

Jekyll Island Carrying Capacity & Infrastructure Assessment Update

July 17, 2018



PROCESS TO DATE

- Met with JIA senior leadership to discuss project goals and objective, reviewed tasks, and collected existing data for the island;
- Developed a list of key stakeholders for small group or individual meetings and/or phone calls and conducted interviews to gather their input;
- Worked collaboratively to conduct original research and analyze existing conditions to assess carrying capacity and infrastructure characteristics;
- Conducted meeting with the JIA board to review the project, present goals and objectives, and define approach and intent;
- Held a public meeting on Jekyll Island to share project goals and tasks, review existing conditions, and seek input from the public;
- Our team has worked collaboratively to analyze data, determine carrying capacity, and make recommendations;
- Conducted resource meeting with JIA staff and resource groups for input and discussion;

STAKEHOLDER INTERVIEWS

- JIA Board Members
- JI Residents
- DNR Representative
- JIA staff
- CBRE Hotel Group
- Initiative to Protect Jekyll Island
- Red Bug Motors & Red Bug Pizza
- Business owners
- Winter guests
- Camp Jekyll & 4H Center Director
- UGA Extension
- 100 Miles
- Selig Center, University of Georgia
- Satilla River Keeper
- Center for a Sustainable Coast
- Westin owner & investor
- Georgia Department of Economic Development (GDEcD)
- Golden Isles CVB
- Golden Isles / Brunswick Chamber of Commerce
- Tidelands Nature Center
- Georgia State - ADA
- Jekyll Island Citizens Association
- Georgia Conservancy
- Jekyll Island Foundation
- Georgia DOT
- State Historic Preservation Officer
- Glynn County Environmental

KEY RECOMMENDATIONS

1. Identify Low-lying Fruit

- Entrance Gate;
- Leases;
- Utility Rates;
- Infrastructure;

2. Manage Usage and Visitor Experience

- Regulate capacities for individual facilities rather than the island as a whole;
- Emphasize uses with fewest negative impacts and most positive impacts;
- Include more off-season activities and better control of activities/events;

3. Integrate Sustainable Strategies

- Address vehicle capacity via parking and alternative approaches;
- Protect environmental resources by managing access and/or overuse;
- Emphasize eco-friendly activities, events, and development.

BASIC PRINCIPLES

- Carrying capacity addresses how to accommodate vehicles and people while preserving the character of Jekyll Island.
- The process is based on desired resource conditions and visitor experiences.
- There isn't one number that indicates an absolute as to an acceptable number of visitors.
- The impact per person is conditional on the method of visitation, season for visit, and length of stay.
- Carrying capacity is not intended to be used singularly.

BASIC PRINCIPLES

- 1. Peak Season:** These are the summer months (March, April, May, June, July) where Jekyll Island typically receives a higher number of visitors coming to the island for vacation and go to the beach. In 2017 and early 2018, these months all had more than 100,000 vehicles enter the island.
- 2. Off Season:** These are all other days of the year where visitation is less, and impact upon resources is less.
- 3. Peak Days:** These are summer weekends, and festival/event days where large crowds come to the island. These days have the highest number of visitors.

