers conducted surveys until 1997, when the Town and UGA initiated their first wildlife project. Deer numbers were still stable at 100/square mile at this time, but research showed that deer-vehicle collisions were at very high levels (50 annually). In 1999, the Town initiated a 4-year study to investigate the efficacy of a fertility control drug in reducing deer numbers on the Island. The study was the first of its kind in the nation. It was discontinued in 2002 when the deer population and deer-vehicle incidents had been reduced to acceptable levels. It was concluded that the reduction in deer abundance (Figure V.3) occurred due to the combined effect of fertility control and natural predation by bobcats and alligators.



**Bobcats**

Bobcats were estimated to be “fairly common” in the 1975 study. The onset of development likely had a similar effect on bobcat numbers as it did on deer numbers, although in a delayed fashion. The creation of openings within the existing forest increased the amount of cover and food available for small mammals such as rabbits and rodents. As rabbit, rodent and deer populations increased, bobcat numbers likely increased as well to take advantage of these readily available food sources.

Bobcats play a vital role on Kiawah Island in helping to maintain the current deer population size. A Town/UGA study conducted during 2002-2005 determined that bobcats are capable of killing more than 50% of fawns produced in a given year. This reduces the number of deer that are added to the population each year and allows the island deer herd to remain stable. It is clear that bobcats are the primary reason why deer numbers continue to remain relatively low on Kiawah.

Bobcats typically do not respond well to development and are often pushed out of these types of areas. Kiawah's bobcats are unique in that they have adapted quite well to development and are commonly seen throughout the island. This is due mainly to the large amount of cover that is still presently available on Kiawah, but is typically the limiting factor in other developed communities. Studies have shown that bobcats utilize all parts of Kiawah, but that they are more abundant on the less-developed eastern end of the island. Since bobcats in more developed areas have to travel further in order to find the food and cover that they need to survive, these areas cannot support as many bobcats. Since 2007, the Town, with support from the Kiawah Conservancy, has been conducting a Bobcat GPS study to provide more detailed data to aid in the preservation and protection of the island's bobcat population. Town biologists have also developed a detailed Bobcat Management Plan for the island.

### **Gray Foxes**

The 1975 study described gray foxes as "uncommon." As with bobcats, the onset of development caused an increase in the number of prey species available to gray foxes, which likely led to an increase in fox numbers. Gray foxes play an important role in helping to control rodent populations. In recent years, the gray fox population has fluctuated dramatically. The fluctuation has primarily been caused by periodic outbreaks of canine distemper. Canine distemper is a common wildlife disease that is present in raccoon populations. It is nature's way of controlling overabundant raccoon populations. In most areas, raccoon populations rarely achieve the high numbers required for a distemper outbreak to occur, but outbreaks have taken place on Kiawah. Although distemper is less than 50% fatal to raccoons, it is almost 100% fatal to gray foxes. Gray fox numbers are currently very low on Kiawah.



### **Red Foxes**

The 1975 study did not find any red foxes on Kiawah Island. The only confirmed red fox on Kiawah Island was captured during bobcat trapping efforts in January 2010. It is possible that red fox numbers may increase in the future and since they are not native to South Carolina it will be important to monitor any population increase and any resultant effects on our native wildlife.

### **Coyotes**

The 1975 study did not find any coyotes on Kiawah Island. The first coyote confirmed in the vicinity of Kiawah Island was on January 9, 2008. This coyote was hit and killed by a car on the exterior Kiawah Island Parkway near Cassique. Coyote numbers have increased in recent years, peaking in 2013. Currently, numbers have stabilized and it is estimated there are 6-8 coyotes on the island. GPS collars have been placed on 2 coyotes (an adult female in 2013 and an adult male in 2014). Data from these 2 animals indicates that coyotes spend most their time in undeveloped portions of the island. There have been no negative encounters between coyotes and either humans or pets on Kiawah. It is important to continue to monitor coyote numbers, habitat use, and any effects on endemic wildlife species.



### **Raccoons**

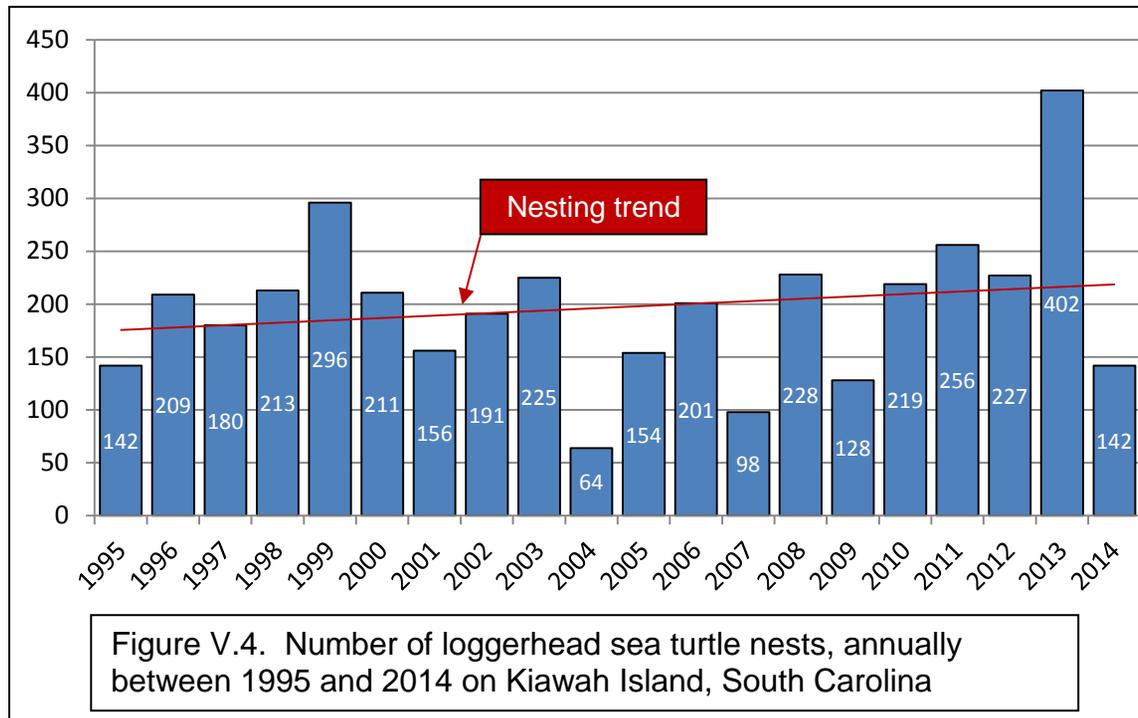
The 1975 study categorized raccoons as “abundant.” Raccoons are very adaptable animals and will live in very close proximity to people. They will readily consume trash, carrion, dog food, birdseed, and almost anything else they can find. Raccoon populations can quickly become overabundant in suburban areas since they do not have any natural predators. Overabundant raccoon populations can be a nuisance as they will readily enter homes, garages and attics in search of food or denning sites and, in doing so, can cause substantial damage to structures. They can also be very detrimental to loggerhead sea turtle nests and beachfront nesting birds. Nature’s way of controlling raccoons is canine distemper. The raccoon population on Kiawah has undergone fluctuations over the last few years, tied to distemper outbreaks, but is currently very high.

### **Loggerhead Sea Turtles**

A program to protect the nests of loggerhead turtles on the beach of Kiawah Island has been in operation since 1973. In the early years, support came from the Kiawah Island Community Association and the Island’s developers, but since 1990 the Town of Kiawah Island has provided funding for the program. The program operates under a permit from the South Carolina Department of Natural Resources (SCDNR); all activities strictly conform to the guidelines set forth by that agency. The program is carried out entirely by volunteers from the community whose numbers have increased each year; approximately 150 property owners and regular visitors participated during 2014. The mission of the Turtle Patrol is

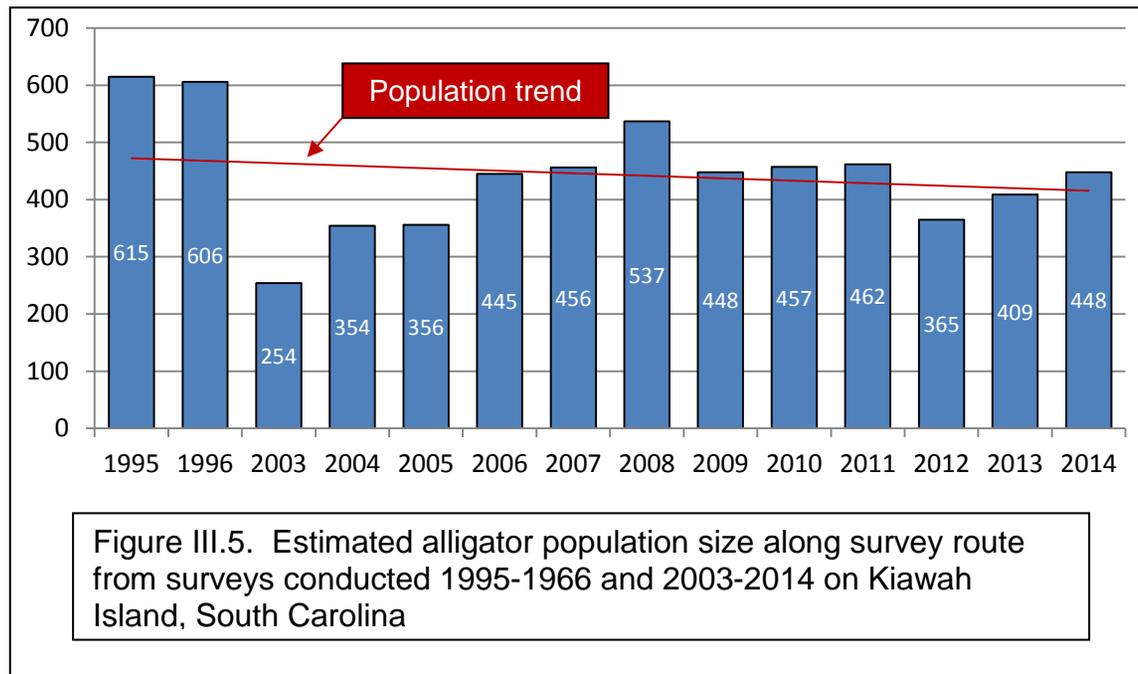
fourfold: protection of the rookery, maintenance of records of activity, education of tourists and residents and the conduct of occasional research projects.

The activities related to protection of the rookery occur during the nesting phase (mid-May to mid-August) when the adult female turtles come ashore to lay nests along the edge of the dunes and the hatching phase when, after an incubation period of 55 to 60 days, the new hatchlings emerge from the nests and make their way to the surf. During both phases, the Patrol's objective is to protect the eggs and the hatchlings from harm by predators and loss due to beach erosion during storms and spring high tides. To this end, nests laid seaward of the expected high tide line are relocated landward on the first morning after being laid. A protective screen is used in some areas to protect nests from predation by raccoons and foxes. Nesting totals for the last 20 years can be found in Figure III.4.



**American alligators**

Kiawah Island is home to a very healthy population of American alligators. Alligators can be seen in almost all of the 183 brackish and freshwater ponds which are interspersed throughout the island. Alligator numbers have been monitored annually since 2003 by Town biologists in conjunction with KICA Lakes Department staff. In addition, surveys were conducted in 1995 and 1996 by Lakes Department staff and SCDNR. (Figure V.5)



Town biologists are also responsible for responding to and removing aggressive alligators from the island under the state’s Nuisance Alligator Program. These are alligators that have lost their fear of humans typically as a result of being fed by people. Biologists typically remove 2-4 alligators per year under this program.

### **Piping Plovers**

Piping plovers are a federally endangered shorebird that uses Kiawah Island for feeding and resting during the fall, winter, and spring. Surveys have been conducted seasonally for plovers since 2006. These surveys were required as mitigation for the 2006 East End Beach Restoration Project and are also required as part the 2015 Beach Project. Piping plover numbers on Kiawah Island vary by season, peaking during the months of March and April as they migrate north to their breeding grounds.



### **Wilson's plovers**

The Wilson's plover is listed as threatened in South Carolina and is declining in numbers because of coastal development, habitat destruction, and disturbance from beachgoers and their pets. Kiawah Island beaches are home to Wilson's plovers year-round but it is a particularly important area for nesting. For several years up to 2014, an independent researcher conducted research on Wilson's Plovers on the beaches around Charleston including Kiawah Island. He trapped plovers and placed a green flag (band) with a unique three-letter code on one leg. The coded flag allows the bird to be identified without it being captured again. The combination of banding and resighting data allows greater understanding of the habitat uses and needs, movements, and survivorship of Wilson's Plovers. In 2015, the Town continued this research and began flagging Wilson's Plovers at the west and east end of Kiawah Island. A priority should be placed on continued monitoring and banding efforts for Wilson's plovers in the future.



### **Red Knots**

Red Knots were listed as a federally threatened species in 2014 based on a long-term population decline. Red knots have one of the longest migrations of any bird, traveling up to 9,300 miles from Tierra del Fuego in southern South America to its Arctic breeding grounds. Kiawah Island is an important stop-over site for large numbers of red knots during the spring so they can rest and refuel as they continue their journey north. Researchers have placed unique alpha-numeric flags on these birds to gather



more information on migration patterns and survival. Town Biologists conduct periodic surveys for red knots on the island and report flag combinations to aid in this research. Because of the importance of Kiawah Island to migrating and wintering red knots, SCDNR and USFWS began a capture and banding program in 2010.

## Bird Banding

Capturing birds and banding them with a unique identifier gives biologists insight into the health and demographics of Kiawah's bird population. Important information on the productivity, survivorship, and movements of many species can be attained through a banding program. The Town of Kiawah has initiated 4 major projects that use banding as the primary tool to study populations of different birds. These projects are discussed in detail below and additional banding information is available on the following web page: <http://www.wildlifeatkiawah.com/birdbanding.html>.

### 1. Fall Migration Banding

Banding is conducted each fall to monitor songbird populations during their migration. Kiawah Island provides important stop-over habitat that migrating birds rely on to rest and refuel before continuing their journey. During our pilot season in 2009, we banded at two sites - one on each end of the island (Captain Sam's Spit and Cougar Island). After evaluating our results, we decided that it would be more effective to concentrate our effort at Captain Sam's Spit, located on the west end of the island. Fall migration banding is currently conducted annually from August 15 to November 30. Between 20-25 mist nets are operated daily (weather permitting) beginning at sunrise and continuing for 5-6 hours. The table below provides detailed results from this effort.

	2009		2010	2011	2012	2013	2014	TOTAL
	Cougar	Captain Sam's						
# of Birds Banded	283	549	910	2263	4725	4529	5086	<b>18345</b>
# of Recaptures	27	85	157	289	885	1144	1312	<b>3899</b>
# of Species	39	41	54	66	89	82	78	<b>115</b>
Effort (net-hours)	258.0	537.0	1000.7	2409.8	7220.8	9566.6	11565.6	<b>32558.5</b>
Capture Rate (birds/100 net-hours)	120.2	118.1	106.6	105.9	77.7	59.3	55.3	<b>68.3</b>
# of Days	8	14	27	57	98	98	103	<b>405</b>

## 2. Winter Banding

Banding is conducted during the winter months to monitor wintering songbirds. A large population of Yellow-Rumped Warblers spends the winter on Kiawah Island which allows a unique opportunity to study many aspects of their wintering ecology. Winter banding is conducted annually at the west end of the island on Captain Sam's Spit. The nets are operated about twice a month from December to March. Data from this effort is presented in the table below.

	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	TOTAL
# of Birds Banded	424	179	212	353	340	263	<b>1771</b>
# of Recaptures	32	68	65	195	141	83	<b>584</b>
# of Species	15	11	18	17	16	20	<b>34</b>
Effort (net-hours)	115.3	210.1	461.5	781.8	510.8	305.6	<b>2385.1</b>
Capture Rate (birds/100 net- hours)	395.7	117.6	60.0	70.1	91.4	113.2	<b>98.7</b>
# of Days	3	6	9	7	5	5	<b>35</b>

## 3. Marsh Sparrow Banding

Three species of coastal "marsh" sparrows winter in the salt marshes of Kiawah Island: Seaside Sparrow, Nelson's Sparrow, and Saltmarsh Sparrow. This group is considered species of high conservation concern due to their specialization of habitat that is considered spatially restricted. This group may be particularly vulnerable to sea-level rise and loss of saltmarsh habitat along their wintering grounds along the southeast United States. Sparrows are captured in mist nets at 10-12 sites around the saltmarshes of Kiawah Island. The nets are deployed to coincide with high tide which concentrates the sparrows into smaller patches of habitat. Each sparrow is identified to species, banded, and a series of morphological measurements are taken. The project began during the winter of 2011-2012 with the objectives of determining habitat requirements, site fidelity, relative abundance, and distribution of the species. The table below provides the number of birds banded each year by species (numbers in parenthesis indicate recaptures of previously banded birds).

	2011-2012	2012-2013	2013-2014	2014-2015	TOTAL
Seaside Sparrow	106	245 (107)	109 (118)	99 (111)	559 (336)
Nelson's Sparrow	115	39 (13)	10 (5)	50 (21)	214 (39)
Saltmarsh Sparrow	64 (1)	24 (28)	28 (10)	46 (30)	162 (69)
Other Species	23	15 (1)	9 (1)	24 (1)	71 (3)
<b>TOTAL</b>	<b>308 (1)</b>	<b>323 (149)</b>	<b>156 (134)</b>	<b>219 (163)</b>	<b>1006 (447)</b>
# of Sessions	21	23	16	24	84

#### 4. Painted Bunting Banding

In 2011, we started intensely trapping and banding Painted Buntings for a long-term project studying their movements, distribution, and site fidelity. The eastern population of Painted Buntings has shown steady, long-term declines over the past several decades. Much of these declines can be attributed to the loss of coastal habitat for development. Painted Buntings readily come to feeders offering white millet and the birds are easily captured in a specially designed cage with a feeder placed inside. Banding occurs from May-August at Kiawah Island resident's homes. The table below provides the number of birds banded each year by species (numbers in parenthesis indicate recaptures of previously banded birds).

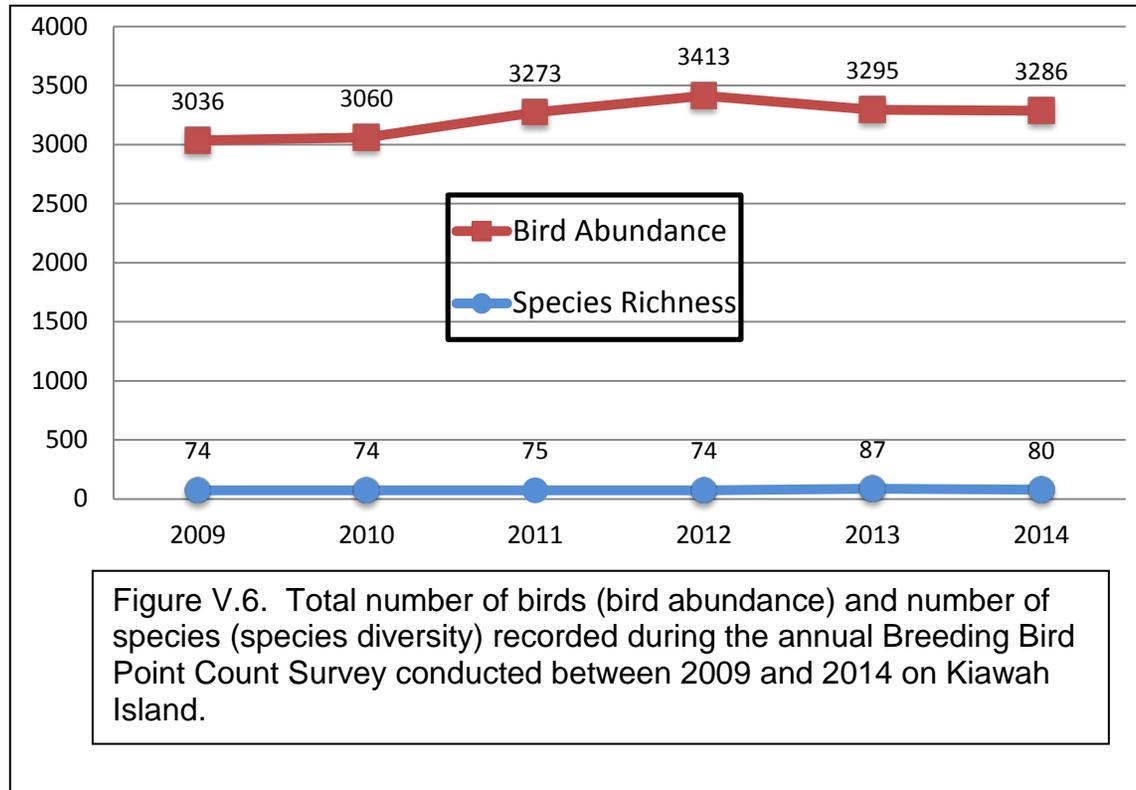


	2011	2012	2013	2014	TOTAL
Painted Bunting	122 (22)	156 (52)	20 (23)	110 (73)	408 (170)
Other Species	115 (1)	71 (1)	24 (1)	47 (1)	257 (4)
<b>TOTAL</b>	<b>237 (23)</b>	<b>227 (53)</b>	<b>44 (24)</b>	<b>157 (74)</b>	<b>665 (174)</b>
# of Sessions	19	32	8	20	79

#### Breeding Bird Point Counts

Point count surveys are conducted annually during late spring (end of May) to inventory and monitor breeding birds on Kiawah Island. The points are located across the island from Captain Sam's Spit to Little Bear Island in all major upland cover types. For logistical convenience, a majority of the points are located on secondary and tertiary roads and trails; however in areas where roads or trails are not present, points are located off-road. The minimum distance between point-count stations is 250 meters in order to reduce the possibility of recording the same bird twice. All individuals heard or

seen within a 5-minute period are recorded. Birds flying over the area are recorded separately from all other birds. The point count survey is divided into 9 separate routes with each route consisting of 15-34 points. One route is conducted per day during the count period with each route beginning at sunrise and ending no later than 11:00am. Each route is conducted in the same order and during the same time period each year. Figure V.6 provides the results of this survey.



