

TRANSPORTATION ELEMENT

Background

The Transportation Element is new to the Comprehensive Plan, mandated by the 2007 amendment to the South Carolina Comprehensive Planning Act. In previous Plans, transportation matters were discussed under the Community Facilities Element. The Transportation Element considers transportation facilities including major road improvements, new road construction, and pedestrian and bicycle projects. It is intended that this element be developed in close coordination with the Land Use Element to ensure transportation efficiency for existing and planned development.



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.

X-1



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

As shown below, annual traffic levels fell in 2008 from 2006/2007 levels. Counts taken of January - May levels over the past three years show that traffic levels have continued to fall through early 2010. This pattern mirrors what is being seen in rental housing demand, number of golf rounds played, housing construction, and retail sales -- the recession that began in 2007 is having its effect on Kiawah as well as across the country. Regardless of the cyclical factors, it is clear that this one road serving Kiawah Island bears considerable traffic.

	Inbound (Roundabout to Kiawah Island Parkway)*	Outbound (Kiawah Island Parkway to Roundabout or Betsy Kerrison Parkway)*	
Annual Traffic Counts			
2006	1,397,826	1,769,522	
2007	1,410,210	1,658,267	
2008	1,351,372	1,557,199	
% 2008 +/(-) 2007	-4.2%	-6.1%	
<u>Memo: Jan-May Traffic</u> Counts			
2008	568,033	653,274	
2009	504,710	586,392	
2010	491,858	583,410	
% 2010 +/(-) 2008	-13.4%	-10.7%	
* Note: Outbound levels exceed inbound traffic because traffic entering Kiawah through the Freshfields Shopping Center is not counted.			

Figure X.1 Kiawah Traffic at the Roundabout



As can be expected, traffic peaks during the summer vacation months and falls off to during the winter months.

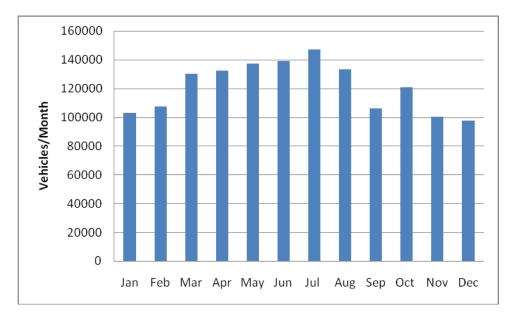
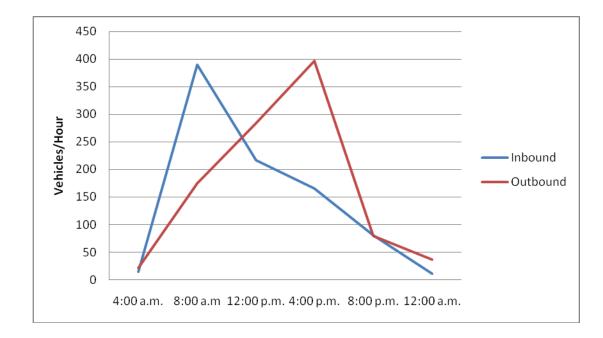


Figure X.2 2008 Seasonal Traffic on Kiawah Island Parkway (Avg. Inbound/Outbound)

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 2010 January-May Avg. Hourly Traffic on Kiawah Island Parkway





Within the Island, 2009 vs. 2008 traffic counts through the main gate monitored by KICA reflect the same annual decline seen on the Parkway. However, traffic through the Vanderhorst Gate has held steady.

	2008	2009	% Change
Traffic Counts			
Main Gate	1,863,284	1,686,588	-9%
Vanderhorst Gate	1,052,272	1,060,791	1%
Memo:			
Vanderhorst Gate	56%	63%	
% of Main Gate			

Figure X.4 Kiawah Gate Traffic -- 2009 vs. 2008

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.



Emergency Evacuation

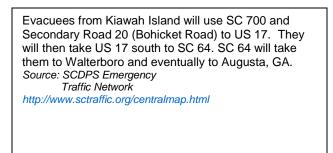
Kiawah Island is a barrier island and, as such, is particularly susceptible to risks associated with severe weather. Natural disasters like hurricanes, floods, tornadoes and earthquakes are potential hazards that need to be addressed not only by organizations like the Town and the Community Association, 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 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.

Figure X.5 Emergency Evacuation Route from Kiawah Island









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, four major air carriers operate out of the Charleston International Airport --Delta, American, Continental and USAir. A fifth, Southwest, is to be added later in 2010. Airport volume is 60 daily flights. Charleston Executive Airport supports mostly private air flights. With two runways in excess of 4,000 ft. in length, the airport can handle planes up to the size of small to mid-sized jets. Volume is 150 flights a day.



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.

Key Issues

- Cooperating and coordinating with all private and public organizations in finding a solution to the increased traffic crossing Johns Island.
- Cooperating with KICA and the developers to ensure safe roads on the Island; and
- Maintaining the structural integrity and beauty of the new roundabout and upgraded 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.

	Implementation Strategy	Responsibility	Time Frame
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.

	Implementation Strategy	Responsibility	Time Frame
а.	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 3rd parties regarding maintenance and replacement plans for their infrastructure within Town boundaries.	Town Council	2011
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.	Town Council Public Safety Committee Town Administrator	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	By 2012

3. Support Johns Island roadway initiatives to improve traffic flow off Kiawah Island, Seabrook Island, and Johns Island.

	Implementation Strategy	Responsibility	Time Frame
a.	Encourage the Charleston Area Transportation Study (CHATS) and	Town Council	By 2015
	Charleston County to improve roadways from the Betsy Kerrison Parkway to		
	Maybank Highway, Savannah Highway and Charleston.		
b.	Encourage approval and funding for the "Sea Islands Greenway."	Town Council	2010-2012
C.	Provide for adequate and effective emergency evacuation routes from	Town Council	Ongoing
	Kiawah Island.		