BASIC PRINCIPLES

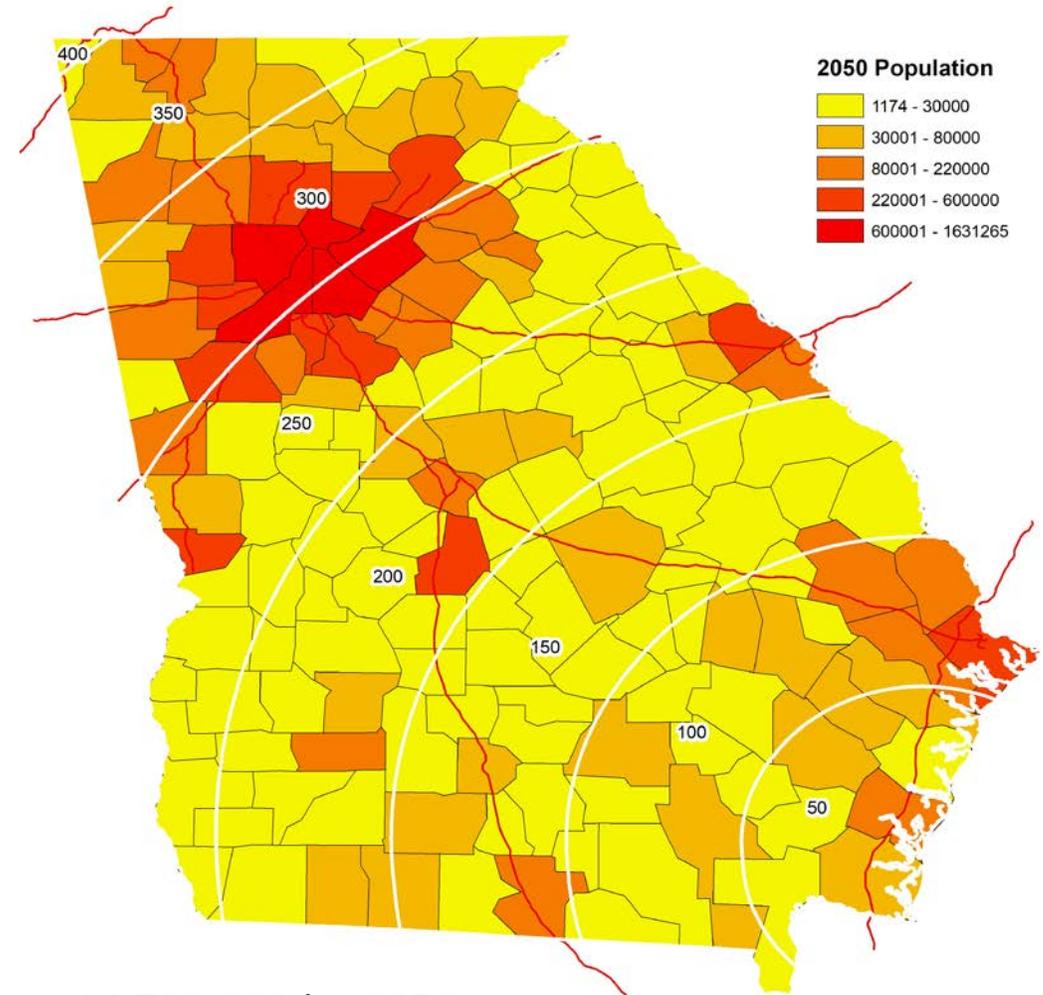
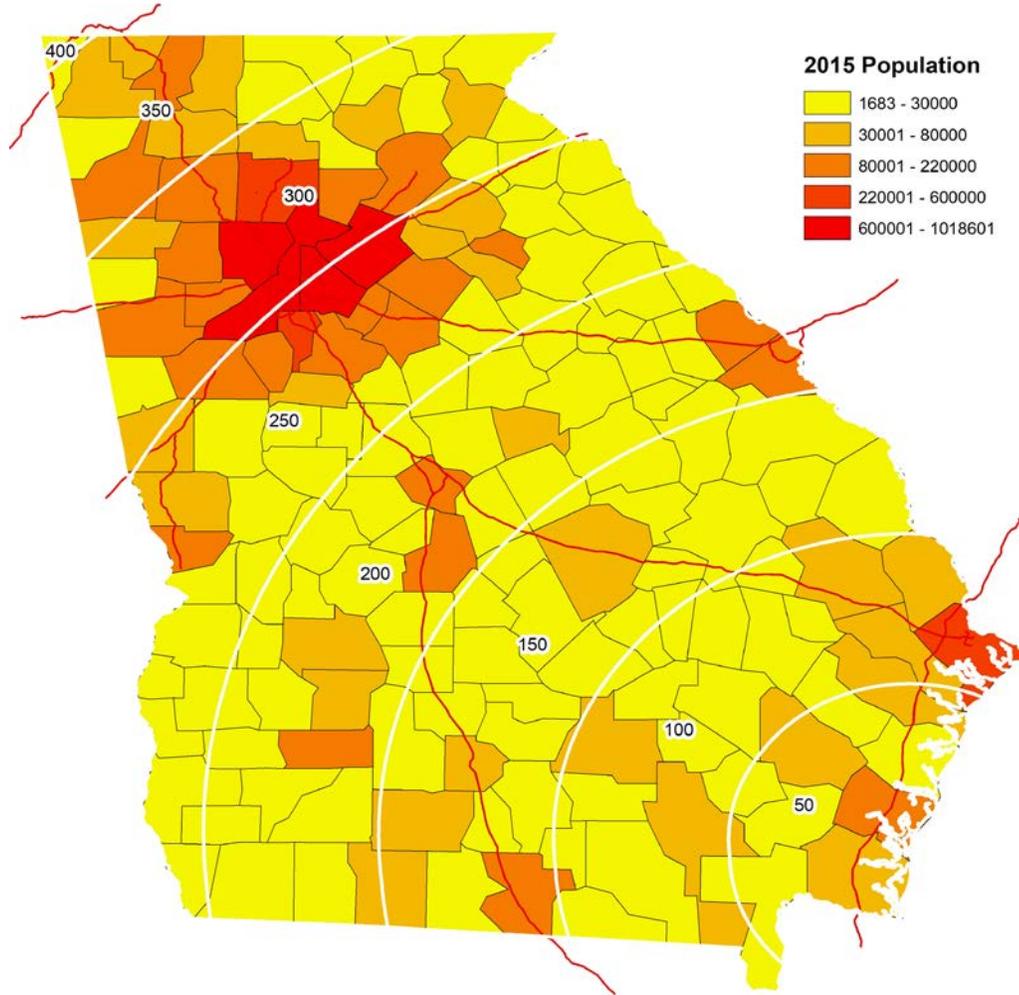
- 1. Maximum Capacity:** For buildings, based on fire marshal standards. For sites, based on metrics via industry standards.
- 2. Practical Capacity:** Adjusted based upon seasonality, visitation trends, and functionality.
- 3. Adjusted Capacity:** Revised capacity based upon about functionality on Jekyll Island.