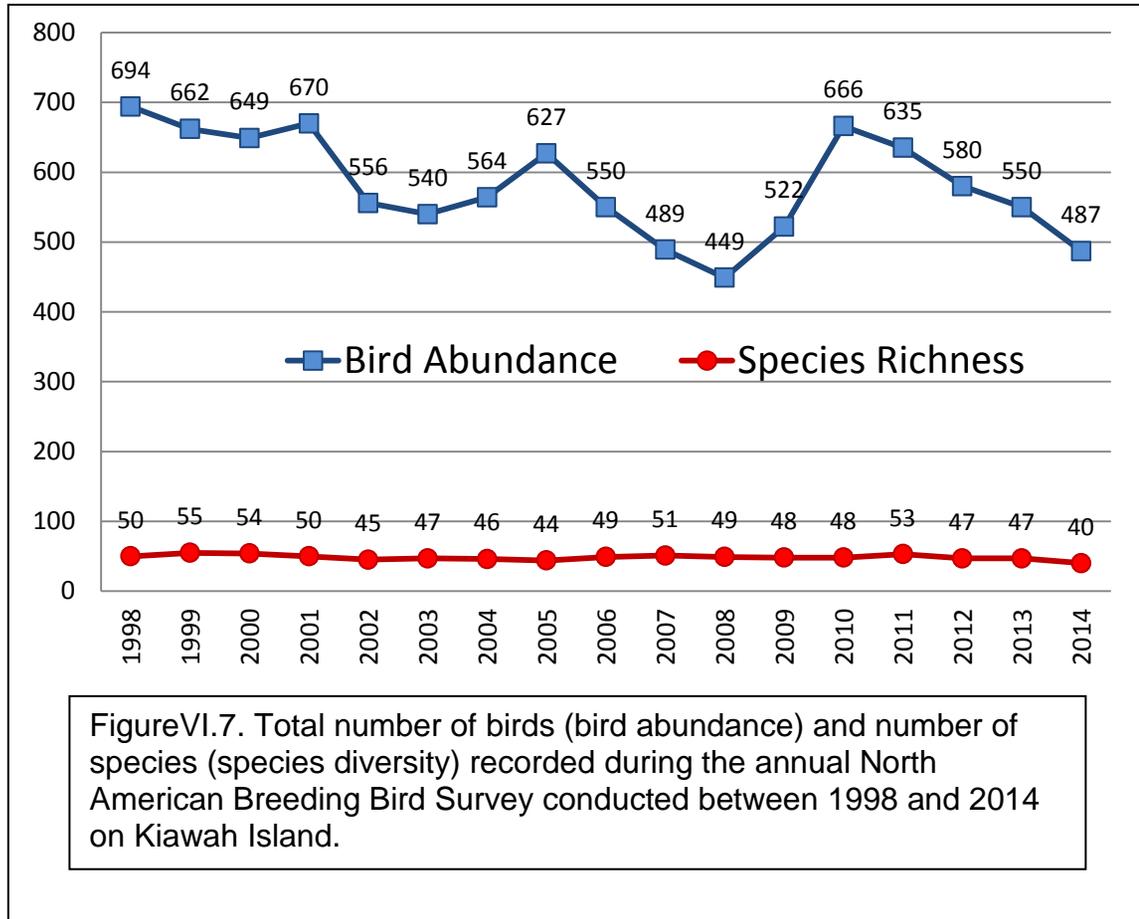
**North American Breeding Bird Survey**

The annual North American Breeding Bird Survey headed up by the United States Geological Survey (USGS) has been conducted on Kiawah Island since 1998. The survey consists of 50 stops during which all birds seen or heard during a 3-

minute period are recorded. Data from this survey is submitted to USGS and is used to monitor trends and changes in bird populations at a landscape level. Results are available in Figure III.7 on the next page.

### **Nest Box Monitoring Program**

In 2011, the Town took over managing the Kiawah Island Nest Box Monitoring Program from the Kiawah Island Naturalist Group who had been managing the program since its inception in 1997. A dedicated group of volunteers monitors a series of nest boxes on the grounds all five golf courses, Night Heron Park, the Sanctuary, and the Preserve. The boxes provide an artificial nesting cavity for bluebirds and other cavity nesting birds. The boxes are primarily occupied by Eastern Bluebirds and Carolina Chickadees, although Tufted Titmice and Carolina Wrens will occasionally use them as well. Approximately 216 boxes are monitored once per week from March through August by the volunteers. Data collected at the nest includes: species, date, number of eggs laid, number of young hatched, and number of young fledged. Data resulting from this program is used to track the status and trends in the reproductive biology of the birds using the nest boxes. During 2013, these nest boxes produced 459 Eastern Bluebird fledglings, 234 Carolina Chickadees, and 8 Carolina Wrens. Figure V.7 below depicts this information.



**Beach bird nest monitoring**

Least terns, Wilson’s plovers, American oystercatchers, and Black skimmers typically nest along Kiawah’s beachfront. Town Biologists monitoring nesting colonies of birds and initiate nest monitoring and protection efforts as necessary.

Least terns, a threatened species in South Carolina, nested regularly on Kiawah Island from the 1970's through the early 1990's but then disappeared. In 2006, least terns returned to Kiawah Island with a small nesting colony on the east end of the island. Unfortunately the colony failed when all nests were overwashed but they have continued to nest with varying degrees of success each year since 2006.

Nesting areas are closed to all traffic (people and dogs) during the nesting season (April-September). It is vitally important that these birds are given the best possible chance to successfully raise young.

### **Bald Eagle Nesting**

An eagle nest was initiated on Kiawah Island in 2000 and successfully produced eaglets during 2002 and 2003. This was the first eagle nest recorded on Kiawah in over 20 years. This nest was destroyed during a hurricane in 2004 and subsequently relocated to a group of hammock islands located in the marsh near the Cassique golf course. The nest is no longer within the municipal limits of the Town of Kiawah Island. During 2014-2015, there were 2 active eagle nests on Kiawah Island. One nest was located adjacent to the Kiawah Island Parkway near the first Fire Station and the second nest was located on a hammock island north of Willet Pond.

## **Education and public outreach**

### **TOKI Wildlife Website**

A new standalone wildlife website was created by Town biologists in August 2009 ([www.wildlifeatkiawah.com](http://www.wildlifeatkiawah.com)). The website contains a wealth of information on Kiawah's wildlife inhabitants, including videos and slideshows. There are also interactive maps showing all of the GPS locations for bobcats between 2009 and 2015, the best places to view wildlife, beach bird nesting areas, dog-leash restrictions, and much more. Use of the website has remained high since inception and averages approximately 2,500 visits per month. Visits to the site are highest during the summer months.

The table below shows the top 10 pages visited during June and July 2014 and the number of visits during that same time period.

Rank	Page Name	Visits
1	Home	2,990
2	American Alligator	1,428
3	Where to see wildlife	1,050
4	Fish	767
5	Meet our Wildlife	717
6	Fishing Location Map	577
7	2014 Bobcats	565
8	Loggerhead Turtles	561
9	Pet Restrictions Map	487
10	Bobcat GPS Research	442

### **Bird Banding Blog**

A blog (<http://kiawahislandbanding.blogspot.com>) was created in 2012 to provide daily updates on bird banding activities on Kiawah Island. This is a popular site and, as of April 2015, has been visited 53,123 times.

## **Conservation on Kiawah Island**

### **Kiawah Conservancy**

The Kiawah Conservancy is a chartered non-profit, Section 501(c)(3), grassroots organization that was established by Island residents in 1997, to preserve the natural habitat of Kiawah Island. The Conservancy has the capability to be a holder of land and conservation easements, and as such, it acts as a land trust. In this regard, the Kiawah Conservancy is a member of the Land Trust Alliance and has adopted and subscribes to the Land Trust Standards and Practices as a guide for its organization and operations. Since its inception in 1997, the Kiawah Conservancy has preserved 28 properties that total over 345 acres of pristine barrier island habitat. The Kiawah Conservancy benefits the community by enhancing the quality of life of residents and wildlife alike; fostering a long-term vision for land and habitat protection; providing a credible voice for land conservation on Kiawah Island; encouraging the preservation of natural habitat for native and migrating wildlife species and finally by making a positive impact on the socio-economic aspects of life for everyone in the area.

## **Publications**

### **Brochures**

Up until 2012, The Town of Kiawah Island Environmental Committee produced 12 different wildlife brochures that were made available free of charge to the public at the Nature Center at Night Heron Park and at the Town Hall Visitors Center. The list of brochures is as follows: American alligator, Bird Life, Birds of Prey, Bobcat, Crabs, Lakes and Ponds, Loggerhead turtles, other mammals, Seashore and river, Shorebirds, Snakes, and White-tailed deer. The brochures are no longer printed for distribution but are available for download on the TOKI wildlife website. <http://www.wildlifeatkiawah.com/brochures.html>

### **The Nature of Kiawah Field Guide**

This booklet was created in 2012 to provide a single publication provided all of the information contained in the brochures mentioned above, as well as a variety of additional information and details on island wildlife. This guide is available at Town Hall and at the Nature Center at Night Heron Park. It can also be downloaded from the TOKI wildlife website. <http://www.wildlifeatkiawah.com/linked/naturekiawah.pdf>

### **Parks and Recreation**

Kiawah Island has more than ten miles of beaches, a 20 mile leisure trail system maintained by KICA, 2 maintained by the Town, five championship golf courses, an extensive open space and trail system, and many parks. The beaches, parks, golf courses and open spaces are key attractions for this community. They meet important community needs for recreation and preserve natural areas.

Kiawah has an extensive pond system (owned and maintained by KICA) which is an important component of the Island's ecology. The pond system includes 117 ponds that encompass approximately 365 acres of water surface. These water bodies range from nearly fresh (>0.5 ppt) in the center of the Island to close to sea strength (30 ppt) on the edges of the Island. The system supports at least 30 species of fish, 3 species of bivalves, 6 species of crustaceans, 4 species of reptiles, and a host of smaller invertebrates. It also supports numerous avian species and is an important asset for migratory waterfowl.

Since 1994, there have been significant park and recreation facility additions. A private golf course and clubhouse (the Kiawah Island Club) was built at Bass Pond. In The Preserve at Cinder Creek, a park with trails, community pavilion, boat and crabbing docks, canoe storage and observation deck were added. In addition, a boat ramp with boat trailer parking was added at Eagle Point on the eastern end of The Preserve. Community piers were added at Egret Pond, Falcon Point Road and Salt Cedar Lane. A park with amenities was recently added at Ocean Park (Cougar Island). Also, most of Little Bear Island (145 acres of the 193 acres) is accessible for passive recreation and is protected by a conservation easement.

The table below lists the existing park sites on Kiawah Island. Park sites are those which provide for a variety of passive recreational activities, from nature observation to field sports. The numbers coincide with the numbers shown on Map V.1 entitled, "Kiawah Island Parks, Trails, and Open Space System."

Beach (1)
Beachwalker Park (2)
Canvasback Minipark (3)
Ocean Park (4)
Cougar Point Golf (5)
East Beach Conference Center (6)
East Beach Tennis (7)
Falcon Point (8)
Glossy Ibis Minipark (9)
Ibis Pond (10)
Beach Club (private) (11)
Bass Pond (12)
Little Bear Island (13)
Marsh Island Park (14)
Marsh View Tower Overlook (15)
Mingo Point (16)
Night Heron Park (17)
Ocean Course Golf (18)
Ocean Marsh Road Beach Parking (19)

Ocean Oaks (Beach Parking Lot) (21)
Osprey Point Golf (22)
Property Owner's Recreation Center (23)
Rhett's Bluff (24)
The Preserve (25)
Turtle Point Golf (26)
West Beach Tennis (27)
Willet Pond (28)
River Course Golf – (Private) (29)

Amenities available at the recreational sites listed above include benches, bike rental, deck areas, boat docks, picnic areas, pools, river access, and fitness and leisure trails.

The management of dock placement is an important issue for the Town. The Town adopted the Dock Key Locations Ordinance 2003-5. The purpose of this ordinance is to control location and installation of all docks, floating and fixed so as to prevent their uncontrolled proliferation along the Island's river and stream frontage. The ordinance includes dock design criteria as well as tables and a map depicting where on the Island docks are permissible, by type.

**Needs Assessments:**

- As the Town is developed, an increasing amount of the Island's natural habitat is taken away; and
- Development also removes the connectivity between natural habitats, putting stress on the Island's wildlife to find alternate routes to move around the Island; and
- Continued monitoring and research of native wildlife species and their response to development will be vital to protecting these species; and
- Research and monitoring data should be taken into account when planning new developments or other projects; and

- Encourage property owners and island entities to eliminate existing invasive plant species and discourage future use of these plants; and
- As one of the Island's key natural resources, the beach and dunes must be maintained and protected.

## **Goals**

The following goals related to the Island's natural resources shall be considered when evaluating proposals for change:

- 1. Complete the Island's development in a way that maintains the Island's environmental integrity and natural beauty and is consistent with the Vision of the Town.**
- 2. Develop and maintain an environmentally sustainable system of parks and open spaces which provide access to the beach and river; preserves, protects and enhances natural resources; and meets the diverse recreational needs of the Town's population.**
- 3. Maintain the existing quality of the natural resources on Kiawah Island, as well as the waters and marine environment surrounding the Island.**
- 4. Maintain and expand public education and outreach programs.**



## **CULTURAL RESOURCES ELEMENT**



Kiawah Island was named for the Kiawah Indians, who inhabited the island before 1670 and the arrival of the English in South Carolina. In 1717, John Stanyarne, a wealthy planter who lived on Johns Island, bought half of Kiawah Island and in 1737, bought the remaining half that had been previously owned by Captain Davis. In 1950, the island was sold to C. C. Royal, a lumberman from Augusta, Georgia. In 1954, Royal began development of a small oceanfront community along Eugenia Avenue, named after his wife Eugenia Mae Royal. C. C. Royal passed away in 1964, and in 1974, his heirs sold the island to the Kuwaiti Investment Company. The Kuwaiti Investment Company undertook to develop Kiawah Island as a world-class resort and began efforts to plan, build, and manage the resort. In 1976, the Kiawah Island Resort opened, with the Kiawah Island Inn-including two swimming pools, two restaurants and a bar-and the Marsh Point (subsequently renamed Cougar Point) golf course

designed by Gary Player. Soon after, the Kiawah Island Company began to sell real estate.

Kiawah Island's rich history enriches the present-day Town. The Cultural Resources Element is an important component of this Plan and considers historic buildings and structures; commercial districts; residential districts; unique, natural, or scenic resources; and archaeological and other cultural resources.

### **National Register of Historic Places**

Listing in the National Register of Historic Places helps to preserve historic and archaeological resources. Two sites on Kiawah Island are listed in the National Register. The Arnoldus Vanderhorst House was placed in the Register in 1973 and the Bass Pond Site was placed in the Register in 1979.

What is now known as the "Vanderhorst House" was the second plantation house built by Arnoldus Vanderhorst II and his wife Elizabeth on the island. The first was destroyed by the British in 1780, leading to the second, by far the oldest structure on Kiawah Island, being built in 1801.



The Bass Pond site, located near what is now Rhett's Bluff, was placed on the National Register of Historic Places because the site is a prehistoric "shell midden area." A midden is a mound of domestic waste/refuse containing shells, animal bone, and cultural materials marking the site of a prehistoric settlement. The Bass Pond site is the only midden not being affected by natural erosion and its significance to understanding human cultural processes during the Formative Period cannot be overstated.

### Natural Resources and Scenic Areas

The Town of Kiawah Island takes a very active role in managing and protecting the natural resources and wildlife within its boundaries. The Island possesses a variety of scenic resources that are scattered throughout the Island, and these resources, especially the beach, have led, in part, to the many accolades recently received by the Town, including being named as one of the "Top 10 beaches" and the "Number One Island in America" and "Number 2 Island in the World" by *Conde Nast Traveler*. Other natural resources found on the Island include the saltwater marshes, Kiawah River, lakes and ponds. Programming is offered by the Kiawah Island Golf Resort's Recreation Department and includes canoeing and kayak trips, alligator expeditions and nature lectures and exhibits. The Island's in-depth wildlife programs are discussed in more detail in the Natural Resources Element of this plan.



### Commercial Districts

The commercial districts on the island are inclusive of resort facilities, restaurants and conference facilities. These facilities complement the Town's community and provide for cultural events, recreation, tourist attractions and meeting space accessible to the entire community. Freshfields, annexed in 2013, is a unique town-center mix of shopping, dining, service establishments and lodging in a relaxed outdoor environment located at the roundabout.

### Recreational Activities

Whether you prefer biking, kayaking, fishing, tennis, or golfing, Kiawah Island offers a number of recreational outlets for residents and visitors to observe and experience the cultural areas, as well as natural and scenic areas throughout the Town. With over 17 miles of bike paths, two tennis centers, and fishing docks throughout the Island, Kiawah has something for everyone to enjoy. The Kiawah Island Community Association (KICA) also offers a number of recreational



outlets for Town residents. KICA owns and maintains hundreds of acres of property for active and passive recreation, including crabbing and boating docks, miles of leisure trails, and numerous observation towers. It also provides three primary amenity facilities for community members to enjoy. These include The Sandcastle (explained below), Cinder Creek, and Rhett's Bluff. Cinder Creek provides residents with kayak and canoe storage, restrooms, two docks, and a pavilion for parties and other gatherings. Rhett's Bluff is a 6-acre multi-purpose facility on the Kiawah River which provides the residents of Kiawah with a pavilion for parties and other gatherings, restroom facilities, and an extensive dock system.

*Cultural Resources Element - VI*

## Tennis

The Roy Barth Tennis Center was named the #1 Tennis Resort in the world for 2015 by Tennis Resorts Online. This honor is among many awarded over the years to the Kiawah Island Resort. The Barth Center and its companion facility at West Beach feature 24 state-of-the-art tennis courts along with two fully-staffed pro shops for guests. The Kiawah Island Club also maintains six courts for its members along with a professional tennis staff offering a variety of programs for players at every skill level.



## History of Golf on Kiawah Island

Charleston is widely recognized as having a place in history for golf in America and this heritage continues on Kiawah Island. Golf on Kiawah Island consists of four resort courses and one private course of the Kiawah Island Club.

### Resort Courses on Kiawah Island

#### Ocean Course

The Ocean Course's 7,356 yards is located on the eastern-most end of Kiawah Island and was built in 1991 by Pete Dye. The course has more seaside holes than any other course in the Northern Hemisphere, 10 holes along the Atlantic Ocean with the other 8 holes running parallel to those. Dye's wife, Alice, suggested raising the entire course to allow players unobstructed views of Kiawah's beautiful Atlantic coastline from every hole. This improved the views; however, the course became substantially more demanding as it also exposed it to the area's brisk and unpredictable sea breezes. Tournaments on the Ocean Course include the 1991 Ryder Cup, 1997 and 2003





World Cups, 2001 UBS Cup, 2005 PGA Professional National Championship, 2007 Senior PGA and most recently, the 2012 PGA Championship – the first of golf's four majors to be played in South Carolina. Awards and accolades include *Golf Digest* #3 "Public Golf Course in U.S.", #20 among "America's Greatest Courses" and "America's Toughest Resort Course." The course is one of only 17 "5-star" courses in North America according to *Golf Digest's* "Best Places to Play" reader's poll. *GOLF* Magazine has rated it #4 in its "Top 100 Courses You Can Play" list. It was also named a "Certified Audubon Cooperative Sanctuary" by the Audubon Sanctuary System and the "Golf Course of the Year" by the National Golf Course Owners Association. The Ocean Course will also host the 2021 PGA Championship.

### **Turtle Point**

Turtle Point features a low profile design that takes advantage of the island's natural contours and dune ridges. Designed by Jack Nicklaus in 1981, the course delivers a true test for strategy and accuracy. Turtle Point Golf Club is one of Jack Nicklaus's early designs featuring narrow fairway corridors, small greens, strategically placed water hazards and three breathtaking holes parallel to the Atlantic Ocean. Tournaments include the 1990 PGA Cup Matches, 2006 Carolinas' Amateur, Carolinas' PGA and South Carolina Amateur. Awards and accolades include being rated 48th on *Golf Digest's* 100 Greatest Public Golf Course List and rated "4 Stars" in the 2006 *Golf Digest* "Best Places to Play" golf course guidebook.



### **Osprey Point**

Osprey Point is a beautiful lowcountry gem built by Tom Fazio in 1988. Fazio used a superb natural canvas to create a masterpiece in playability and variety set around four large, natural lakes, fingers of saltwater marsh, and dense maritime forests of live oaks, pines, palmettos and magnolias. Awards and accolades include 4 stars in *Golf Digest's* "Best Places to Play" reader's poll and 10th in *Golf for Women* magazine's list of the "50 Best Golf Courses for Women."

### **Cougar Point**

Originally named Marsh Point, Cougar Point was redesigned by Gary Player in 1996. It features a blend of short and long par-4s, risk/reward par-5s and scenic and challenging par-3s. One of the most dramatic vistas on the island is in the middle of Cougar Point's front nine, along the Kiawah River. Cougar Point is a very memorable and playable course. Members and guests come back to play again and again. Awards and accolades include "Golf Course of The Year" by the South Carolina Golf Course Owners Association and 4 stars in *Golf Digest's* "Best Places to Play" reader's poll.