CARRYING CAPACITY

- Visitation
- Overnight Stays
- Facilities – Buildings
- Facilities - Sites
- Parking
- Vehicular Level of Service (LOS)
- Infrastructure Assessment
- Environmental Capacity
- Coastal Hazards and Risk Management
- Economic Viability

VISITATION - DEMOGRAPHICS

Glynn County's population is forecast to grow at 1.5% annually for the next 25 years.



10,895,213 in 2020, to 14,709,321 by 2050

VEHICLE CAPACITY - TRAFFIC COUNTS

The number of vehicles coming to Jekyll Island are counted in two different ways. Both sources provide year-to-year traffic counts for Jekyll Island.

- 1. ENTRY GATE:** One source is traffic monitoring by the JIA, which occurs at the entrance to the state park. Every vehicle that comes through the entrance pays a parking fee, and this information is tabulated and stored. This is the primary source of information on visitor capacity.
- 2. GDOT MONITORING SITES:** The other source is the Georgia Department of Transportation (GA DOT) and their traffic monitoring system which provides estimates of traffic volume on most roads across the state, both major highways and local roads, such as the Causeway onto Jekyll Island.

VEHICLE CAPACITY - TRAFFIC COUNTS

Gate Traffic Counts		
2013	904,877	
2014	972,544	7.0%
2015	1,071,576	9.2%
2016	1,138,504	5.9%
2017	1,163,829	2.2%
	Five-year total	22.3%

VEHICLE CAPACITY - LEVEL OF SERVICE

<i>Level of Service</i>	<i>Capacity in vehicles Per day 2-lane rural facilities</i>
LOS A	< 2,500
LOS B	2,500 – 4,500
LOS C	4,500 – 8,000
LOS D	8,000 – 14,000
LOS E	14,000 – 27,500
LOS F	> 27,500