### **Private Course on Kiawah Island**

One of Golf Week's Top 100 residential courses in the United States - The River Course - is reserved for Kiawah Island Club Members and their guests.

### **The River Course**

The Tom Fazio designed course built in 1995 includes eight holes playing along the Kiawah River and Bass Pond with the other fairways and greens following along marsh savannas, ponds and oak-filled forests. The River Course which extends a mile or so along the Kiawah River was the location of the first English settlement on the Island in the 18th century. In 1999, it was fully certified as an Audubon Cooperative Sanctuary. The River Course's accolades include hosting the 2000 and 2001 Kiawah Children's Hospital Classic, *Golf Digest's* 1996 top 5 new private courses in the nation and listed on America's Best Top 100 Residential Courses by *Golfweek* magazine in 2012.

### **Community Activities**

The Town of Kiawah Island offers a wide variety of community activities. The Kiawah Island Community Association's homeowner's facility, the Sandcastle, is a gathering place for residents for fellowship, classes, and exercise. The Sandcastle can accommodate formal and informal meetings, receptions, community clubs and various special events. Amenities include a 24-hour fitness center and daytime fitness classes, banquet rooms, a lending library, an Olympic size pool, a children's pool, the Castle Grille and Sandbar, lounging areas, beach access, outdoor showers and a scenic veranda. The Sandcastle also provides a number of different programs throughout the year including annual events such as Celebrate Kiawah (April), Art and Artisan Showcase (spring and fall), the Landscape Symposium (spring), and Dogtoberfest (October).



The Kiawah Island Golf Resort also provides a variety of events throughout the calendar year. The Resort offers several events within five specific areas, including; holiday activities and festivals; summer programming; cultural events; environmental outreach and education; and sporting events. Some events offered by the Kiawah Island Golf Resort in 2015 include a Family Boat Building Challenge, Family Beach Cornhole Tournament, and the Annual Turkey Day Shootout.

Freshfields Retail Village also holds a number of weekly events throughout the year. Events include wine tastings, a variety of free concerts, festivals, and a starlight cinema perfect for residents of any age.



The diverse events, concerts, presentations and activities hosted throughout the year provide island residents and visitors with 365 days of cultural programming regardless of their families demographic and needs.

### **Arts and Cultural Events Council**

The Arts Council was created by the Town in 2004 to foster and enhance community appreciation and involvement in the visual and performing arts within the Town of Kiawah Island and its environs by providing a diversity of planned and budgeted programming, services, support, and cultural education. The Council is comprised of 5-9 members chaired by a Town Council representative. The Arts Council began with a budget of \$25,000 and a program of 12 events. Chamber music has held a strong interest consistently over the years. The interest in other genres has grown to include symphonic, ballet, jazz, blues, theatre, art themed films, dance band, piano bar, and musical theater.

The Council strives to provide a wide variety of musical styles. The trend of interests and the opportunities provided by artists ultimately define the programming. As the years have passed, the popularity and awareness of the Town's arts program has increased and, therefore, the budget. Performances are offered to the community at large free with the exception of the occasional charge for a particular event. The Town does not have a performing arts center. Two area churches (Holy Spirit Catholic Church and Church of Our Saviour) two Resort venues (Turtle Point Clubhouse and East Beach Conference Center), the KICA Sandcastle, the Kiawah Island River Club, and the Seabrook Island House Club are used as venues. Promotion of events includes posters, email marketing and word of mouth with no budget for advertising.

In 2014 the Arts Council was expanded to become the Arts & Cultural Events Council with two budgets. The Arts Council remains the same with a budget of \$118,000 and 28-30 events annually. The Arts & Cultural Events Council for the 2014/2015 season hosted 39 events to an audience of approximately 17,000 people.

The Cultural Events Fund was created with a separate budget from Local, County, and Hospitality Tax Funds to bring cultural events. The events presented so far are still the larger arts events, but could include other cultural events. Seven years ago a collaboration developed with the Cultural Affairs Office for the City of Charleston to bring a Piccolo Spoleto Preview to the Town prior to the festival with the release of the program as a cultural outreach. That has expanded to bring a second event during the festival held within the Town. The budget for the CEF is \$182,000.



Other events and activities are provided by the Kiawah Island Resort, Kiawah Island Community Association, Freshfields Village, Kiawah Island Club, and the Conservancy. Figure IV.1 below represents the types of genres provided from 2004 to 2015.

Figure IV.1 Arts & Cultural Events

Genre	Percentage
Chamber	19%
Jazz	15%
Blues	5%
Vocal	7%
Piano Bar	9%
Art Film	10%
Orchestra	6%
Dance	5%
Other	24%

Source: Town of Kiawah Island Arts & Cultural Events Council, 2004-2015

### Community Outreach

The Town of Kiawah Island has a culture of generosity and volunteerism that extends beyond the geographical boundaries of the Town. Many of the residents volunteer at area schools on Johns Island in various capacities including mentors, tutors, supply providers, and coaches. Residents also volunteer in a wide-range of external agencies including the Charleston Symphony Orchestra, Gibbes Museum, Sea Island Habitat for Humanity, and the South Carolina Aquarium. In 2012, the Kiawah Island Community Association (KICA) began the “Kiawah Cares” Initiative, which is a community partnership program that partners with nonprofits from Johns Island and Wadmalaw Island to celebrate the community, as well as work together to address social issues on the islands such as financial and educational disparities. The mission of Kiawah Cares is to create community partnerships and contribute to improving the overall quality of life on the Sea Islands. So far, this initiative has led to several hundred thousand dollars of private donations by Kiawah homeowners to program partners. Based on the success this initiative has had, steps have been taken to establish a separate 501(c)3 foundation to facilitate additional giving opportunities. In 2014, Kiawah Cares along with the support from Kiawah Island property owners were able to make these things happen:

- Gave school children their first exposure to arts and cultural, via theater, photography and trop sponsorships;
- Adopted 75 Sea Island students, providing them with school uniforms, supplies and weekend snack-packs;



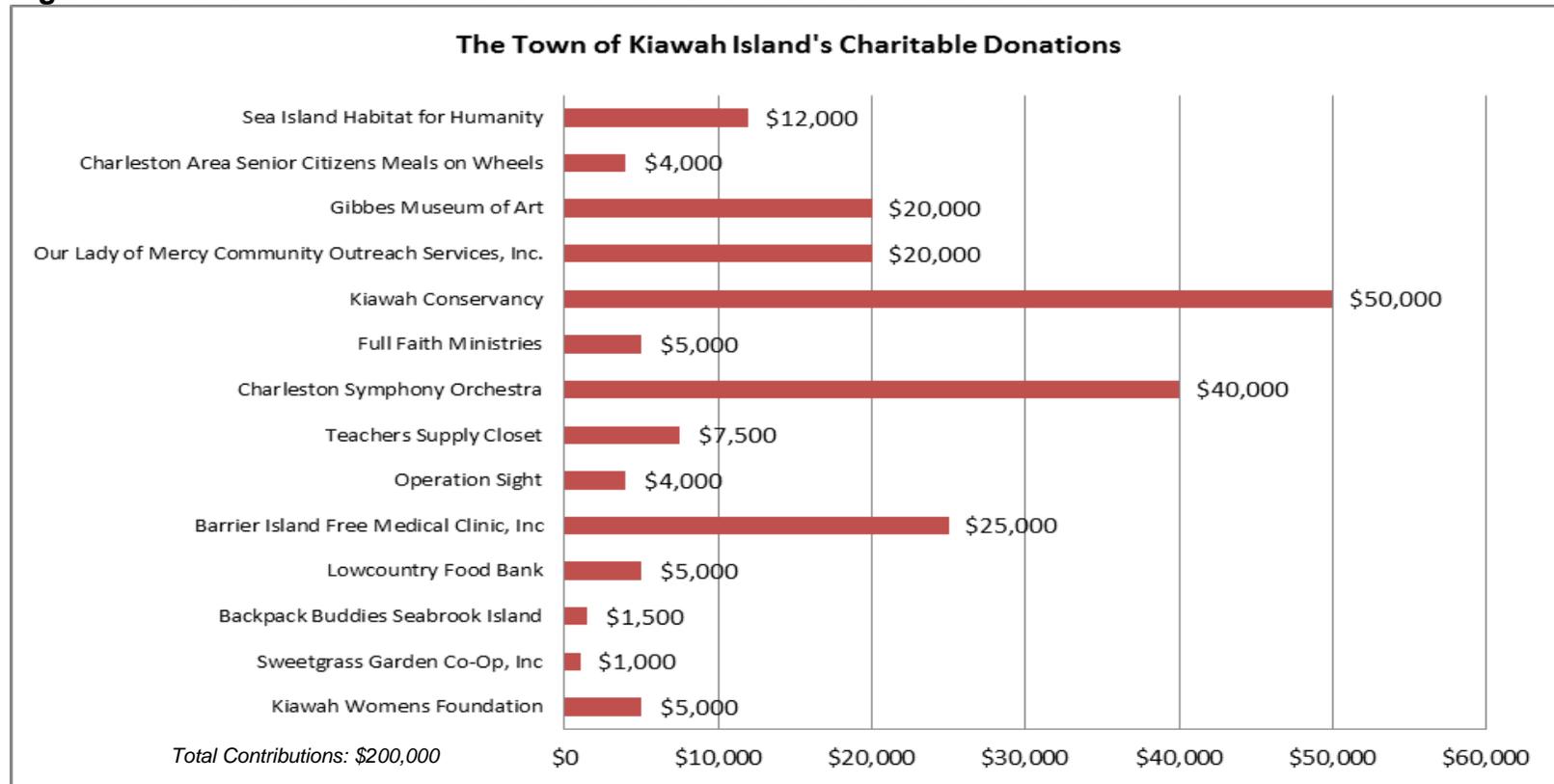
*Cultural Resources Element - VI*

- Helped students “shop” for their own uniforms and supplies at the annual Hands of Christ Back to School Uniform Distribution;
- Donated health products, winter coats, sweaters and blankets that were distributed among the Sea Island’s public schools and senior citizens;
- Helped save the beloved Angel Oak Tree, now forever persevered by the Lowcountry Open Land Trust;
- Supported today’s young leaders and role models involved in the St. John’s High School athletic program through sponsorships, providing new uniforms and equipment to support the team.
- And finally, Kiawah Cares donated \$50,000 to the Reverend Clementa Pinckney Scholarship Fund.

In addition to its volunteerism, the Town of Kiawah Island has shown its generosity by contributing \$40,000 to the Charleston Symphony Orchestra, \$50,000 to the Kiawah Island Natural Habitat Conservancy, and \$110,000 to area non-profits including the Rural Mission, Barrier Island Free Medical Clinic, Coastal Crisis Ministries, and Our Lady of Mercy Outreach for the 2015 fiscal year. These donations are funded by the Local Accommodations Tax, which must be specifically used for tourism related expenses and overall charitable contributions. Figure VI.2 demonstrates the monetary donations made to local organizations from the Town of Kiawah Island in 2015.



**Figure VI.2 2015 The Town of Kiawah Island’s Charitable Contributions**



Source: Town of Kiawah Island: Comprehensive Annual Financial Report, 2015

In addition to philanthropic efforts, Kiawah Island offers a number of educational opportunities for the surrounding community to experience the diverse cultural and natural resources on the island, from maritime forests and brackish water ponds to picturesque dunes. Communities and organizations can conduct wildlife research and tours to the Nature Center and beach on Kiawah Island. Examples of recent educational opportunities available to residents of Kiawah Island and surrounding communities include Reptile Round Up, Beach Ecology, Marsh Ecology, Pondlife Exploration, and Island Walk.





## **Summary**

The residents of Kiawah Island are blessed with a multitude of activities, events, sporting venues and numerous opportunities for volunteering. As well as enjoying the pristine environment, which includes the many bike and walking trails, parks, boat docks and our award winning 10 miles of beach.

## **Needs Assessments:**

- Preserving and protecting the historic areas of the Island;
- Ensuring that the cultural interests and needs of the Town's differing population components are met by providing a diversity of programs; and
- Supporting the continuation and expansion of cultural events and programs in the Town, including outreach events directed at neighboring communities.

## **Goals**

To help the Town further realize its Vision, the following goals should be considered when evaluating proposals for change.

- 1. Encourage the development of programs and services that improve the delivery of cultural activities to all of Kiawah Island and its visitors.**
- 2. Encourage the identification and preservation of archaeological and historic resources located on Kiawah Island.**



## COMMUNITY FACILITIES ELEMENT

The Community Facilities Element considers water supply, treatment, and distribution; sewage system and wastewater treatment; solid waste collection and disposal; fire protection; public safety; emergency medical services; general government facilities; education facilities; and libraries and other community facilities.

### Background

In most communities, a city or town government is the principal provider of community facilities and services. The Town of Kiawah Island is unique because most community services and facilities are provided and maintained by private entities. The Town of Kiawah Island is responsible for planning and zoning, emergency preparation, disaster recovery, code enforcement, public safety, garbage collection, and preservation of the beach. The Town has chosen to provide these services directly or through private contracts.



The Kiawah Island Community Association (KICA) owns the majority of the Island's infrastructure including roads, bridges, culverts, lagoons, and bike trails behind the main gate. Moreover, KICA owns and maintains approximately 50 miles of roads, 40 miles of drainage pipes, 20 miles of leisure trails, 25 community owned boardwalks, and 7 bridges. The association conducts an annual reserve study that estimates the replacement costs associated with these assets is approximately \$37 million.

### Municipal Center

The Kiawah Island Municipal Center is located on Beachwalker Drive. The building was completed in 1997. It includes offices for the Town, Kiawah Island Community Association (KICA) and a satellite office of the Charleston Convention and Visitor's Bureau, Council Chambers and municipal court. Subsequent additions have included a Town garage and completion of additional office and storage space on the second floors of both wings.

Town Hall occupies one wing of the Kiawah Island Municipal Center, providing workspace for the Town's employees. The Council Chambers are used for Council meetings, municipal court proceedings, public meetings, and hearings and public



interest meetings such as Census training. The Kiawah Island Community Association (KICA) occupies the second wing of the Municipal Center.

Office space is provided for the Administration Department and Commercial Pass Office. Since the Town is faced with a growing community, increased services and limited office space, and parking, the Town's Council has begun investigating municipal center expansion options. After trying to work with the confines of the existing building and parking lot, it was determined that onsite building modifications would be limited and would exacerbate the parking problem. Council then began a search for property both on and off the island and determined resources on the island proved to be too expensive. Council identified a 28 acre parcel on Betsy Kerrison Parkway that was purchased for \$2 million.

The Town's goal is to have the new municipal center completed and ready for occupancy by the end of 2016 or spring of 2017. The Town's vision for the new Municipal Center and site is to create a "Gateway" to the Town of Kiawah Island. The facility will feature a high quality entrance commensurate with The Sanctuary Hotel, River Course Clubhouse and Cassique Clubhouse. The facility will house the Town's current departments and allow for growth, expecting to provide space to accommodate up to 25-30 employees based on a ten year look ahead. It will include Council Chambers, Municipal Court, Visitors Bureau space, public meeting space and customer service areas for the public. Preliminary estimates indicate a building size of about 14,000-15,000 square feet.

The Charleston Convention and Visitor's Bureau operates a small, fully functional, satellite office in the lobby area of the Municipal Center. Kiawah Island's Visitor's Center offers information on regional and local area lodging, shopping, dining and special events.

## **Community Facilities and Services**

The Town's objective regarding community facilities is to ensure that adequate facilities and services are provided to the community regardless of the entity providing the service.

The following services are available in the Town of Kiawah Island:

### **Water and Wastewater Facilities**

Water and wastewater services are provided by the Kiawah Island Utility, Inc. (KIU) a private firm.

As of July, 2015, Kiawah Island Utility, Inc. (KIU) has 4,023 water customers. There is currently a total of 4.5 million gallons (mg) above ground storage on the Island; 3.5 at the Sora Rail facility and 1 mg at the Governors Drive facility.



KIU operates two Aquifer Storage and Recovery (ASR) systems. The first one, located at the main facility on Sora Rail Road was permitted in 2002. The second one, located on Governors Drive was permitted in 2003.

ASR is used for peak shaving and emergency situations by allowing KIU to store water in an underground aquifer during the non-peak season for use during emergencies and heavy demand periods.

A 100 HP variable speed pump was installed at the Governors Drive pump station in 2012. This upgrade was included as a part of the secondary water line project. Once the secondary line is completed a second 100 HP pump will be installed at this facility as demands dictate.

KIU is aggressively working toward the installation of a water supply line to the Island that will tie in to the Down Island Pump Station on Governors Drive. Easement acquisitions are being finalized and awaiting the issuance of all permits in anticipation of beginning construction by end of 2015 with approval to operate the new line by spring 2016. The line is necessary to ensure a redundant supply of water to the Island and enhance water pressures on the eastern end of the Island. The current water supply is by way of a single 16" Ductile Iron Pipeline that was installed in 1978.

In 2014, KIU provided service to 7,315 customers (3,972 for water and 3,343 for sewer). KIU maintains 148 miles of transmission lines throughout the Town. KIU is able to treat 1.7 million gallons of wastewater per day. KIU provides its customers with award winning service and water and from 2008 to 2011 KIU won the South Carolina Department of Health & Environmental Control Facility Excellence Award.

### **Solid Waste Management**

An Island-wide residential solid waste management system was implemented to provide uniform collection for the Island. There are various types of garbage service including:

- Curbside;
- Backdoor (once per week); and
- Saturday backdoor (twice per week during the summer season and once per week during the off-season).



#### Community Facilities Element - VII

Curbside recycling is available to all single-family homes, homeowner associations, and some villa communities. The Town also provides two public recycling centers located on Sora Rail Road and at the Municipal Center. In 2008 the Town began expanding its recycling program and received a \$40,000 grant from the South Carolina Department of Health and Environmental Control (DHEC). These funds were used to procure 35-gallon roll-out recycling carts and expand recycling to 10 boardwalk locations on the Kiawah Beach. The Town launched an “Island-wide Recycling Initiative” that includes educating residents and visitors about the availability of recycling on the Island. The Town has developed promotional literature including magnets, door hangers, trifold and plastic bags to help expand the recycling program and increase its efficacy. Since 2009 the recycling levels on the Island have increased by 25 tons or 10% in 2010, the Town was named as the winner of DHEC’s Recycle Guys Distinguished Municipal Recycling Program.



Yard debris pickup is available to single-family homes and to all unimproved lots in the residential zoning districts. The Town also has an overflow dumpster for household garbage located on Sora Rail Road. Quarterly white goods collections are offered each year. Two household hazardous waste collections are also offered each year. Collection for villas and condos is handled directly by the regimes’ homeowners’ associations. Commercial entities are responsible for their own collection service.

In July of 2012, the Town contracted with a private entity, known as Carolina Waste, for collections and disposal of residential solid waste, recycling and collection and disposal of yard debris. In addition the Town has signed a contract with a sister company for dumpster pickup for multifamily developments throughout the Island. The total expenses for 2014 amounted to approximately \$760,000.



#### **Electric and Communication Utilities**

The utilities on the Island are provided by a variety of private firms:

Berkeley Electric Cooperative (BEC) is the electricity supplier to the Island and has a franchise agreement with the Town of Kiawah Island. Beginning in 2008, BEC began replacement of its 20 year old electric lines along the Kiawah Island Parkway with a nine duct line to the front gate. BEC completed the replacement of the electric lines from the main gate to



the substation on Kestrel Court in the fall of 2010. BEC has completed a number of major projects on and off the main Island. Some include:

- Kiawah Island regulator station rebuild – Completed;
- Replacement of circuits from the front gate to the regulator station – Completed;
- Ocean Park phases one through five – Completed;
- Ocean Park phases six and seven are currently under construction;
- Riverview at Kiawah line construction – Completed.

AT&T is the largest telephone provider on the Island for residential and commercial customers. There are other telephone providers on the Island as well.

Comcast Cable has a non-exclusive franchise agreement with the Town to provide cable and internet services on the Island. In June 2010, the Town approved a 3% franchise fee for cable and internet services with AT&T and Comcast Cable.

Cellular service is also available on the Island with strict guidelines for cell towers. The current service providers include AT&T, T-mobile, Verizon and Sprint. Ultimately, cellular service within the Town has drastically improved with the building of a number of disguised cellular antennas.

### **Public Safety and Security**

The Town of Kiawah Island does not operate its own police or security force. The Charleston County Sheriff's Department provides law enforcement and investigative support for the Town of Kiawah Island. Additionally, the Town contracts with the Sheriff's Office for four off-duty deputies to provide supplementary coverage for law enforcement patrols, traffic control, and enforcement. The Town funds 75% of the Sheriff's deputy costs through the State Accommodations Tax Fund and 25% is funded from the Town's General Fund. The Kiawah Island Community Association (KICA) provides limited private security services for the area inside the main gate. The Kiawah Island Golf Resort also manages limited premise security for their properties.

The Town's Public Safety Committee has assessed that the combined coverage provided by these multiple entities is sufficient for the Island's needs. Kiawah Island has a very low crime rate with only minor offenses and traffic violations recorded.



### **Fire and Emergency Medical Service (EMS)**

The Charleston County EMS Department is responsible for the provision of EMS throughout Charleston County, which includes the Town of Kiawah Island. The system responded to approximately 55,000 9-1-1 calls for service in 2014; in which approximately 130 incidents occurred in the Town. Services are provided with a fleet of more than 24 paramedic staffed ambulances and 12 paramedic staffed quick response vehicles – and over the next 12-months, the department will have an assigned operational workforce of over 200 EMS personnel. All response units feature Automatic Vehicle Location (AVL) equipment, a GPS-based system that allows the Charleston County Consolidated Dispatch Center to dispatch the closest available units to any incident. This equipment includes an integrated application for both navigation and routing.

The Charleston County EMS Department has been acknowledge as a leader in the provision of pre-hospital emergency care – and is a recipient of the South Carolina’s EMS Award of Excellence and was recognized as the 2010 National EMS System of the Year.

The St. Johns Fire District provides fire protection to the Town of Kiawah Island. The Town has three members serving on the St. Johns Fire District Commission. Two fire stations are located in the Town. The first, Station 4, was built in 1984 in the East Beach area and services all of Kiawah Island and the southern portion of Johns Island. The second fire station, Station 6, was built in 1997 at the East End of the Island. The service area for Station 6 is Kiawah Island. The total staffing of the two stations on Kiawah Island is 4 crewmembers per apparatus for a total of 12 crew members per day. The total number of employees for a shift of operations in the St. Johns Fire District is 38 and one Battalion Chief. Additionally there are eight administrative officers who are qualified to respond.

In 2005, the District added a platform vehicle to Station 4 that reaches the new, multi-level Sanctuary Hotel and existing multi-story structures. Fire apparatus replacement like this one is accomplished through a replacement scheduling system that determines service life for front line equipment in general this equates to fifteen (15) years for pumpers and twenty (20) years for ladders/platforms.

### **Emergency Preparedness/Disaster Planning**

The Town of Kiawah Island Emergency Preparedness Plan is updated on an annual basis and was updated in June 2010 and 2015. The purpose of this plan is to keep residents and organizations on Kiawah Island informed of conditions which may present a threat to life and/or property and to ensure that all information, recommendations, and/or orders coming from national, state, or local authorities are passed on to all residents and organizations.



#### *Community Facilities Element - VII*

The Town uses several outlets to make sure information, especially concerning evacuation and re-entry, is communicated to property owners, visitors and commercial interests in a timely manner. The Town has a telephone notification system, the “Code Red” system, to contact property owners, guests and commercial interests in times of emergency. “CodeRed” is essentially a high-speed emergency and community notification system used by state and local government organizations to effectively alert their residents of potential threats. The Town also holds an annual meeting to inform property owners about the dangers of being on a barrier island during a hurricane and to suggest appropriate preparations to make in advance of hurricane season. The purpose of this meeting is also to educate property owners on general preparedness procedures in other types of disasters as well, including earthquakes, tsunamis, tornados, fires and floods. The Town’s entire Emergency Preparedness Plan is described on the Town’s website.

To handle recovery from a natural disaster, the Town has a pre-positioned debris removal contract that allows for the removal of vegetative, construction, animal and white goods debris from the right of ways of all streets on the Island. This contract also provides for damage assessment, debris reduction, barge transportation, temporary housing, satellite phone service and meals in a post disaster scenario.

The Town is an active participant in the Charleston County Emergency Operations Center. In 2007 the Town began utilizing a major component of the center- Web Emergency Operations, which allows the Town to communicate status updates, request resources and distribute public information notices with County, fire, law enforcement, medical personnel and news media from a remote location should an evacuation occur.

In 2008 all Town Council members completed the mandatory National Incident Management System (NIMS) for elected officials, and Town staff completed the prescribed Incident Command Structure (ICS) courses to ensure compliance with the required NIMS program. Since 2008, the Town Council members as well as the Town’s staff have completed annual Disaster Preparedness training.

#### **CERT (The Community Emergency Response Team)**

The Community Emergency Response Team Program educates people about disaster preparedness for hazards that may impact their area and trains them in basic disaster response skills, such as fire safety, light search and rescue, team organization, and disaster medical operations. Through this training, citizens can manage utilities and put out small fires; treat the three killers by opening airways, controlling bleeding, and treating for shock; provide basic medical aid, search for and rescue victims safely; and organize themselves and spontaneous volunteers to be





### *Community Facilities Element - VII*

effective. CERT members can assist others in their neighborhood or workplace following an event when professional responders are not immediately available to help. CERT members are also encouraged to support emergency response agencies by taking a more active role in emergency preparedness projects in their community. CERT is about readiness, people helping people, rescuer safety, and doing the greatest good for the greatest number. Ultimately, CERT is a positive and realistic approach to emergency and disaster situations where citizens will be initially on their own and their actions can make a difference.

### **Recreation**

There are numerous recreational facilities owned by the Kiawah Island Golf Resort (KIGR) and the private membership club, Kiawah Island Club (KIC). The Resort (KIGR) owns and maintains five golf courses (one just off the Island), two tennis facilities, two pools, and three premium-dining facilities, plus a full complement of 5-star amenities at the Sanctuary Hotel. The Resort also maintains the Night Heron Park. This 21-acre Park is a hub for concerts, special functions, and sporting events. The park is also open year-round and features basketball and volleyball courts, soccer fields, a playground, nature center, pool complex, and fitness trail complete with cardio and strength training stations. The Kiawah Island Club (KIC) owns and maintains two golf courses with clubhouses (one of which is located off-Island), a beach club, a spa and a sports pavilion.



In The Preserve, a park with trails, community pavilion, boat and crabbing docks, canoe storage and observation deck were added. Community piers were also added at Egret Pond, Falcon Point Road and Salt Cedar Lane. These are all owned and maintained by KICA. A major park with amenities is a central feature of Ocean Park, the newest area of residential development by the Kiawah Partners. This 55-acre park is located near the Ocean Course Golf facilities.

Other recent improvements include the following:

- Improvement of the boat launch and floating docks at Rhett's Bluff (KICA).
- A boat launch at Mingo Point (KIGR).
- In 2013, KICA repaired five different boardwalks, which provide access to the beach. These include, Boardwalks 8B, 22, 27, 30, and 25.
- Construction of the KICA facility "The Sandcastle" in 1997, which includes a pool complex that was enlarged in 2000, exercise facilities and meeting and administrative spaces and rooms for special events. In 2005, extensive improvements were made to this facility, along with the addition of three new fitness classes in 2013.



#### *Community Facilities Element - VII*

- In June of 2013, KICA's Major Repairs and Replacements Department installed an extension to the current dock at Cinder Creek, which features a gentle ramp into the water for a safe and easy way to access Cinder Creek by canoe or kayak.

There are approximately 193 acres of park and recreational areas in the Town of Kiawah Island. Map III.1 (See Natural Resource Element), entitled "Kiawah Island Parks, Trails, and Open Space System", identifies the parks on Island by number.

#### **Annexation**

Municipalities in South Carolina can expand their boundaries (corporate limits) through annexation, a legal procedure by which land outside a city or town can become a part of the municipality to receive its benefits and city services. The South Carolina General Assembly has delegated this authority to municipalities. The Legislature sets out responsibilities and authority of municipalities, and annexation of contiguous property is permitted. The process to annex a specific parcel is fairly simple. There are a number of different incentives to annex a piece of property including, municipal services at discounted costs, access to the beach, golf and other recreational activities, Arts Council events, dining and residency in the prestigious Kiawah Island community. Since 1988, the Town of Kiawah Island has annexed a number of different properties previously on or off the Island. These include:

- In 1988 the Town of Kiawah Island annexed the main portion of Kiawah Island. This annexation incorporated approximately 2970 acres, which included the lands from the Kiawah River in the west to approximately Flyway Drive in the east;
- In 1989 the Town of Kiawah Island annexed the rest of the main portion of Kiawah Island. This annexation included the lands north of the Governors Drive as well as the western end of Cougar Island, now known as Ocean Park;
- In 2010 the Town annexed the newly constructed Roundabout;
- In 2013 the Town annexed Freshfields Village;
- And in 2014, the Town annexed approximately 28 acres on Johns Island, which will soon be home to the Town's new Municipal Center.

For more information on the annexation process, please refer to South Carolina Code of Laws Title #5.

#### **Need Assessments:**

- Cooperating and coordinating with all private and public organizations on the Island for the provision of services and facilities;



- Continuing cooperation of public safety service providers;
- Availability and access to facilities for the entire community, including physically handicapped residents and visitors;
- Cooperating with KICA, the Developers (KDP), and the Resort (KIGR) in achieving community goals; and
- Due to the relative affluence and high profile nature of segments of the Island's population, there is a need for higher levels of security for residents, non-resident property owners and visitors.

## **Goals**

To help the Town further realize its Vision, the following goals should be considered when evaluating proposals for change.

- 1. Coordinate with all public and private organizations for the provision of essential community services.**
- 2. Monitor and sustain the continued adequacy of emergency preparedness plans and communicate regularly such plans to resident, non-resident property owner, and visitor populations.**
- 3. Work to ensure an environmentally sustainable system of parks and open spaces are developed and maintained. This system should provide access to the beach and river; preserve, protect and enhance natural resources while meeting residents' diverse recreational needs.**
- 4. Maintain professional development and training for Town Council, Boards, Committees and Staff.**



## HOUSING ELEMENT

### Background

The Housing Element considers location, types, age and condition of housing, owner and renter occupancy, and affordability of housing. This element includes an assessment of non-essential housing regulatory requirements that add to the cost of developing affordable housing but are not necessary to protect the public health, safety, or welfare. It also includes an analysis of market-based incentives that may be made available to encourage development of affordable housing. Such incentives may encourage development of affordable housing and may include density bonuses, design flexibility, and streamlined permitting processes.



Housing in the Town of Kiawah Island consists primarily of single-family residential homes, including patio and zero lot line homes and condominium units. A majority of the housing stock in the Town is used for vacation homes and is not occupied year-round. The Housing Element section of the Comprehensive Plan explains the different types of housing available on Kiawah Island (i.e., single-family dwellings, condominium units, etc.) and how these are used. Information comes from the U.S. Bureau of Census, 2010.

### Residential Districts

The residential districts in the Town are zoned R-1, R-2, and R-3 and include single family homes, townhomes, and multifamily dwellings. The residential developments or neighborhoods have been planned by Kiawah Development Partners (successor to Kiawah Resort Associates) following the planning guidelines of the Town of Kiawah Island as outlined in the Land Use and Planning Ordinance. The purpose of the R-1 zoning district is to promote a stable residential neighborhood consisting of low density, detached single-family dwellings that are surrounded parks, golf courses, and open spaces. The purpose of the R-2 zoning district is to promote a stable residential neighborhoods consisting of medium density residences that are surrounded by parks, golf courses and open spaces. And finally, the purpose of the R-3 district is to provide for neighborhoods that consist of higher density, residential developments for Kiawah Island's residents and guests, which are surrounded by parks, golf courses, and open spaces.



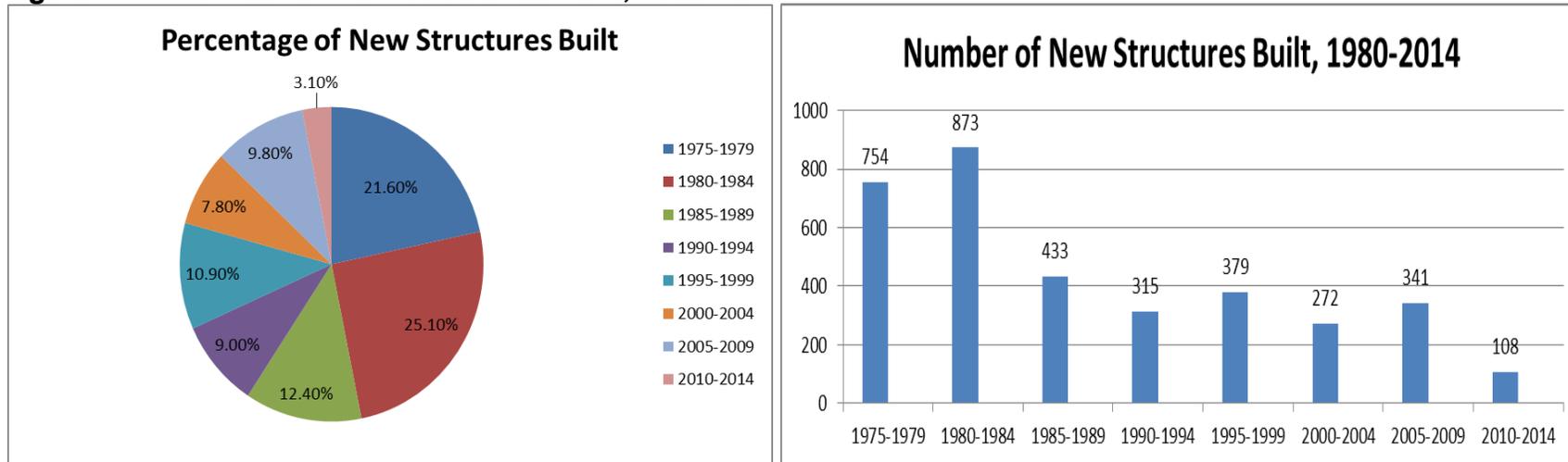
## Existing Conditions

### Housing Inventory

Per the 2009-2013 American Community Survey, there are approximately 3,445 dwelling units on the Island, which is an increase of 375 dwelling units (11 percent increase), since 2000. Of the total, 2,304 are single family units, including cottages, and 1,141 are condominium units. Based on the 2000 Census, approximately 2,331, or 24 percent of the dwelling units at that time were used for seasonal, recreational, or occasional use. According to the 2010 Census, approximately 1,274, or 61 percent of the dwelling units at that time were used for seasonal, recreational, or occasional use. Per 2010 Charleston County records, there are 824 vacant residential platted lots that are not yet built upon.

As shown below, approximately 50% (1627 between 1975 and 1984) of the dwelling units within the Town of Kiawah Island were built over 25 years ago. Many of the homes within the Town are still relatively young by national standards, but they are becoming of an age where maintenance costs and renovations are more commonplace, which is shown in Figure VIII.2. As shown, many of the permits issued were used for residential improvements (approximately 3362 improvement permits between 2008 and 2014) while the rest were issued for new homes (approximately 229 new home permits between 2008 and 2014).

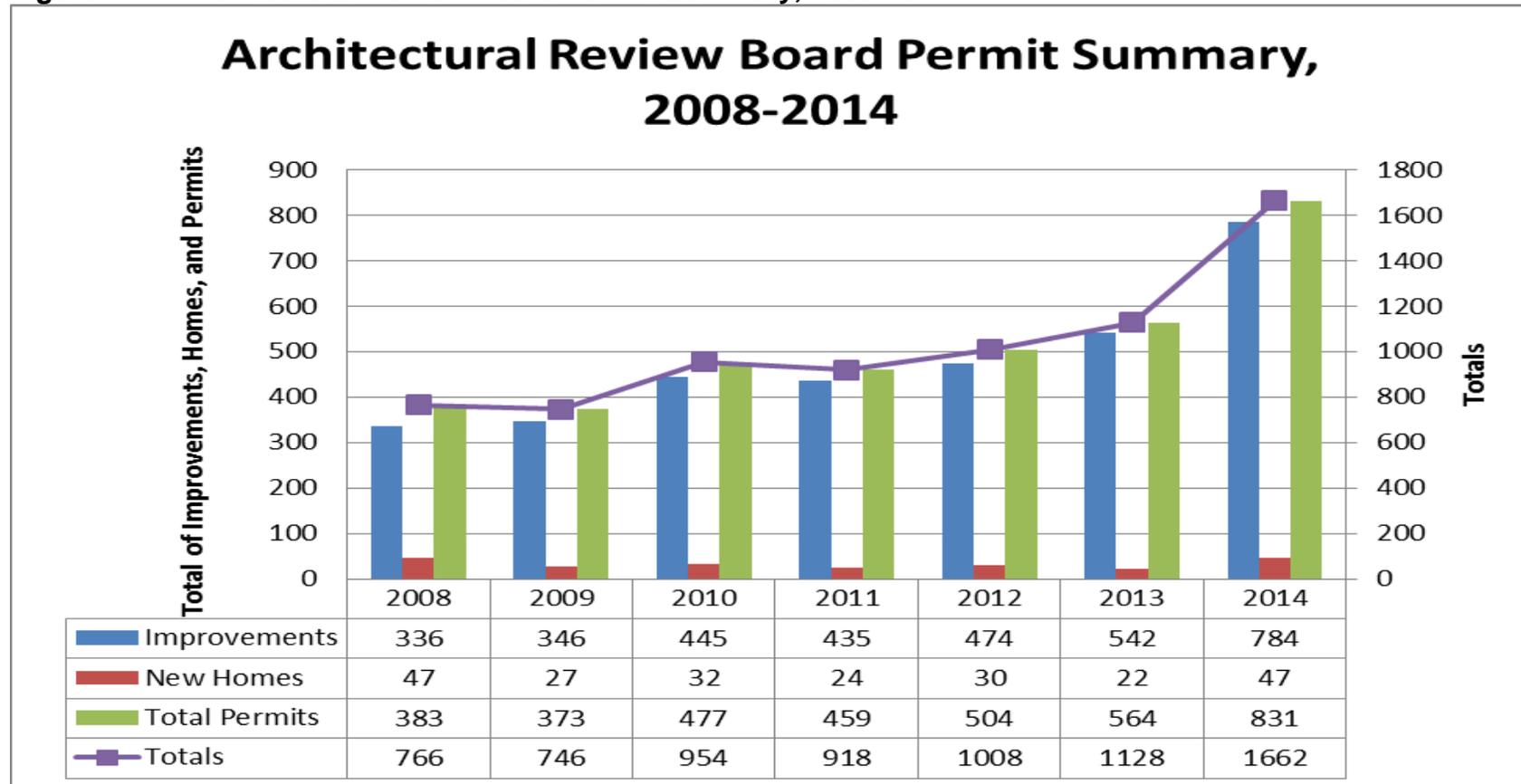
Figure VIII.1 Number of New Structures Built, 1989-2014



Source: Charleston County Building Services and the Town of Kiawah Island



Figure VIII.2 Architectural Review Board Permit Summary, 2008-2014



Source: Town of Kiawah Island Architectural Review Board Permit Summary, 2008-2014

Figure VIII.3 shows the total number of new construction permits issued since 1998, broken down by residential and non-residential permits. The number of building permits issued in a given year is often different than the number of Certificates of Occupancy issued in that same year. This variance is due to the fact that not all structures for which building permits are issued are completed and issued a Certificate of Occupancy in a year's time. Since 2009, there have been a total of 187 new construction permits issued by the Town of Kiawah Island. These permits have a combined value of approximately \$300 million. New residential permits accounted for 94 percent (175 permits) of all permits issued, while new non-residential permits accounted for only 6 percent (12 permits) of all the permits issued during this time. New



residential permits accounted for approximately \$260 million (92 percent) of the total \$302.3 million, while non-residential permits accounted for only approximately \$25 million (8 percent) of the total \$302.3 million. Still the largest number of permits issued in the past sixteen years occurred in 2008 due in part to the construction of new condominium dwelling units. However, the highest construction permit value was seen in 2002 when construction on The Sanctuary began.

**Figure VIII.3 New Construction Permits, 1998 – 2014**

Year	Total Permits	Value of New Construction Permits (\$ in millions)	Total Residential Permits	Value of Residential Permits (\$ in millions)	Total Non-Residential Permits	Value of Commercial Permits (\$ in millions)
1998	96	57.6	94	57.5	2	0.1
1999	103	70.7	97	70.1	6	0.6
2000	70	55.3	66	54.4	4	0.9
2001	52	44.2	45	38.4	7	5.8
2002	53	106.9	51	60.3	2	46.6
2003	45	40.1	41	38.5	4	1.6
2004	83	68.3	72	61.6	11	6.7
2005	83	97.9	78	97.2	5	0.7
2006	75	72.3	71	63.2	4	9.1
2007	68	100.2	63	99.9	5	0.4
2008	122	98.1	122	98.1	0	0
2009	30	38.7	30	38.7	0	0



2010	32	30.2	29	30.1	3	0.1
2011	31	54.4	28	39.2	3	15.1
2012	32	43.9	29	41.8	3	2.1
2013	17	38.5	16	29.9	1	8.5
2014	45	96.5	43	95.4	2	1.1

Source: Charleston County Planning Department

### Housing Affordability

In 2007, the South Carolina Priority Investment Act was passed by the General Assembly to address affordable housing by expanding the Housing Element to require municipalities: “(1) to analyze to ascertain non-essential housing regulatory requirements and (2) to analyze market based incentives that may be made available to encourage development of affordable housing.”

Barrier islands are, by their definition, limited by area and natural boundaries; this lack of land and the desirability of living in the small community of the Town of Kiawah Island make the provision of market based incentives to add affordable housing challenging. However, a surprising number of small homes and villas are today available to purchase or rent on the island at relatively modest prices. This supply will be increased in the future by the addition of apartments and town homes planned in the Freshfields Village planned development. Also, within thirty minutes of Kiawah, a number of new homes are under construction in unincorporated Charleston County adding to the supply of nearby affordable housing.

The Charleston County Comprehensive Plan notes that the affordability of homes on Johns Island is an area of concern, particularly for working families and low to moderate income residents. The median home value in the unincorporated county is 3.6 times higher than the median household income, putting home ownership out of reach for many County residents.

### Needs Assessments:

- Controlling and containing growth and development consistent with the Town’s Vision and the Comprehensive Plan,



- Redevelopment of the existing housing on the Island, and
- Affordability of housing.

## **Goals**

To help the Town further realize its Vision, the following goals should be considered when evaluating proposals for change:

- 1. Encourage development of a diversity of housing stock, types and styles that meet different needs of the population.**
- 2. Increase the transparency and understanding for everyone involved in all phases of the development process.**
- 3. Consider the affordability of housing.**



## LAND USE ELEMENT

### Background

The Land Use Element considers existing and future land use by categories, including residential, commercial, industrial, agricultural, forestry, mining, public and quasi-public, recreation, parks, open space, and vacant or undeveloped. Because our population shares a commitment to the natural environment and wildlife, land use in the Town is oriented toward residential, parks, open space, recreation, and limited commercial development to service residents and visitors. The incorporated boundaries of the Town of Kiawah Island also include a considerable amount of marsh and water features. The Land Use Element is designed to tell the story of where the Town is and where it desires to be in regard to the utilization of land resources.