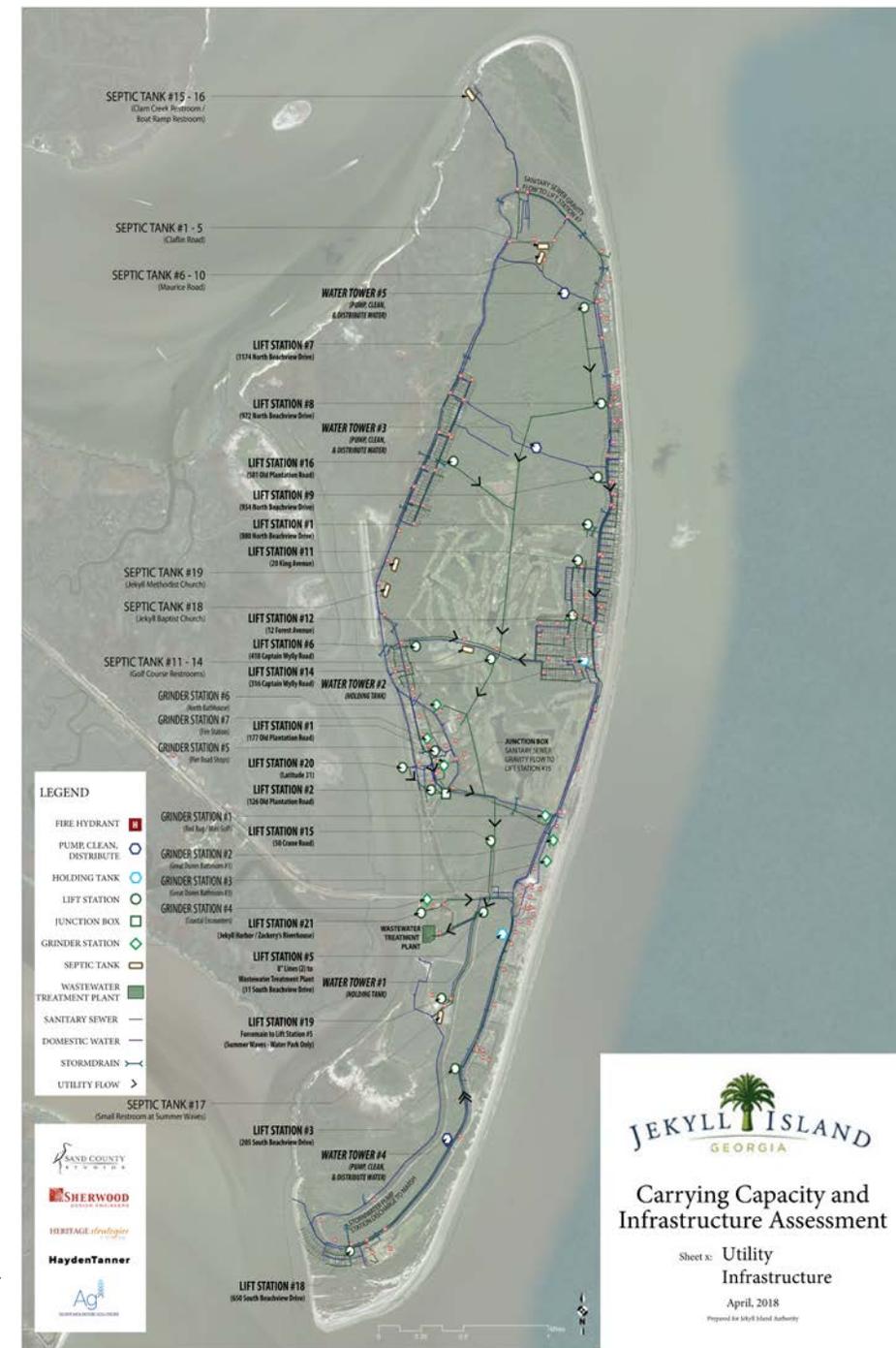
Most of the roads on Jekyll Island have a LOS A or B.

The Jekyll Island Causeway was designed to accommodate 18,000 to 21,000 vehicles daily, and the AADT in 2016 was 4,270.