### Existing Conditions

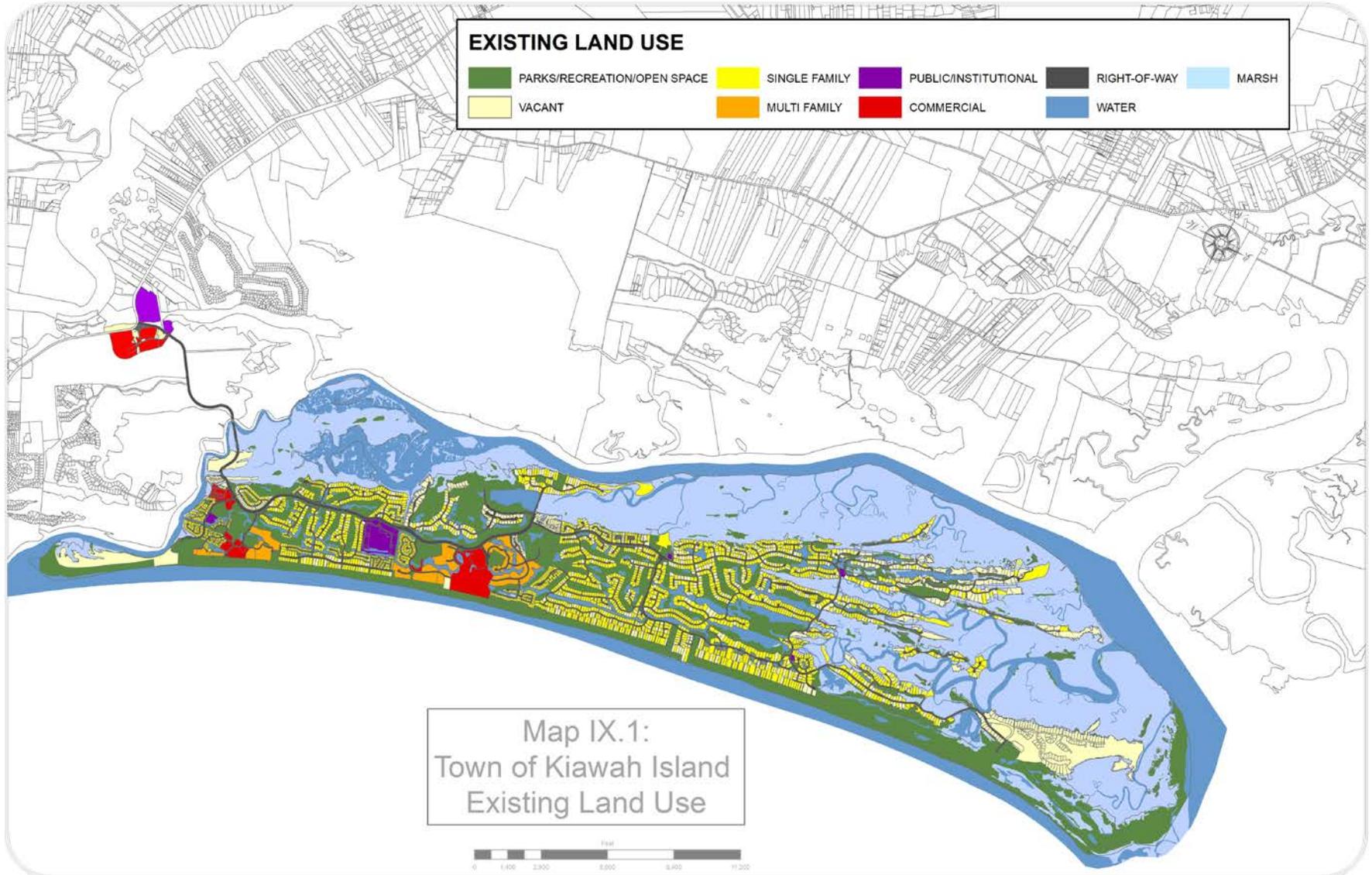
#### Existing Land Use

Figure IX.1 depicts the existing land use categories that are present on the Island and the percentage of land use compared to the total incorporated area of the Town of Kiawah Island. Geographic Information System (GIS) technology and current Charleston County records were used to detail the existing land use. The land use categories were established based on the general use of each parcel as determined by the Charleston County Assessor's Department. Map IX.1, updated in 2015, entitled "Existing Land Use" illustrates where existing land uses are located on the Island.





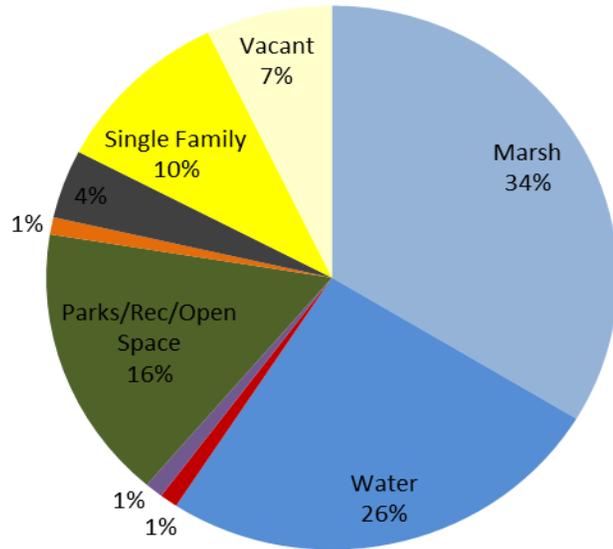
### Map IX.1 Existing Land Use



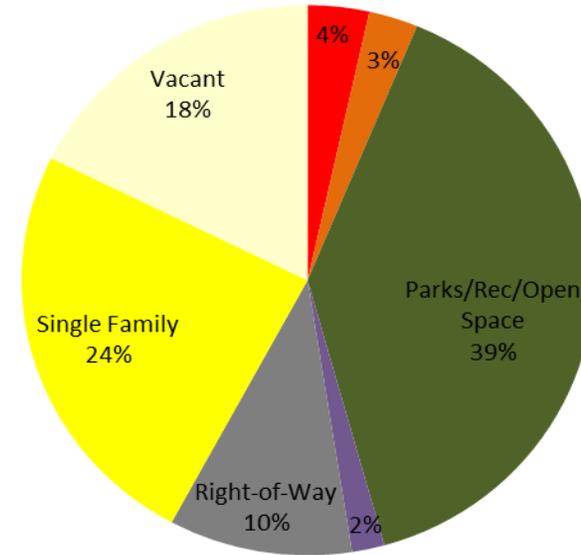


**Figure IX.1 Existing Land Use**

**% Existing Land Use – Total Incorporated Area**



**% Existing Land Use – Total Incorporated Area (Excluding Marsh & Water)**



PARKS/RECREATION/ OPEN SPACE	VACANT	SINGLE FAMILY	MULTI FAMILY	PUBLIC/ INSTITUTIONAL	COMMERCIAL	RIGHT-OF-WAY

Figure IX.2 shows the percentages of existing use of the Town’s total incorporated area, as well as the Town’s total incorporated area excluding marsh and water. A considerable amount, 60 percent, of the Town’s total area consists of marsh and water. Parks, recreation and open space encompass the next largest percent of area at 16 percent. Excluding marsh and water, the total for parks, recreation and open space is the largest use of land on Kiawah Island, accounting for 39 percent. As shown on Map IX.1, “Existing Land Use,” open space and recreational uses are located throughout the Island in the form of parks, boat landings, wildlife viewing areas, recreational facilities and golf courses.

Single Family Residential land uses encompass 10 percent of the Town’s total incorporated area and 24 percent of the total land area (excluding marsh and water) while vacant parcels total 7 percent and 18 percent, respectively. Road right-



of-ways consist of 4 percent of the total land area and 10 percent excluding the Town's marsh and water lands. Multi-family consists of 1 percent of the Town's total incorporated area and 3 percent when you exclude the Town's marsh and water acreage. Residential uses are established throughout the Island. While single family residential uses are found in all areas of the Island, multi-family residential uses are located solely on the western part of the Island.

Commercial land use makes up a relatively small percent of the land use. These uses are located at the Freshfields Village and in both the East and West Beach areas of the Island. Commercial development has occurred (restaurants, a convenience store, small shops, etc.) in proximity to the East and West Beach Resort facilities and at the main gate.

### **Future Land Use**

Future land use is intended to provide guidance for the location and types of proposed future land uses to support the Town of Kiawah Island's Land Use Planning/Zoning Ordinance. All recommendations and approvals by the Town's Planning Commission and Council should be consistent with the Future Land Use Recommendations of this Plan. The aspects of the Land Use Element establish a flexible yet predictable method for determining the appropriateness of proposed development to shape the future of the Town. Map IX.2, "Future Land Use," updated in 2015, shows how the community envisions future growth for the Island.

### **Future Land Use Revisions**

In May of 2015 the Town conducted an Island-wide study throughout Kiawah which identified a number of areas that were inconsistent with the 2010 Future Land Use category. These inconsistencies included areas with future land use recommendations of Medium Density Residential and Mixed Use, which had been developed consistent with Low Density Residential, and Medium Density Residential.

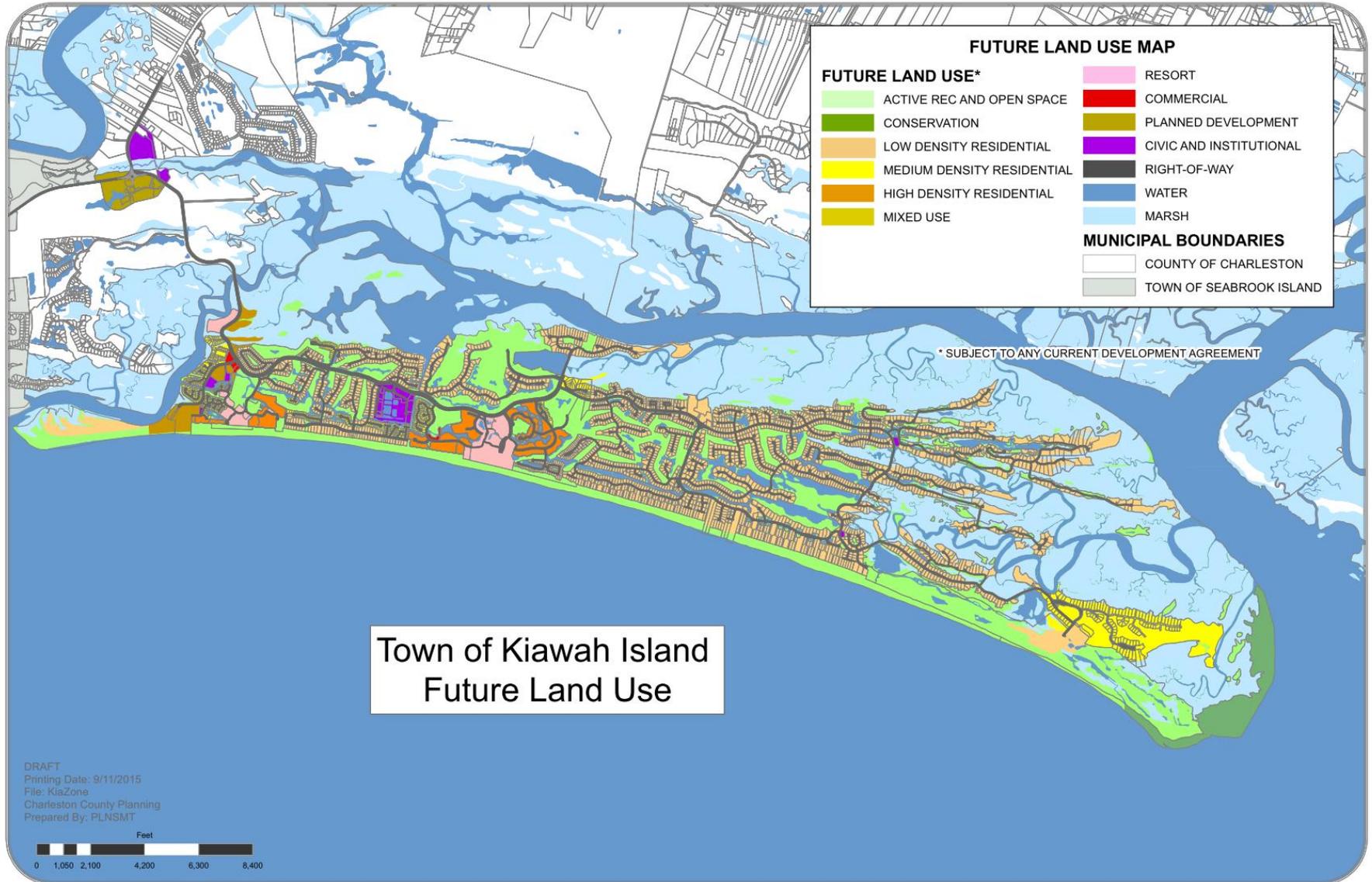
For example, Salt Meadow Cove, The Settlement, Silver Moss Circle, Ocean Oaks, The Cottages, Shell Creek, Atlantic Beach Court, and the Enclave at Turtle Beach has a Medium Density Residential future land use category while the character of the area was developed consistent with the Low Density Residential future land use category.

Additionally, Little Rabbit, Little Rabbit South, and Kiawah River Commons has a Mixed Use future land use recommendation however these parcels were either developed or surrounded by development consistent with the Medium Density Residential land use recommendation.

These future land use designations were revised during this update as identified on Map IX.2 "Future Land Use" because it was identified that these areas were inconsistent with their 2010 Future Land Use designation.



### Map IX.2 Future Land Use





## **Future Land Use Categories**

### **Active Recreation and Open Space**

This category provides and is intended to promote the development of community parks and recreational facilities including parks, golf courses, and tennis courts. This category also provides for lands that are intended to remain in their natural state; this includes land that have been protected through conservation easements or that are publicly or privately owned. Some examples include the Tennis Center, Night Heron Park, and the Property Owners Beach and Recreation Center.

### **Conservation**

This category is used to promote, protect, and preserve the various natural resources located within the limits of the Town. These lands typically include highland areas surrounded by marsh or water, small islands, and fragile natural land. Ultimately, this category consists of lands which are outside the Ocean and Coastal Resource Management critical line that have been designated as unsafe or unsuitable for permanent structures or development. Furthermore, these lands have either been publicly or privately obtained through preservation or conservation easements that significantly restrict development. An example includes Little Bear Island to the east of the Ocean Course.

### **Low Density Residential**

This category is intended to promote, protect, and preserve lower density development of single family detached residential areas. In this designation, the maximum density must not exceed three dwelling units per acre. Infill lots or community re-development should be designed to be sensitive to the character of the surrounding area as well as have minimal impact to the density requirements set out in the Town's Land Use Planning and Zoning Ordinances. A typical area with a Low Density Residential designation would include Plantation Woods or The Settlement.

### **Medium Density Residential**

This category is intended to provide and promote medium density development of single family detached and attached residential areas. In this designation, the maximum density must not exceed six dwelling units per acre. This district can accommodate the development of patio homes and zero lot line homes which would not be found in the Low Density Residential district. A typical area with a Medium Density Residential designation would include Inlet Cove or Night Heron Cottages.



### **High Density Residential**

This category is intended to provide for the development of stable residential areas consisting of higher density dwelling units for Kiawah Island's residents and guests. In this designation, the maximum density must not exceed 12 dwelling units per acre. This district can accommodate multifamily dwelling and other higher density single-family alternatives, such as duplexes or townhouses. A typical area with a higher density residential designation would include Shipwatch Villas or Duneside Villas.

### **Mixed Use**

This designation encourages the development that combines retail, service and other commercial uses with office and/or residential use in the same building or on the same site. A typical neighborhood with a Mixed Use designation would include either Mingo Point North or Mingo Point South.

### **Resort**

This category is intended to promote the development of high quality recreational use structures that provide a range of activities for residents and guests of Kiawah Island. A typical development with a Resort designation would include The Sanctuary Hotel.

### **Commercial**

This category is intended to promote planned small-scale commercial activity including specialty businesses, personal services and family restaurants. Such facilities should be designed to complement the character of the surrounding community. In this designation, the maximum floor area ratio must not exceed 0.2. A typical development with a Commercial designation would include the Freshfields Retail Village.

### **Civic and Institutional**

This designation is used to promote the development of supporting community facilities, as well as public and privately owned service buildings. These buildings and facilities include churches, schools, community centers, utilities, and street maintenance facilities. Like with the commercial land use designation, the maximum floor area must not exceed 0.25. Typical facilities or structures with a civic and institutional designation would include Town Hall, the fire stations throughout the Island, and the Kiawah Island Utilities Company.



### Total Buildable Area

The Town, along with the rest of the Island, has been developing steadily since the 1970's. This development should slow down in years to come, as the Town is fairly limited in its total vacant land. Future development of the Island may be limited to Ocean Park and Cape Charles. Figure IX.2 illustrates the percentage of utilized land (93 percent, including: residential, commercial, civic/institutional, parks, golf courses, etc.) to vacant land (7 percent) out of a total buildable area of 4,076 acres.

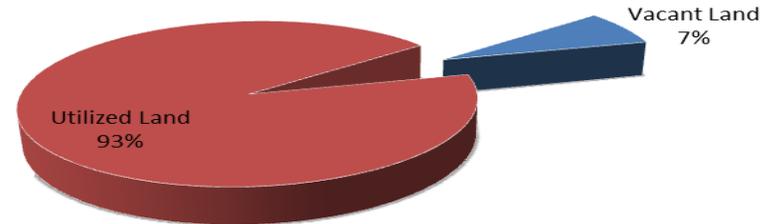


Figure IX.2 Percentage use of Total Buildable Area

### Needs Assessment:

- Expectation that the Town's residential character and natural environment will be maintained;
- Develop criteria and standards that encourage future development and redevelopment consistent with the Vision Statement;
- Assuring that continued development is accompanied or preceded by available services and community facilities;
- Zoning standards that are fair and consistent.

### Goals

To help the Town further realize its Vision, the following goals should be considered when evaluating proposals for change:

1. **Maintain and enhance the residential character of the Town.**
2. **Provide for high quality, orderly, controlled development and redevelopment.**



- 3. Encourage expansion of conservation areas, parks, recreation, and open space.**
- 4. Thoroughly evaluate any annexation proposals.**
- 5. Continue to improve monitoring and evaluating spatial relationships of physical properties and land use (such as zoning, lot size, natural resources, transportation, and community services) with updated, accurate GIS data.**



## TRANSPORTATION ELEMENT

### Existing Conditions

Kiawah Island is unique in that all roads within the Island's front gate are privately owned, usually by the Kiawah Island Community Association but also, in some cases, by third parties. While the Town is not responsible for their maintenance and replacement, it is responsible for the safety and welfare of its citizens in driving these roads.

The Town is responsible, however, for the maintenance and replacement of the two roads outside the front security gate. The first is the Kiawah Island Parkway extending approximately 3.0 miles from the terminus of the Betsy Kerrison Parkway on the west to the front security gate of Kiawah Island. The Town owns this two-lane access road as well as the roundabout merging traffic to and from the Betsy Kerrison Parkway, the Kiawah Island Parkway, the Seabrook Island Parkway and the entrance/exit from the Freshfields shopping center. The roundabout was completed in 2005 at a cost of \$2.3 million. The Kiawah Island Parkway underwent a major improvement and resurfacing in 2009 and, as part of that project, a bike path and trestle bridge were installed adjacent to the road. Extensive landscaping revisions to the areas adjoining the Parkway were also part of the project. Costs for the Parkway project in total amounted to \$2.8 million. The second road owned by the Town is Beachwalker Drive, running from the Parkway to the County Park.



### Road Design Standards

New roads constructed on the Island are required to be constructed to Town standards. The Town's Road Code establishes minimum standards which promote continued development of curvilinear streets. Such streets are designed to limit speeds and excess pavement. While narrow, curving streets help control speeds, they also have the potential to hinder emergency access if vehicles are parked on the roadway. It is important, therefore, that curbside parking be strictly controlled.

### Road Usage

Figure X.1 below shows the gate traffic at both the Main Gate and the Vanderhorst Gate from 2010 to 2014, while Figure X.2 shows the seasonal traffic numbers through the Main Gate. The total traffic count has risen approximately 5 percent during this period. It is important to note that based on the number of commercial passes issued by KICA to contractors



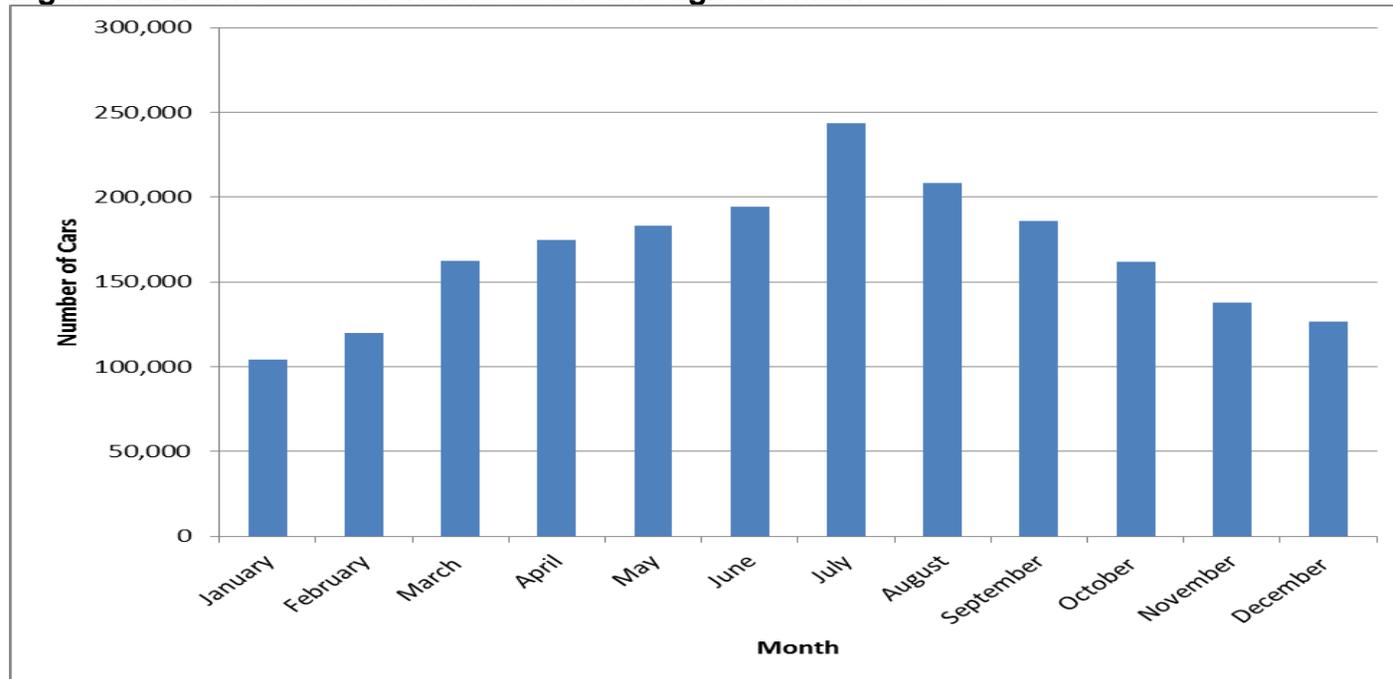
and other services providers, every day there are many thousands of people coming to work on Kiawah that aren't captured in the graph below.

**Figure X.1 Kiawah Island Gate Traffic, 2010-2014**

Traffic Counts	2010	2011	% Change	2012	2013	% Change	2014
Main Gate	1,902,244	1,830,003	-3.80%	1,830,629	2,013,574	0.10	2,002,045
Vanderhorst Gate	977,827	980,545	0.28%	1,057,960	1,104,158	0.04	1,122,996
Vanderhorst Gate % of Main Gate	49.0%	53.6%		57.8%	54.8%		56.1%

Source: Kiawah Island Community Association

**Figure X.2 2014 Seasonal Traffic Count through the Main Gate**

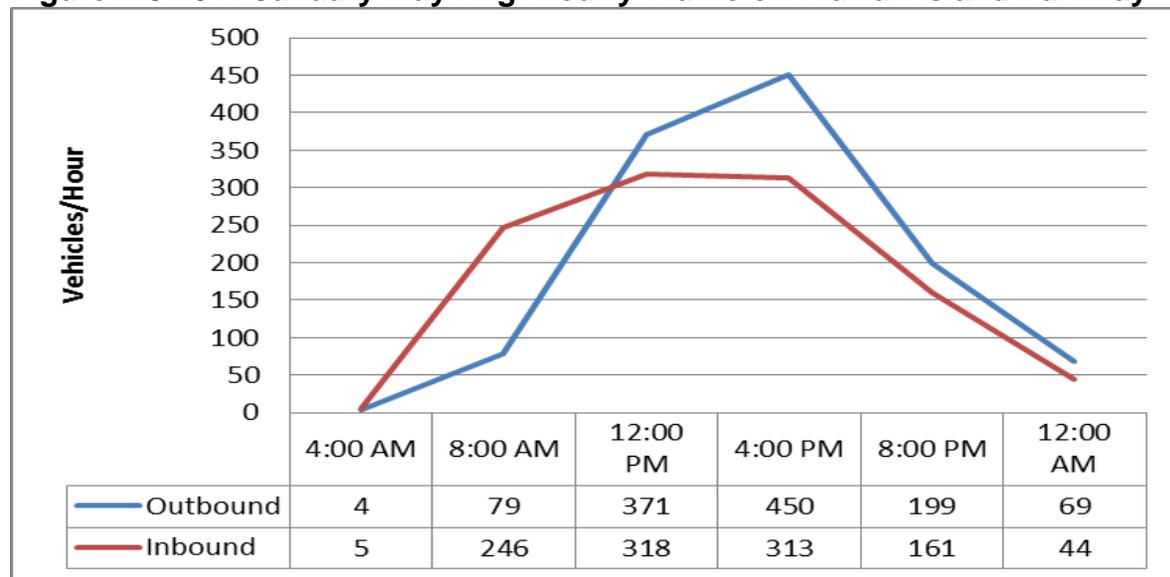


Source: Kiawah Island Community Association



On an hourly basis, inbound traffic peaks at 8:00 a.m. when contractors and service personnel enter the Island. Outbound traffic peaks at 3:00 - 4:00 p.m. when they leave. Because of the relative density of traffic, these are the critical safety hours on the Parkway.

**Figure X.3 2014 January-May Avg. Hourly Traffic on Kiawah Island Parkway**



Source: The Town of Kiawah Island Traffic Data, 2011-2014

**Traffic Accidents**

There are very few accidents on Kiawah Island roadways. As reported by Charleston County Sheriff’s Deputies and KICA security personnel monitoring our roadways, on average there are roughly two accidents per month. This number includes both multiple car collisions as well as single car accidents (excludes car-deer accidents).

**Johns Island Roads**

The condition of Johns Island roads is an important issue to Kiawah for two major reasons: first, these roads are travelled by Kiawah residents in their trips to Charleston and other off-island destinations. And, second, workers heading to and from Kiawah -- contractors, sub-contractors, landscape and maintenance personnel, hospitality workers, etc. -- are on those roads daily. Safety while driving those roads is of utmost concern to all. A key objective has been to secure a route across Johns Island that can absorb the considerable traffic headed to and from Kiawah and Seabrook Islands. As of this update, no agreement within the County has been reached on the location and funding of such a route. Despite the



condition of a number of Johns Island roads, Bohicket Road, the only road on or off of the Betsy Kerrison Parkway, is going through an important resurfacing project. The South Carolina Department of Transportation recently confirmed plans to completely resurface Bohicket Road beginning in late summer of 2015. The entire project will resurface the entire Bohicket Road from the River Road/Betsy Kerrison Parkway intersection to Maybank Highway.

### Emergency Evacuation

Kiawah Island is a barrier island and, as such, is particularly susceptible to risks associated with severe weather. Natural disasters like hurricanes, floods, tornadoes and earthquakes are potential hazards that need to be addressed not only by organizations like the Town and the Community Association, but also by individual residents and property owners. Evacuation of the Island is often called for when one of these natural disasters is judged imminent. If a mandatory evacuation order is issued, the prescribed evacuation route calls for leaving the Island via the Kiawah Island Parkway, and then on to Bohicket Road, Main Road and Highway 17. Highway 17 is then taken south to SC64 and then on to Walterboro. For more information regarding the Town's emergency evacuation plan, as well as its entire Emergency Preparedness Plan, please visit the Town's website at [www.KiawahIsland.org](http://www.KiawahIsland.org)

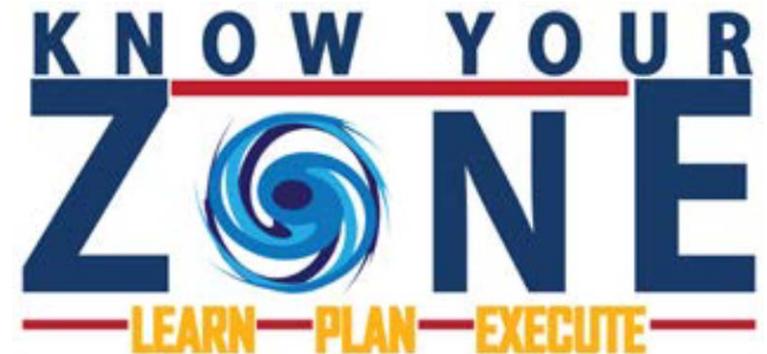
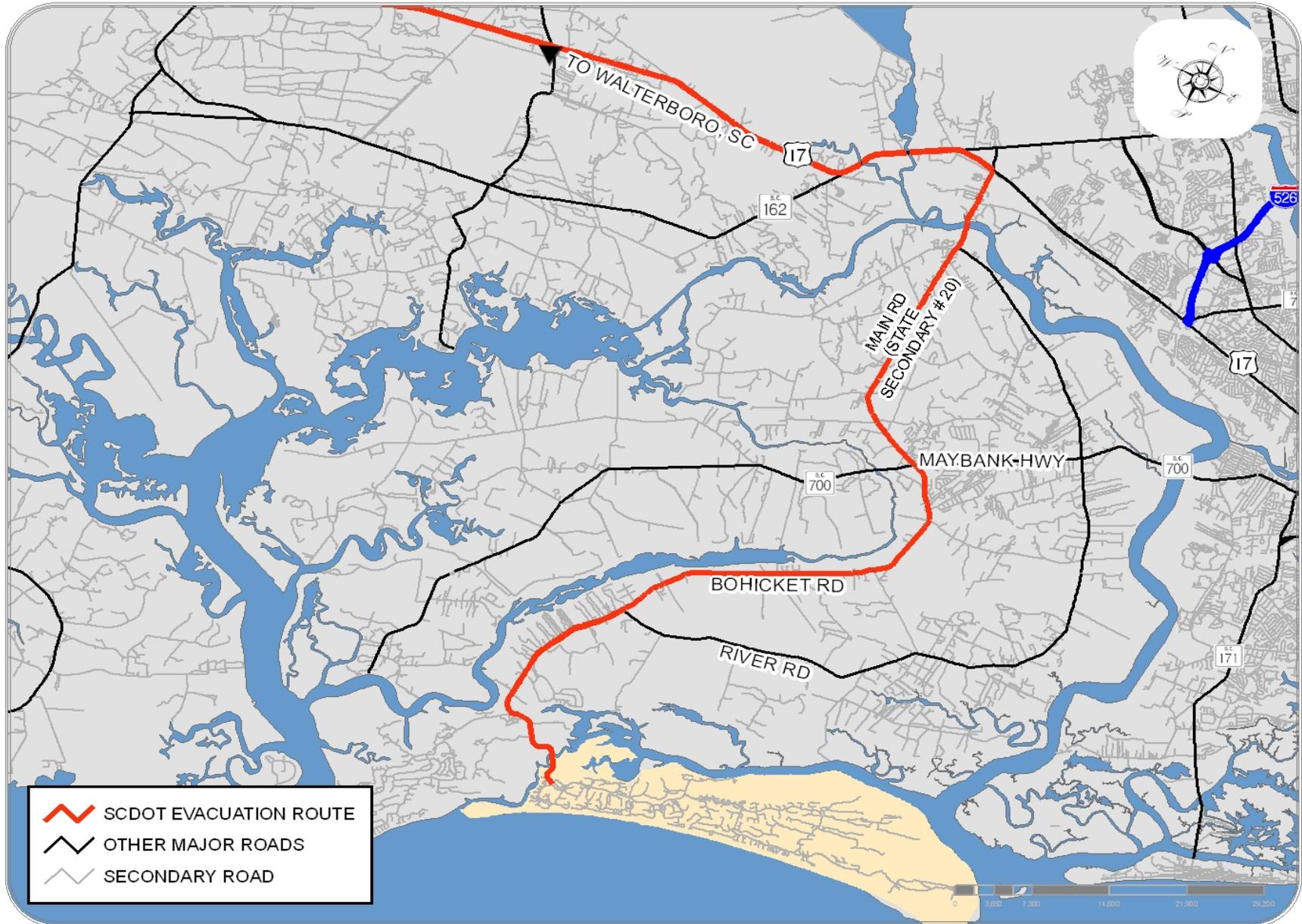




Figure X.5 Emergency Evacuation Route from Kiawah Island





## Transportation Element - X



Evacuees from Kiawah Island will use SC 700 and Secondary Road 20 (Bohicket Road) to US 17. They will then take US 17 south to SC 64. SC 64 will take them to Walterboro and eventually to Augusta, GA.

Source: SCDPS Emergency Traffic Network  
<http://www.sctrffic.org/centralmap.html>

### Public Transportation

Currently, there is no public transportation available on the Island or from the Island to other destinations. The Resort does provide bus service on and off the Island for its employees and complimentary Island transportation to its guests and off-Island transportation to residents and guests for a fee.

### Air Transportation

It is possible to fly into and out of Charleston at two local sites: the Charleston International Airport located about 20 miles north of the Island, and the Charleston Executive Airport, which is undergoing renovations and expansion, and is located 15 miles northeast of the Island. At present, nine major air carriers operate out of the Charleston International Airport -- Delta, American, USAir, JetBlue, Silver Airways, United, Porter Airlines, Alaska Airlines, and Southwest, who was the latest edition to the airport in 2010. Airport volume is 306\* daily flights. Charleston Executive Airport supports mostly private air flights. With two runways in excess of 6,000 ft. in length, the airport can handle planes up to the size of small to mid-sized jets. Volume is 151\* flights a day.

\*for 12-month period ending May 31, 2015



### **Limousine Service**

A number of limousine firms, mostly operating out of Charleston, service demand on Kiawah. Airport shuttle-vans as well as stretched and standard-sized luxury cars are the vehicles of choice. KICA, as well as the Kiawah Island Club, offer a transportation service for its members. This Shuttle Service was first introduced in April of 2014. This service offers a premier and convenient luxury transportation to a myriad of destinations inside and outside the County of Charleston. Since its launch, the shuttle has been booked for over 550 trips and has accrued approximately \$50,000 in revenue for KICA. The most popular destination, accounting for over 74 percent of the bookings to date, has been to the Charleston International Airport; however, the shuttle has been all over Charleston County and the surrounding area.

### **Needs Assessments:**

- Cooperating and coordinating with all private and public organizations in finding a solution improving access to and from the Greater Charleston Metro Area.
- Cooperating with KICA and the developers to ensure safe roads on the Island; and
- Maintaining the structural integrity and beauty of the roundabout and upgraded Kiawah Island Parkway which serves as the gateway to Kiawah.

### **Goals**

To help the Town further realize its Vision, the following goals should be considered when evaluating proposals for change:

1. **Promote compatibility among roadway improvements, land use patterns, community character and natural environment.**
2. **Ensure that the Town's roadway system is properly maintained to meet the safe and efficient mobility of residents, businesses, and visitors.**
3. **Support regional roadway initiatives to improve traffic flow between Kiawah Island, Seabrook Island, Johns Island, and the Greater Charleston Metro area.**



## **PRIORITY INVESTMENT ELEMENT**

### **Background**

On May 23, 2007 the General Assembly adopted the Priority Investment Act requiring Planning Commissions to incorporate priority investment analysis in the comprehensive planning process. The Act called for Comprehensive Plans to include a new Priority Investment Element that analyzes the likely federal, state, and local funds available for public infrastructure and facilities during the next ten years, and recommends projects for expenditure of those funds during that time period for needed public infrastructure and facilities such as water, sewer, roads, and schools.

The recommendation of projects for public expenditure must be coordinated with adjacent and relevant counties, municipalities, public service districts, school districts, public and private utilities, transportation agencies, and other public entities that are affected by or have planning authority over the public project. Such coordination is accomplished through written notification by the local planning commission or its staff to affected parties and the opportunity for those parties to provide comment to the planning commission or its staff concerning the proposed projects. Failure of the planning commission or its staff to identify or notify an adjacent or relevant jurisdiction or agency does not invalidate the local comprehensive plan and does not give rise to a civil cause of action.

### **Priority Investments**

The purpose of this section of the Town's Comprehensive Plan is to focus investment on the priorities identified as critical to the sustainability of the Island. The goal is to coordinate prioritization, planning, and budgeting for these priorities over a ten year period.

The Town of Kiawah Island has identified the following areas as priorities for the community: hazard mitigation, emergency management, infrastructure, beach management and maintenance, and information technology. Each of these areas supports the development of a Capital Improvement Plan (CIP). These priority areas are discussed further in the following sections.



## **Hazard Mitigation**

Hazard Mitigation involves sustained planning to minimize or reduce long term risk to people and their assets, as well as the economy and the community. The Town of Kiawah Island adopted the Charleston Regional Mitigation Plan in 2004 to address the mitigation of all types of hazards and maintain a high Community Rating System (CRS) resulting in lower insurance costs. Additional information about the program may be found at [www.charlestoncounty.org](http://www.charlestoncounty.org).

Currently, the Town updates its Hazard Mitigation Action Plan and reports the plan's status each June, and submits a Town Council resolution to Charleston County committing its continuance in the program. In 2014, the Town completed a five year federal review of the plan and retained its current CRS rating (resulting in lower flood insurance premiums for property owners).

The Town's action plan focuses primarily on flooding, but should be broadened to more specifically address other known hazards. Expanding the current hazard mitigation plan would require a collaborative effort among Island entities and, in particular, emergency personnel including the St. John's Fire District and Charleston County Sheriff's Department. For a mitigation plan to be successful, it must remain relevant and should be reviewed regularly.

Hazard mitigation planning is included in the Town of Kiawah Island's Priority Investment Element as it sets the stage for determining those critical community assets, including housing, economy, cultural resources, and transportation, that should be prioritized, protected, and maintained. Hazard mitigation plans help communities like Kiawah Island plan for, budget, and justify improvements in order to mitigate the effects of identifiable hazards. Some of the known hazards to Kiawah Island include, but are not limited to, hurricanes, tornados, fires, earthquakes, explosions, erosion, and floods.

## **Emergency Management**

As a coastal community on a barrier island, the Town of Kiawah Island recognizes emergency management as a priority investment. The risk of severe hurricane effects and the remote location of the Island combine to make hurricanes a double threat to Kiawah Island and its population. The Town has developed a written emergency preparedness plan that



*Priority Investment Element – XI*

is updated annually. The Town also hosts an annual disaster awareness day event. The details of the Town's preparedness efforts are discussed at length in Chapter V- Community Facilities.

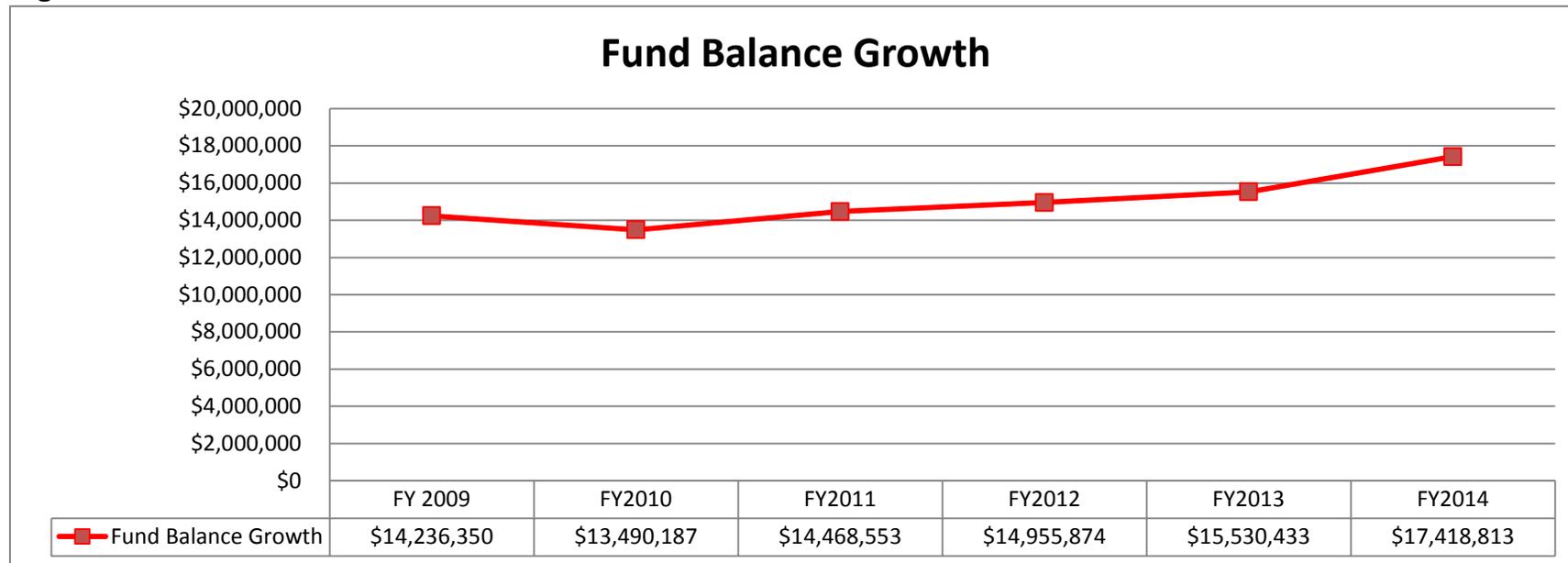
To prioritize funding for emergency management, the Town should conduct reasonable assessments of the Town's owned infrastructure and identify its replacement costs (see Infrastructure discussions below). Next, the Town should estimate the clean up or recovery costs associated with restoring the Island to its pre-emergency condition. Lastly, the costs for the resources needed to demonstrate readiness and responsiveness should be determined. These estimates should be the basis of a target budget for an emergency preparedness component of the Capital Improvement Plan.

Developing cost estimates should be a collaborative effort among Island entities, the State's Budget & Control Board, private contractors, and other public partners like the Federal Emergency Management Agency (FEMA) and Charleston County. This effort should also involve the Town's financial advisors (bankers, accountants, etc.) to measure the financial strength of the Town as compared to the inherent risk of a natural disaster or other emergency. The Town should position itself by seeking a bond rating and discuss available options with financial advisors should a bond issuance become necessary to facilitate any potential recovery.