INFRASTRUCTURE - UTILITIES

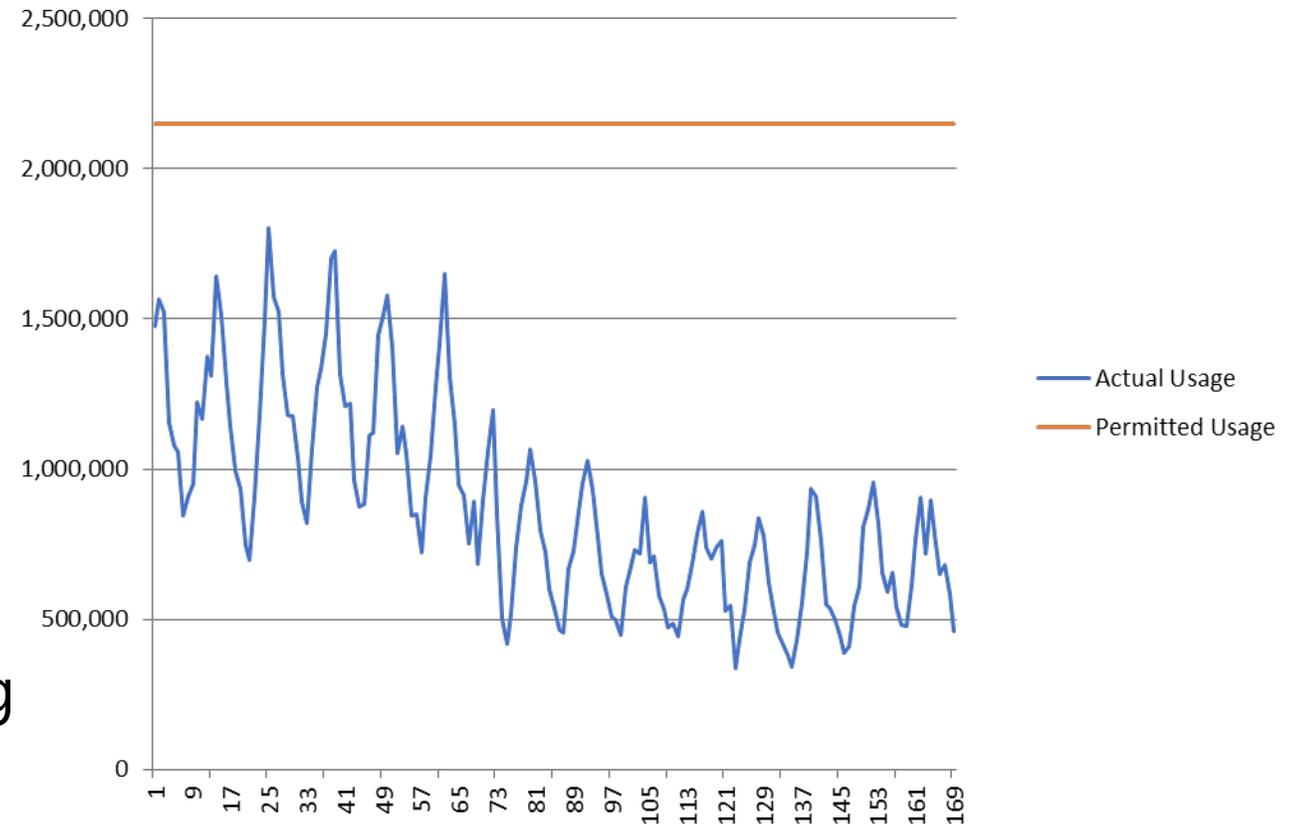
- Key utility infrastructure
 - Water
 - Sewer