The Town of Kiawah Island is well aware of the need for funding to respond to a natural disaster, and has been fiscally conservative allowing for the accrual of approximately \$10-12 million in reserves.



**Figure XI: Fund Balance Growth**



Source: *The Town of Kiawah Island Comprehensive Annual Financial Report, 2009-2014*

It should be the objective of the Town to seek out other identifiable funding sources to leverage those available in the current reserves. Other possible sources include FEMA, emergency management grants, Homeland Security, and Charleston County.

**Beach Management and Maintenance**

The most critical priority investment for the beach is the ability to recover from damage resulting from a major storm. In the event of such a storm, the beach could sustain significant damage that could take years to recover from naturally. As the beach is a major contributor to the economy of the Town of Kiawah Island and Charleston County, it is important that it be restored as soon as reasonably possible. Every effort should be made to recognize and budget provisionally for the expense of restoring the Kiawah Island beach to its pre-storm event condition.



*Priority Investment Element – XI*

Over the past ten years, the Town has held reserves in the Local Accommodations Tax Fund, primarily for preserving the 10 mile Kiawah Island beach. In 2006, these funds were utilized to complete a major beach restoration project totaling \$3.6 million. As a continuation of the East End Beach project completed in 2006, the Town continued to monitor the results of this project. The Town spent roughly \$115,000 in order to fully monitor the beach and the wildlife affected by the 2006 restoration project. This monitoring program continued until 2014. After the program was completed, The Town found that the eastern end of Kiawah Island had experienced severe erosion during 2014 and 2015, specifically the land that was adjacent to the Ocean Course driving range. In May of 2015, the Town moved approximately 100,000 cubic yards of sand to create a new half mile inlet to the east. This project was completed in July of 2015 and cost the Town approximately \$1 million. The objective of the beach management and maintenance priority is to provide continuous monitoring of beach erosion or accretion rates, dune formation or other shoreline changes. The results of this ongoing observation should be taken into consideration as part of the planning process and used to identify future needs. Currently, these observations are conducted by Dr. Kana of Coastal Science and Engineering and the results are incorporated in the State mandated Beach Management Plan. As part of the coordination efforts, priorities established should be consistent with the existing Beach Management Plan.

**Infrastructure**

Infrastructure refers to the physical structures or framework needed for the proper functioning of a community. It includes the construction and maintenance of roads, bridges, water, sewer and storm drain improvements, refuse disposal facilities, government buildings, and telecommunications.

**Roads and Bridges**

As indicated in the Transportation Element the Town of Kiawah Island owns the Kiawah Island Parkway and Beachwalker Drive and their rights of way. Beachwalker Drive was last repaved in 2003 and landscaped in 2007. As discussed in the Transportation Element, the Roundabout was constructed in 2005 at a cost of \$2.3 million. The Parkway, bridge and bike path project was implemented in 2009 at a cost of \$2.8 million. The bridge is insured at \$1 million and its replacement value is estimated to be at least that amount. In 2012, the Town of Kiawah Island applied to Charleston County for Greenbelt funds. The Town was awarded approximately \$120,000, which were used to improve the





*Priority Investment Element – XI*

areas around the bridge on the Kiawah Island Parkway, and the bridge on Beachwalker Drive. In 2014, the Town allocated approximately \$50,000 to improve and update the pedestrian pathway along Beachwalker Drive. The Town also allocated a total \$60,000 to the replacement of a joint in the Kiawah Island Parkway Bridge. This project consists of furnishing and installing a bridge asphaltic plug expansion within the Kiawah Island Parkway Bridge.

As a priority investment, the Town's roads and bridges should be assigned useful lives and maintenance schedules tied to these useful lives. Maintenance should include establishing base line or current condition of the roadway, bridges, curb cuts and associated sidewalk or bike paths. Budget funding should be linked to coincide with the replacement schedules.

Possible additional funding sources for the road repairs and/or replacement include South Carolina Department of Transportation, Charleston County C-Funds, and the Berkeley, Charleston and Dorchester Council of Governments. The Town will aggressively seek access to these funds and incorporate them into the Capital Budget for Infrastructure investments.

### **Water and Wastewater**

The water and wastewater service to Kiawah Island is owned and operated by the Kiawah Island Utility (KIU) Company. The original water lines servicing the Island are estimated to be 30 years old and have experienced numerous breaks requiring minor repairs. Fortunately, a new secondary waterline for Kiawah Island is in the final stages of approval. All easements have been obtained. KIU is also currently in the process of obtaining Army Corps of Engineers inspection and wetland delineation approval, which is required prior to submitting all other permit applications. Plans and scheduling will be reviewed with pertinent regulatory agencies prior to preparing contracts for the three phases of construction. KIU anticipates construction to begin in late 2015. In 2014, KIU provided service to 7,315 customers (3,972 for water and 3,343 for sewer). They maintained 148 miles of transmission line throughout the Town, as well as was able to treat approximately 1.7 million gallons of water per day.



### Storm Water Improvements

The Town will seek to identify, locate, and log all storm drains on Town-owned streets or easements. Their current condition will be evaluated upon identification and systematically scheduled for maintenance based on their projected useful lives. They will be repaired as those along the Parkway were repaired in 2009 and along Beachwalker Drive in 2007. However, as a priority investment, this approach will allow for proactive maintenance or replacement to ensure that they are in working order and do not jeopardize functionality of the overall storm water network managed by the Kiawah Island Community Association. The Town of Kiawah Island recently concluded an infrastructure assessment along Beachwalker Drive. Plans to implement suggested changes are ongoing. The Kiawah Island Community Association has an interest in storm water improvements. KICA owns and maintain more than 40 miles of underground pipe that provide drainage for the entire Island. About 25 percent is metal and was installed during the Kuwati era, which means they have been submerged for nearly 40 years. Because of this need to improve the Town’s infrastructure, KICA has implemented a multi-year process for repairing or replacing these pipes, with a number of larger projects already being completed. These projects were completed at a total cost of approximately \$600,000. The Town as well as the Community Association will continue to take step to improve storm water on and off the Island.



### Municipal Buildings

The Town’s Municipal Center and garage are the single largest facility owned by the Town of Kiawah Island. The structures are 18 and 17 years old respectively and have required minor renovations and improvements over the last five years. The buildings are valued at \$3.2 million. A strategic maintenance and replacement plan is necessary to budget for the replacement and repair of major parts of the building. These include the roof, HVAC systems, plumbing, windows, protective shutters, emergency generator, and interior repairs. Faced with a growing community, increased services and limited office space and parking, Town Council began investigating municipal center expansion options in the Spring of 2015. After trying to work within the confines of





the existing building and parking lot, it was determined that onsite building modifications would be limited and would exacerbate the parking problem. Council soon began a search for property both on and off the island and determined resources within Kiawah Island proved to be too expensive. Council then identified and purchased a 28-acre parcel on Johns Island for approximately \$2 million. This piece of property proved to be a viable option and solution both economically and in location. The total Municipal Center project, inclusive of architectural design, construction, site development, and landscaping, is projected to cost approximately \$10 million. Plans are in place to sell the existing building and site with the proceeds reducing the amount of financing. Ultimately, the Town's goal is to have the new municipal center completed and ready for occupancy by the end of 2016 or early 2017.

## **Information Technology**

### **Geographical Information System (GIS)**

The Town has a geographical information system that is used to produce limited mapping for beach related studies, Project Impact, and debris removal. When originally purchased, the system was valued at \$50,000, but is underutilized. The goal is to increase the systems benefit to the Town and maximize its usage. Additional uses that have been identified include plotting GIS points for all Town-owned infrastructure, water hydrants, solid waste routes, and conservation areas. This level of usage will require additional training, layers of information and hardware. Investments for this resource should be budgeted on an annual basis and upgraded/maintained continuously.

### **Implementation**

The major implementation strategies for the Priority Investment Element include conducting a thorough hazard assessment, community appraisal, and developing a Capital Improvement Plan (CIP). These implementation strategies are discussed in the following sections of this Element.

### **Hazard Assessment**

The first step to emergency preparedness is assessing a community's risk exposure and analyzing hazards. The process of hazard assessments is a method to prioritize and allocate resources to proactively mitigate hazards to the Town of Kiawah Island.



## **Community Appraisals**

A community appraisal focuses on local assets, resources, and activities as well as gaps, barriers, and emerging needs. The process of identifying and appraising this information will help build collaborative partnerships through the following:

- clearly understand the context in which residents live and the issues residents want to address;
- locate hidden strengths or underutilized resources that could be developed;
- determine which resources could contribute to comprehensive strategies, and in what way;
- design effective, collaborative strategies that engage residents because they respond to important conditions; and
- empower residents and community members by giving them a role in designing and implementing the strategies.

The process of conducting a community appraisal involves (1) scanning the community to locate existing information, (2) developing a resident focus, (3) identifying community assets and the degree to which they are accessible to the people who can benefit from them, and (4) analyzing the information obtained. Once completed, the next step is forming partnerships and coordinating efforts to implement the goals identified. An appraisal should be an ongoing process and updated during Comprehensive Plan reviews.

## **Capital Improvement Plan (CIP)**

The objective of the CIP is to plan and coordinate the financial resources necessary to prioritize investment. The CIP covers a ten year period and allows for the following:

- Facilitates coordination between capital needs and the operating budgets;
- Enhances the community's ability to obtain a credit rating in the future and avoid sudden changes in any potential future debt service requirements;
- Identifies the most economical means of financing capital projects;
- Increases opportunities for obtaining federal and state aid;
- Relates public facilities to other public and private development and redevelopment policies and plans;
- Focuses attention on community objectives and fiscal capacity;
- Keeps the public informed about future needs and projects;
- Allows local government to reduce duplication; and
- Encourages careful project planning and design to avoid costly mistakes and help a community reach desired goals.

The CIP is implemented by Town Council during the annual budget process and involves the evaluation of projected fund balances as compared to the 10 year funding requirements for each priority. After adoption of the 10 year plan, the Town



will review the progress of the plan annually, make adjustments or modifications, and incorporate recommendations from the Planning Commission as deemed appropriate.

The Town should also seek to invest funds and match their maturities so that they coincide with the planned time frame for the construction or renovation of priority investments as outlined in the CIP.

As such, the CIP will be a dynamic document that will chart the planning and funding for major capital projects or priorities within the community. Town Council should receive regular financial reporting for the CIP and discuss these findings in open session during Ways & Means Committee meetings.

### **Coordination**

One of the challenges to the implementation strategy is the required coordination and planning across jurisdictions and public/private partnerships.

The coordination would involve federal, county and state resources and private entities including the Kiawah Island Community Association, Kiawah Island Golf Resort, Kiawah Development Partners, Berkeley Electric Cooperative, Kiawah Island Utility, and Northwoods. The coordination would involve aligning development plans of the various entities with those of the Town and identifying financial resources to ensure that common priorities are funded in a time frame to prevent detriment to the community.

Coordination would also involve evaluation to prevent duplication of effort and the most effective use of resources. Further coordination would be allowed for public-private partnerships to accomplish similar goals to the extent that this is feasible. Lastly, the coordination among these entities would seek to leverage financial support to maximize the benefit to the Kiawah Island community.

### **Goals**

To help the Town further realize its Vision, the following goals should be considered:

- 1. Conduct an assessment to identify the Town’s exposure to all types of hazards, using the Charleston Regional Hazard Mitigation Plan as a baseline, and consider appropriate mitigation steps and associated resources or funding needed.**



- 2. Establish a process for regularly conducting community appraisals of existing resources and assets and identify gaps, barriers, and future needs.**
- 3. Maintain the Capital Improvement Plan**
- 4. Focus the Town’s investment on the priorities identified as critical to the sustainability of the Island.**



## APPENDIX A: Goals, Implementation Strategy, Responsibility, and Time Frame

### Population Element

#### Goals

To help the Town further realize its Vision, the following goals should be considered when evaluating proposals for change:

#### 1. Provide residents, non-resident property owners, and visitors with a safe and secure environment and high quality community facilities.

	<b>Implementation Strategy</b>	<b>Responsibility</b>	<b>Time Frame</b>
a.	Coordinate with law enforcement and private security providers to ensure a safe and secure environment is provided.	Public Safety Committee	Ongoing
b.	Monitor and sustain the continued adequacy of emergency preparedness plans designed to ensure the safety and protection of the Town's population during an emergency event and regularly communicate such plans to resident, non-resident property owner, and visitor populations. (See also Community Facilities Element-Goal #2)	Town Administrator Public Safety Committee	Annually

#### 2. Develop more accurate data on property owner and visitor populations in order to assess and project the need for community services and facilities.

	<b>Implementation Strategy</b>	<b>Responsibility</b>	<b>Time Frame</b>
a.	Work with KICA, KIGR, KDP, and other groups to collect accurate population data, including those pertaining to residents, non-resident property owners, and visitors.	Town Administrator	Ongoing
b.	Using these data, assess the current need and project future needs for community services and facilities to accommodate residents, non-resident property owners, and visitors.	Planning Director	Annually



**3. Develop strategies that consider the needs of an older and aging segment of the population.**

	<b>Implementation Strategy</b>	<b>Responsibility</b>	<b>Time Frame</b>
a.	Form a task force to study and consider the needs of an older and aging segment of the population, including their needs related to emergency preparedness.	Town Council	2016

**Economic Development Element**

**Goals**

To help the Town further realize its Vision, the following goals should be considered when evaluating proposals for change.

**1. Provide a balance between preservation of natural resources and economic development.**

	<b>Implementation Strategy</b>	<b>Responsibility</b>	<b>Time Frame</b>
a.	Ensure that future Development Agreements recognize the “Town’s Vision” while also providing for appropriate economic development and orderly growth (See Natural Resources Element Goal #1a).	Town Council Planning Commission	When Development Agreements are replaced or amended
b.	Ensure land use and zoning ordinances implement the Town’s Comprehensive Plan (See Natural Resources Element Goal #1b).	Town Council	Ongoing



## Natural Resources Element

### Goals:

To help the Town further realize its Vision, the following goals should be considered when evaluating proposals for change:

#### 1. Complete the Island’s development in a way that maintains the Island’s environmental integrity and natural beauty and is consistent with the Vision of the Town.

	<b>Implementation Strategy</b>	<b>Responsibility</b>	<b>Time Frame</b>
a.	Utilize site design and construction standards, methods, and practices to minimize natural area disturbance resulting from building design, location and construction. Standards in the ARB Building and Landscaping Guidelines, “Designing with Nature,” and the Kiawah Conservancy “Landscaping for the Legacy” and the Association’s “Landscape Management Guidelines for Association Members” should be used as a guide.	Town Council, Planning Commission	Ongoing
b.	Provide for or create open spaces, including undisturbed spaces, natural habitat areas, and access thereto throughout the Town (open space is intended to protect the natural and visual character of the community, provide for appropriate active and passive recreational uses and preserve corridors for wildlife travel between larger open space areas).	Town Council, Planning Commission	Ongoing

#### 2. Develop and maintain an environmentally sustainable system of parks and open spaces which provide access to the beach and river; preserves, protects and enhances natural resources; and meets the diverse recreational needs of the Town’s population.

	<b>Implementation Strategy</b>	<b>Responsibility</b>	<b>Time Frame</b>
a.	Maintain existing programs to monitor and protect natural resources, wildlife species and habitat and expand these programs to include all groups of species on the island.	Town Wildlife Dept., Environmental Committee, Town	Ongoing



		Council	
b.	Support and encourage research on wildlife and natural resources by outside entities, such as colleges and universities, to expand our knowledge and understanding of the natural systems on the island.	Town Wildlife Dept., Environmental Committee, Town Council	Ongoing
c.	Conduct aerial orthophotography of the island every 3 years to monitor changes to the beach and dunes, interior habitat areas, and ongoing development.	Town Wildlife Dept., Environmental Committee	Every 3 years
d.	Improve access to the beach, Kiawah River and other open space areas by allowing for parking near key access points.	Town Council, Environmental Committee	Ongoing

**3. Maintain the existing quality of the natural resources on Kiawah Island, as well as the waters and marine environment surrounding the Island.**

	<b>Implementation Strategy</b>	<b>Responsibility</b>	<b>Time Frame</b>
a.	Minimize disturbances to or impact on the Island's natural resources and unique natural setting.	Environmental Committee	Ongoing
b.	Discourage land uses that are threatening to wildlife and wildlife habitats.	Environmental Committee	Ongoing
c.	Protect natural habitats and corridors essential for the health and integrity of native plant and wildlife populations. Control invasive species.	Town Wildlife Dept., Environmental Committee, Town Council	Ongoing
d.	Recognize that native vegetation should be protected and used to protect and stabilize lagoons and stream banks.	Environmental Committee	Ongoing



**4. Maintain and expand public education and outreach programs.**

	<b>Implementation Strategy</b>	<b>Responsibility</b>	<b>Time Frame</b>
a.	Maintain and expand existing wildlife website	Town Wildlife Dept., Environmental Committee, Town Council	Ongoing
b.	Continue to produce wildlife nature guide and other pertinent publications and distribute to residents and visitors.	Town Wildlife Dept., Environmental Committee, Town Council	Ongoing
c.	Maintain wildlife interpretive signs and update as necessary.	Town Wildlife Dept., Environmental Committee, Town Council	Ongoing
d.	Continue and expand public outreach programs, including presentations and school group field trips.	Town Wildlife Dept., Environmental Committee, Town Council	Ongoing



## Cultural Resource Element

### Goals

To help the Town further realize its Vision, the following goals should be considered when evaluating proposals for change.

#### 1. Encourage the development of programs and services that improve the delivery of cultural activities to all of Kiawah Island and its visitors.

	<b>Implementation Strategy</b>	<b>Responsibility</b>	<b>Time Frame</b>
a.	Support the Town Arts Council which is chartered to foster community appreciation and involvement in the visual and performing arts through a range of programming, services, support and cultural education.	Town Council	Ongoing
b.	Coordinate with other public and private organizations, including KICA, KIGR, KDP, among others, to encourage the further development and delivery of recreational and cultural activities such as arts, clubs, and common activities, for the Town's resident, non-resident property owner, and visitor populations.	Town Council Arts Council	Ongoing
c.	Promote available events and programs for the benefit of the Town's resident, non-resident property owner, and visitor populations, and outreach events for neighboring communities.	Arts Council	Ongoing

#### 2. Encourage the identification and preservation of archaeological and historic resources located on Kiawah Island.

	<b>Implementation Strategy</b>	<b>Responsibility</b>	<b>Time Frame</b>
a.	Monitor preservation of identified archaeological and historic resources.	Town Council	Ongoing
b.	Evaluate requests for zoning permits to identify any previously unidentified archaeological or historic resources within the Town.	Planning Director	Ongoing



## Community Facilities Element

### Goals

To help the Town further realize its Vision, the following goals should be considered when evaluating proposals for change.

#### 1. Coordinate with all public and private organizations for the provision of essential community services.

	Implementation Strategy	Responsibility	Time Frame
a.	Evaluate the provision of public safety services to ensure the safety and security of the Town’s resident, non-resident property owner, and visitor populations, including security, fire protection, and emergency medical care, among others; provide Town Council with an annual report of status.	Town Administrator	Annually
b.	Evaluate the provision of utility services to meet the quality, volume and emergency needs of existing and proposed development. Such services include electricity, water, wastewater management, solid waste management, cable, telephone and other services; provide Town Council with an annual report of status.	Town Administrator	Annually
c.	Evaluate the merits of developing the Town’s borrowing capacity as a source of funding to address critical community services that may be needed on an emergency basis.	Town Council	Biannually

#### 2. Monitor and sustain the continued adequacy of emergency preparedness plans and communicate regularly such plans to resident, non-resident property owner, and visitor populations.

	Implementation Strategy	Responsibility	Time Frame
a.	Coordinate reviews of the Town’s Emergency Preparedness Plan, and related processes and infrastructure, with all relevant local, state, and national authorities. Update the Plan accordingly.	Town Council Town Administrator	Annually
b.	Communicate regularly the essential elements of the Town’s Emergency Preparedness Plan to residents, non-resident property owners, and visitors.	Town Council Town Administrator	Annually
c.	Develop plans for a variety of potential post-emergency event scenarios	Town Council	Annually



	and estimate clean-up, recovery and replacement costs for Town assets.	Town Administrator	
--	--	--------------------	--

**3. Work to ensure an environmentally sustainable system of parks and open spaces are developed and maintained. This system should provide access to the beach and river; preserve, protect and enhance natural resources; and meet residents’ diverse recreational needs.**

	<b>Implementation Strategy</b>	<b>Responsibility</b>	<b>Time Frame</b>
a.	For strategies see Natural Resources Element Goal #3	Town Council	Annually

**4. Maintain professional development and training for Town Council, Boards, Committees and Staff.**

	<b>Implementation Strategy</b>	<b>Responsibility</b>	<b>Time Frame</b>
a.	Ensure that required training courses are completed annually.	Town Council, Town Administrator	Annually

**Housing Element**

**Goals**

To help the Town further realize its Vision, the following goals should be considered when evaluating proposals for change

**1. Encourage development of a diversity of housing stock, types and styles that meet different needs of the population.**

	<b>Implementation Strategy</b>	<b>Responsibility</b>	<b>Time Frame</b>
a.	Provide mechanisms to permit flexibility and innovation in residential project design to promote land use efficiency and environmental protection.	Town Council Planning Commission Planning Director	Ongoing

**2. Increase the transparency and understanding for everyone involved in all phases of the development process.**

	<b>Implementation Strategy</b>	<b>Responsibility</b>	<b>Time Frame</b>
a.	Provide forums necessary to facilitate increased information flow at all	Planning Commission	Ongoing



	levels of involvement in the development process.	Town Administrator	
--	---	--------------------	--

**3. Consider the affordability of housing.**

	<b>Implementation Strategy</b>	<b>Responsibility</b>	<b>Time Frame</b>
a.	Develop information and consider (i) the affordability of housing in and/or near the Town, (ii) any nonessential housing regulatory requirements that add to the cost of developing affordable housing but are not necessary to protect the public health, safety, or welfare, and (iii) any market-based incentives that may be made available to encourage development of affordable housing.	Town Council	Ongoing

**Land Use Element**

**Goals**

To help the Town further realize its Vision, the following goals should be considered when evaluating proposals for change:

**1. Maintain and enhance the residential character of the Town.**

	<b>Implementation Strategy</b>	<b>Responsibility</b>	<b>Time Frame</b>
a.	Develop standards that assure that new development is high quality and compatible with the existing community's residential character and natural habitat.	Planning Commission	Ongoing
b.	Encourage the Developer (KDP and its successors) and the Resort (KIGR and its successors) to enter into development agreements with the Town which clearly set forth the rights and responsibilities of both parties and are consistent with the Vision Statement of the Island and this Plan.	Town Council	Ongoing

**2. Provide for high quality, orderly, and controlled development and redevelopment.**

	<b>Implementation Strategy</b>	<b>Responsibility</b>	<b>Time Frame</b>
a.	Ensure development criteria and standards are determined to be consistent with the Vision Statement of the Island and this Plan.	Planning Commission	Ongoing



b.	Develop standards that are flexible enough to allow property owners and developers to respond to changing conditions and ensure compliance with such standards.	Planning Commission	Ongoing
c.	Maintain compatibility of commercial, residential, and resort areas with adjacent and nearby properties such that redevelopment will not create demands for recreational facilities, roads or utilities in advance of their availability.	Planning Commission	Ongoing

**3. Encourage expansion of the Kiawah Island Conservation Areas.**

	<b>Implementation Strategy</b>	<b>Responsibility</b>	<b>Time Frame</b>
a.	Zone environmentally sensitive areas such as marshes and any future accreted land in the Conservation District.	Planning Commission	Ongoing

**4. Thoroughly evaluate any annexation proposals.**

	<b>Implementation Strategy</b>	<b>Responsibility</b>	<b>Time Frame</b>
a.	Ensure that annexation proposals protect environmentally sensitive areas, are consistent with the Town’s Vision, the spirit of this Comprehensive Plan, and enhance the character of Kiawah Island.	Town Council	Ongoing

**5. Continue to improve monitoring and evaluating spatial relationships of physical properties and land use (such as zoning, lot size, natural resources, transportation, and community services) with updated, accurate GIS data.**

	<b>Implementation Strategy</b>	<b>Responsibility</b>	<b>Time Frame</b>
a.	Broaden use of the Town’s GIS System and upgrade as appropriate.	Town Council	Ongoing



## Transportation Element

### Goals

To help the Town further realize its Vision, the following goals should be considered when evaluating proposals for change:

#### 1. Promote compatibility among roadway improvements, land use patterns, community character and natural environment.

	<b>Implementation Strategy</b>	<b>Responsibility</b>	<b>Time Frame</b>
a.	Provide roadways designed to provide for safe and efficient traffic flow, minimizing impact on the environment, while enabling travelers to experience the natural beauty of the Island.	Town Council	Ongoing
b.	Base the size and capacity of roads, parking areas, driveways and other impervious surfaces on the land uses they will serve.	Town Council Planning Commission	Ongoing
c.	Ensure safe traffic flow on and protection of the Town's only evacuation route – the Kiawah Island Parkway.	Town Council	Ongoing
d.	Encourage adequate off-street parking for all residential, commercial and recreational development activities in the Town.	Town Council Planning Commission	Ongoing

#### 2. Ensure that the Island's roadway system is properly maintained to meet the safe and efficient mobility of residents, businesses, and visitors.

	<b>Implementation Strategy</b>	<b>Responsibility</b>	<b>Time Frame</b>
a.	Develop and implement a strategic maintenance and replacement plan to ensure long-term maintenance of Town-owned transportation infrastructure (see Priority Investment Goals #3c. and #4b.). Coordinate with KICA and 3 <sup>rd</sup> parties regarding maintenance and replacement plans for their infrastructure within Town boundaries.	Town Council	Annually
b.	Collect and review roadway traffic count data and other information to assist in ensuring that the Highway Capacity Manual's Level of Service (LOS) "C" or better is maintained on collector and arterial streets and to serve development.	Public Safety Committee	Annually



c.	Encourage safe, non-motorized (e.g. walking, biking, etc) mobility on the Island. Ensure the efficacy and consistency of signage and pavement markings to improve safety of auto-non-auto interfaces (e.g., crosswalks, yield signs, etc.).	Public Safety Committee Town Administrator	Ongoing
----	---	---	---------

**3. Support regional roadway initiatives to improve traffic flow between Kiawah Island, Seabrook Island, Johns Island, and the Greater Charleston Metro Area.**

	<b>Implementation Strategy</b>	<b>Responsibility</b>	<b>Time Frame</b>
a.	Encourage the Charleston Area Transportation Study (CHATS) and Charleston County to improve roadways from the Betsy Kerrison Parkway to Maybank Highway, Savannah Highway and Charleston.	Town Council	Ongoing
b.	Encourage approval and funding for the "Sea Islands Greenway."	Town Council	Ongoing
c.	Provide for adequate and effective emergency evacuation routes from Kiawah Island.	Town Council	Annually

**Priority Investment Element**

**Goals**

To help the Town further realize its Vision, the following goals should be considered when evaluating proposals for change:

**1. Conduct an assessment to identify the Town’s exposure to all types of hazards, using the Charleston Regional Hazard Mitigation Plan as a baseline, and consider appropriate mitigation steps and associated resources or funding needed.**

	<b>Implementation Strategy</b>	<b>Responsibility</b>	<b>Time Frame</b>
a.	Lead a collaborative effort to develop a detailed and organized hazard mitigation plan to reduce disaster losses.	Town Administrator	2016
b.	Plan for, budget, and justify improvements identified through the hazard assessment to mitigate the effects of potential hazards.	Town Administrator	2016
c.	Position the Town to seek a bond rating should bond issuance become necessary to facilitate disaster recovery.	Town Administrator	2016



**2. Establish a process for regularly conducting community appraisals of existing resources and assets and identify gaps, barriers, and future needs.**

	<b>Implementation Strategy</b>	<b>Responsibility</b>	<b>Time Frame</b>
a.	Use surveys, Town Hall meetings, and other methods to seek input from residents, as well as public and private entities to identify desired community services, facilities, and programs.	Town Administrator	Ongoing
b.	Form partnerships to coordinate and implement additional identified priorities.	Town Administrator	Ongoing
c.	Identify feasibility, community impact and potential costs associated with implementing new initiatives.	Town Administrator	Ongoing

**3. Establish a Capital Improvement Plan**

	<b>Implementation Strategy</b>	<b>Responsibility</b>	<b>Time Frame</b>
a.	Budget for an emergency preparedness component of the Capital Improvement Fund, and other actions to mitigate hazard risks.	Town Administrator	2015
b.	Seek additional funding sources for priority investments to leverage existing Town funds.	Town Administrator	2015
c.	Develop maintenance requirements, replacement plans and budget requirements for infrastructure and other assets, tied to estimated useful lives and anticipated maintenance schedules (see Transportation Goal #2.a.).	Town Administrator	Ongoing

**4. Focus the Town’s investment on the priorities identified as critical to the sustainability of the Island.**

	<b>Implementation Strategy</b>	<b>Responsibility</b>	<b>Time Frame</b>
a.	Work with utility companies to ensure adequate replacement plans for utility service to the Island.	Town Administrator	2016
b.	Identify, locate and log all storm drains on Town-owned streets or easements—develop maintenance and/or replacement schedules (see Transportation Goal #2.a.).	Town Administrator	By 2015
c.	Continue to monitor beach erosion or accretion rates, dune formation or	Wildlife Biologist	Ongoing



	other shoreline changes. Use the Beach Management Plan as a planning tool for establishing beach-related priorities.	Environmental Committee	
d.	Consider additional uses of the Town-owned GIS system. Provide additional training, information and hardware as required.	Town Administrator	Ongoing
e.	Conduct feasibility studies regarding development of (i) an island-wide Wi-Fi network and (ii) cellular service. Consider external resources to support such studies.	Town Administrator	By 2015

## APPENDIX B: Definitions

**Employed:** Persons 16 years and over in the civilian non-institutional population who, during the reference week, did any work at all as paid employees; worked in their own business, profession, or on their own farm, or worked 15 hours or more as unpaid workers in an enterprise operated by a member of the family. Each employed person is counted only once, even if he or she holds more than one job. Excluded are persons whose only activity consisted of work around their own house or volunteer work for religious, charitable, and other organizations.

**Unemployed:** Persons aged 16 years and older who had no employment during the reference week, were available for work, except for temporary illness, and had made specific efforts to find employment sometime during the 4-week period ending with the reference week. Persons who were waiting to be recalled to a job from which they had been laid off need not have been looking for work to be classified as unemployed.

**Labor Force:** The labor force includes all persons classified as employed or unemployed in accordance with the definitions contained in this glossary.

**Family Group:** A family group is any two or more people residing together, and related by birth, marriage, or adoption. A household may be composed of one such group, more than one, or none at all. The count of family groups includes family households, related subfamilies, and unrelated subfamilies.

**Family household:** A family household is a household maintained by a householder who is in a family, and includes any unrelated people who may be residing there. The number of family households is equal to the number of families. The count of family household members differs from the county of family members, however, in that the family household



members include all people living in the household, whereas family members include only the householder and his/her relatives.

**Town of Kiawah Island (TOKI):** The Town of Kiawah Island, was incorporated by the State of South Carolina on September 13, 1988 and operates as a Mayor-Council form of government. The Town Council is composed of a Mayor and four Council Members. The Mayor is the chief administrative officer of the Town. The Town Administrator provides support and advice to the Mayor and Council and runs the day to day operations of the Town. The Town provides services to its property owners and visitors including, but not limited to: public safety; street and drainage maintenance; solid waste disposal; planning and zoning administration; municipal court administration; beach maintenance and safety; communications and wildlife management. The annual budget serves as the guide for the Town of Kiawah Island's financial planning and control. The Town's operations are funded by business license revenue, franchise fees, aid to subdivisions, accommodation taxes, solid waste fees and other miscellaneous revenue. Unlike more municipalities in South Carolina, the Town of Kiawah Island does not levy property taxes to its residents.

**Kiawah Island Community Association (KICA):** Incorporated in 1976, The Kiawah Island Community Association (KICA) is a non-profit organization whose mission is to preserve and enhance the quality of life and property values of its members. All property owners on Kiawah Island become members of KICA upon purchase of their property. The association owns, maintains, insures and improves common properties such as roads behind the main security gate, drainage systems, rights-of-way, the Sandcastle Community Center and pool, boardwalks, bridges, lakes and leisure trails. KICA also provides premise security on the island, enforces its covenants and rules and regulations, and seek to foster a sense of community through social, recreational and outreach programs. Through its programs and services, KICA plays a leadership role in ensuring that Kiawah Island is a beautiful, safe, well maintained and friendly community.

**Kiawah Island Golf Resort (KIGR):** For the first two decades of its existence, the developer and resort were all part of the same company. In 1989, the island's owner separated the real estate/developer operations from the resort amenities and sold the resort amenities to California-based Landmark Land Company, Inc. After the Ryder Cup, Landmark went bankrupt as a result of the Savings and Loan collapse and their holdings were turned over to the government's Resolution Trust Corporation. In 1993, the resort's current owners (under the name of Virginia Investment Trusts) bought the resort facilities at auction (with the Ocean Course being sold in 1995). The resort consists of the former Kiawah Island Inn property, the Straw Market in West Beach, Cougar Point Golf Course, the West Beach Tennis Center, the Roy Barth Tennis Center in East Beach (including the Tennis Center pool), the East Beach Conference center, Town Center Market,



the Sanctuary Hotel, the Night Heron Park, nature center and pool complex, Turtle Point Golf Course, Osprey Point Golf Course, The Ocean Course and Oak Point Golf Course on John Island.

**Kiawah Partners (KP):** KP is the Kiawah Island master developer and creates attractive real estate purchase opportunities on the island. It is sensitive to the ecology and natural beauty of the island as it builds new roadways and designs new neighborhoods. KP's functions are: Owning un-subdivided land and operating the Kiawah Island Club (Beach Club, Cassique and River Course), Kiawah Island Real Estate, Freshfields Village (a mixed use commercial village) and the water and sewer provider Kiawah Island Utilities (KIU); Providing recreational facilities to member of the Kiawah Island Club and publishing Legends and Island insight to promote island living; Recovery of KP properties after natural disasters and insurance of KP properties; Providing planning and development services for new neighborhoods, approval of modifications to homes and building of new homes on undeveloped lots via the Architectural Review Board.

**Kiawah Island Conservancy (KIC):** The Kiawah Island Natural Habitat Conservancy, Inc. (Kiawah Conservancy) is a 501(c)(3) non-profit organization established by the Island residents and incorporated in 1997. Its mission is to provide for the identification, preservation and appropriate management of the critical, natural habitat needed to maintain a healthy, balanced and diverse population of native flora and fauna on Kiawah Island. The Kiawah Conservancy publishes a bi-annual magazine - Naturally Kiawah, offers an annual presentation series - Conservation Matters, maintains two websites – [www.kiawahconservancy.org](http://www.kiawahconservancy.org) and [www.sweetgrassaward.org](http://www.sweetgrassaward.org), sponsors the Habitat Improvement Program and co-sponsors a variety of research studies. The Kiawah Conservancy is also a holder of land and conservation easements, and as such it acts as a land trust. Since its inception, the Kiawah Conservancy has preserved 21 properties, totaling 324 acres of pristine barrier island habitat.

**Kiawah Property Owners Group (KPOG):** An independent property owners' advocacy organization, KPOG represents the collective interests of property owners. Formed in 1981 as HOG, the Home Owners Group, KPOG provides information about the analyses of issues affecting Kiawah. KPOG's communications vehicles are Kiawah Island Talk, published 10 times each year.

**Architectural Review Board (ARB):** The Kiawah Island ARB is committed to protecting and enhancing property owner's precious assets. To do this, they help Kiawah Island property owners achieve an environmentally sensitive design for your new home through careful consideration of the configuration of your home site, the Lowcountry climate, existing vegetation, and topography of the building site. Thus, one of their primary objectives is to assist property owners with planning efforts. Ultimately, the goal of the Kiawah Island Architectural Review Board is to achieve an uncommon and



visually pleasing blend of natural beauty and manmade improvements by providing standards and guidelines for community areas as well as residence, in accordance with the development's comprehensive Master Plan.

**The Community Emergency Response Team (CERT):** The Community Emergency Response Team Program educated people about disaster preparedness for hazards that may impact they area and trains them in basic disaster response skills, such as fire safety, light search and rescue, team organization, and disaster medical operations. Using the training learned in the classroom and during exercises, CERT members can assist others in their neighborhood or workplace following an event when professional responders are not immediately available to help. Ultimately through training, citizens can manage utilities and put out small fires; treat the three killers by opening airways, controlling bleeding, and treating for shock; provide basic medical aid; search for and rescue victims safely; and organize themselves and spontaneous volunteers to be effective.

**Community Rating System (CRS):** The Community Rating System is a voluntary incentive program that recognizes and encourages community floodplain management activates that exceed the minimum National Flood Insurance Program requirements. As a result, flood insurance premium rates are discounted to reflect the reduced flood risk resulting from the community actions meeting the three goals of the CRS: reduce flood losses; facilitate accurate insurance rating; and promote the awareness of flood insurance. The lower the number of the CRS class rating, the higher the flood insurance premium discounts to the citizens.

**Geographic Information System (GIS):** A method of storing geographic information on computers. Geographic information can be obtained from a variety of sources, including topographic maps, soil maps, aerial and satellite imagery, and many others. Using GIS software, the computer can create special maps for presentation, can analyze spatial data from different sources simultaneously, and can generate interpretive maps. Among the many benefits of GIS are easily updated digital databases that can be used to print maps easily and efficiently, that can be easily shared by many users, and that can be used to analyze spatial relationships among the physical, social and natural environments.

**Parks and Recreation:** Parks, playgrounds, swimming pools, recreation facilities, and open spaces available to the general public, either without a fee or under the management or control of a public agency.

**Development Rights:** Development rights entitle property owners to develop land in accordance with local land use regulations.



## APPENDIX C: References

Kiawah Island Community Association. 2013. *Kiawah Island Community Association Membership Study 2013*. Kiawah Island Community Association.

U.S. Bureau of Census. American Community Survey 2009-2013 Five Year Estimates. 2014.

Kiawah Island Real Estate Publication. 2014. *Kiawah Island Property Report: 2014 Results in Review*. Charleston County: Kiawah Island Real Estate.

Town of Kiawah Island. 2014. *Town of Kiawah Island Comprehensive Annual Financial Report*. Charleston County: Town of Kiawah Island.

United States Bureau of Census, 2010.

United States Bureau of Census, American Community Survey 2009-2013 Five Year Estimates.

Town of Kiawah Island Architectural Review Board. 2015. *Town of Kiawah Island Architectural Review Board Permit Summary 2008-2014*.

Town of Kiawah Island Community Association. 2014. *Seasonal Traffic Count Through the Main Gain Study, 2014*.

Charleston County Assessor's Office. 2015. *Freshfields Gross Receipts for 2011 through 2013*. Charleston County

Town of Kiawah Island Arts Council. 2015. *Kiawah Island Arts Council Event Budget Review, 2010-2015*. Town of Kiawah Island.



## APPENDIX D: Legal Authority for Comprehensive Planning

### Legal Authority for the Comprehensive Plan

In 1994, the *South Carolina Local Government Comprehensive Planning Enabling Act* (S.C. Code Sections 6-29-310 through 6-29-1200) was passed to replace all previous planning and zoning statutes in South Carolina. Among other things, the *Enabling Act*, as amended, charges the Town of Kiawah Island Planning Commission with responsibility for comprehensive planning. The Planning Commission must establish and maintain a planning process which will result in the systematic preparation, continual evaluation and updating of a Comprehensive Plan (*S.C. Code Section 6-29-510(A)*). At a minimum, the planning process for each comprehensive plan element must include the following items: (i) inventory of existing conditions, (ii) a statement of needs and goals, and (iii) implementation strategies with time frames (*S.C. Code Section 6-29-510(C)*). Comprehensive plans must include, at a minimum, the following nine elements: (i) population, (ii) economic development, (iii) natural resources, (iv) cultural resources, (v) community facilities, (vi) housing, (vii) land use, (viii) transportation, and (ix) priority investment (*S.C. Code Section 6-29-510(D)*). The Act requires the Planning Commission review the comprehensive plan or elements of it no less than once every five years to determine whether changes in the amount, kind, or direction of development of the area or other reasons make it desirable to make additions or amendments to the plan and to update the comprehensive plan, including all elements of it, at least every ten years (*S.C. Code Section 6-29-510(E)*).

### Plan Approval Process

The process for review and adoption of the Comprehensive Plan is established by the *South Carolina Local Government Comprehensive Planning Enabling Act* (*S.C. Code Sections 6-29-520 and 6-29-530*), as well as the Town Code. Accordingly, the following steps comprised the process for this review:

- 1. Preliminary Review:** Members of the Planning Commission worked with the professional staff of the Town of Kiawah Island and the Charleston County Planning Department to review each element of the Town's Comprehensive Plan which was last updated in 2005. Among many things, this review consisted of the gathering and analysis of statistical and archival data related to the plan's elements, coordination with important organizations within the Town (such as KDP, KICA, and KIGR), and an analysis of changes in regulatory requirements since 2005. A draft revision of the Town's Comprehensive Plan was prepared to solicit input from the public.



2. **Consideration of Public Comments.** The Planning Commission held two information sessions to solicit comments on the Comprehensive Plan from interested members of the public. All such comments were considered by the Planning Commission and further revisions to the draft plan were made.
3. **Recommendation and Resolution.** The Planning Commission adopted a resolution recommending the review of the Plan to the Town Council for adoption. The resolution explicitly refers to maps and other descriptive material intended by the Planning Commission to form the recommended review of the plan. The resolution was recorded in the official minutes of the Planning Commission. A copy of the recommended review of the Plan was transmitted to the Town Council.
4. **Town Council Hearing.** The Town Council held two public hearings prior to adopting the recommended review of the plan. In each case, at least 30 days' notice of the hearing time and place was provided in a general circulation newspaper in the Charleston area
6. **Adoption Ordinance.** The Town of Kiawah Island Council adopted the recommended review of the plan by ordinance.

### **Plan Implementation**

Following adoption of the *Comprehensive Plan Re-evaluation* by the Town of Kiawah Island Council, the Town will move forward, if appropriate, with a series of implementation actions. These actions will include revisions to ordinances, programs, and routine Town operations, as appropriate, to achieve consistency with the goals of the Town of Kiawah Island Comprehensive Plan.

### **Legal Authority for the Reasonable Regulation of Land Development and Use**

As a product of the state-mandated comprehensive planning process, the Town Council is authorized to adopt zoning ordinances and maps that are consistent with the Comprehensive Plan. These changes are made pursuant to the Planning Commission's recommendations based on its analysis and study of any specific or comprehensive planning matter. Numerous zoning techniques are contemplated by the state Planning Enabling Act, including cluster development, floating zones, performance zoning, and planned development districts. However, state statutes expressly authorize the Town to adopt other reasonable and lawful regulations that implement the policies and provisions of the Comprehensive Plan. Additionally, the Town, like all local governments in South Carolina, has broad home rule



authorities conferred pursuant to a 1973 amendment to the South Carolina Constitution and new state legislation adopted in 1976.