Mapping derived from JIA as-built data



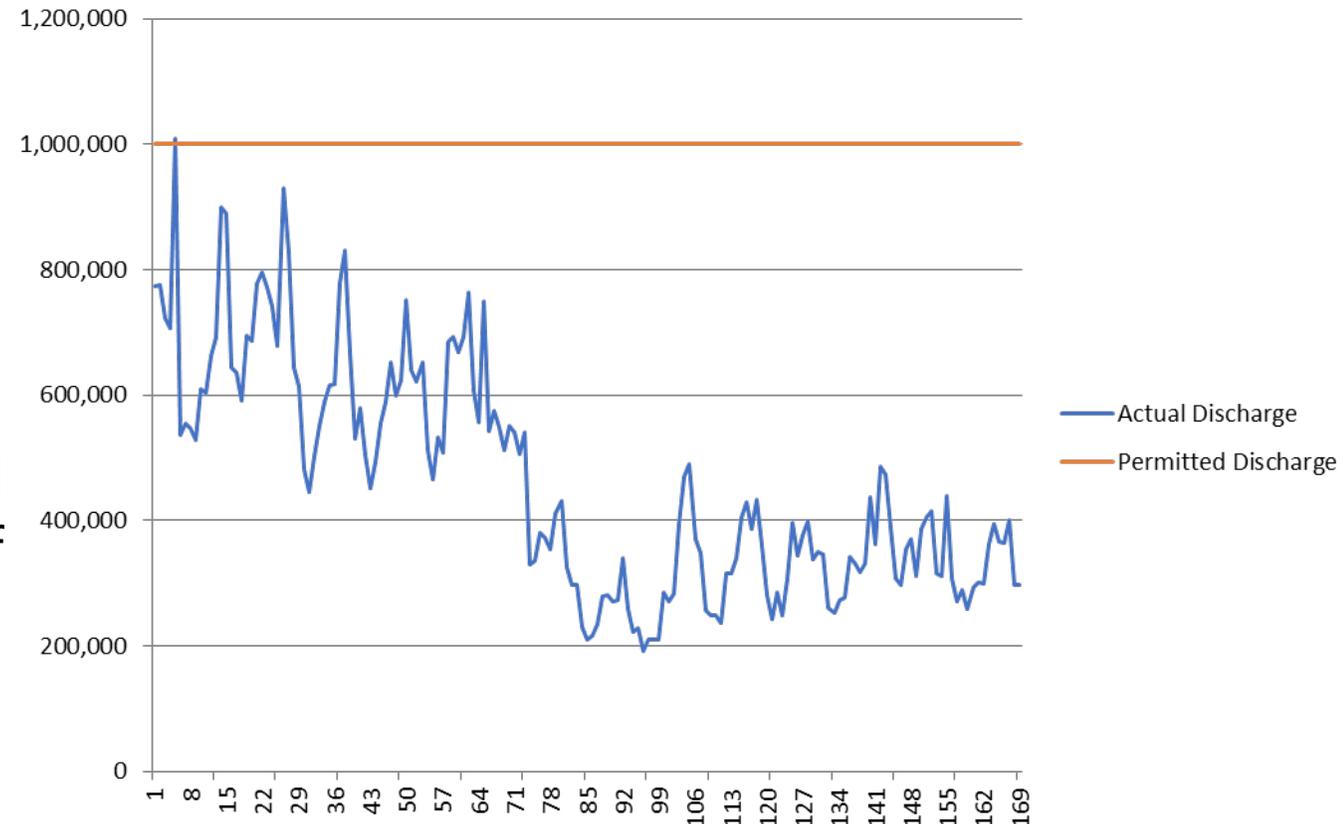
INFRASTRUCTURE – WATER CAPACITY

- Water Permitted Usage is 2,150,000 gallons per day per Georgia Environmental Protection Department (EPD)
- Actual water usage from 1996 thru 2017 has been graphed
- Based on historic data the water usage has the ability to double its daily use before any new permitting modifications would be necessary.



INFRASTRUCTURE – SEWER CAPACITY

- Sewer Permitted Discharge is 1,000,000 gallons per day per Georgia Environmental Protection Department (EPD)
- Actual sewer discharge from 1996 thru 2017 has been graphed
- Increases in treatment plant size would be required once flows reached 80% of permitted amount. Based on historic discharges the current treatment plant/sanitary system has the capacity to accommodate 300,000 gal.



COASTAL HAZARDS AND RISK MANAGEMENT



Current Conditions with Tidal Marsh Blue-Green

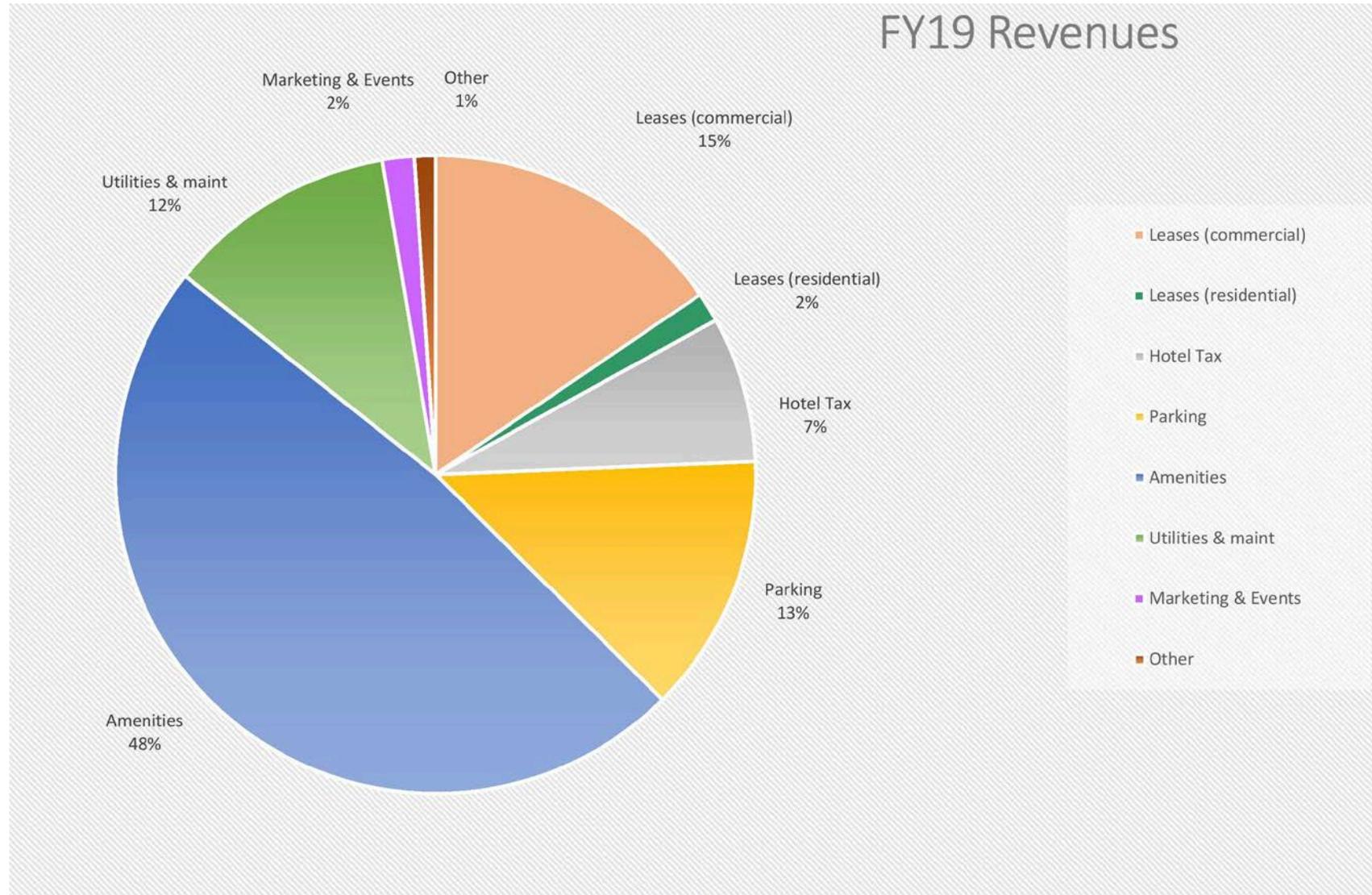
COASTAL HAZARDS AND RISK MANAGEMENT



Full Island

1' SLR Shown in Red

ECONOMICS



ECONOMICS

FY 2018 Budget	Revenues	Expenses	Net Operating Income	Margin	Notes
Summer Waves	\$2,343,126.00	(\$1,334,816.00)	\$1,008,310.00	43.03%	Note: General park maintenance more than 62% higher than in past years
Campground	\$1,206,074.00	(\$629,548.00)	\$576,526.00	47.80%	
Village Retail	\$533,892.00	(\$224,970.00)	\$308,922.00	57.86%	
Mini-Golf, bikes, playground & skating rink	\$354,717.00	(\$160,757.00)	\$193,960.00	54.68%	
Convention Center	\$2,976,559.00	(\$2,845,284.00)	\$131,275.00	4.41%	
Life is Good	\$134,581.00	(\$118,984.00)	\$15,597.00	11.59%	
McCormick's Grill	\$391,683.00	(\$389,911.00)	\$1,772.00	0.45%	
Airport	\$8,100.00	(\$15,564.00)	(\$7,464.00)	-92.15%	
Museum	\$1,330,306.00	(\$1,373,859.00)	(\$43,553.00)	-3.27%	
Tennis	\$92,770.00	(\$146,622.00)	(\$53,852.00)	-58.05%	Tennis revenue has significantly increased in the last year (expenses stable)
Georgia Sea Turtle Center	\$1,873,053.00	(\$1,944,718.00)	(\$71,665.00)	-3.83%	
Golf	\$2,118,028.00	(\$2,718,188.00)	(\$600,160.00)	-28.34%	Gross Revenues up about 4.3%, but, operating costs up 9.7%. Due in large part to personnel costs (up 10% - \$125K) and new golf course equip. lease (up 46% - \$119k, after 32% - \$62k increase prior year. Golf has averaged a \$666,000 operating loss over the past 5 years.

JIA Board Presentation

August 28th, 2018

PUBLIC INFORMATION SESSION

August 28th, 2018

5:30 PM

Jekyll Island Convention Center

Have a comment?

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