

STRONGE CONSULTING INC.

Recreational Use of Captiva's Beaches and Economic Impact

2018 Draft

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Introduction

This report summarizes the results of a survey of beach users on the gulf-front beaches of Captiva Island that was undertaken during the winter season of 2018. The purpose of the survey was to determine the recreational benefits of the Captiva beach nourishment project in advance of its anticipated construction in 2020-21.

Interviews were conducted on the beach with 420 persons during ten days in 2018: February 14th, February 16th, February 23rd, February 25th, March 2nd, March 5th, March 8th, March 16th, March 20th, and March 25th. The results of the February and March surveys were extrapolated to the entire November-April winter season. The individual recreational beach user counts were made on foot by walking the beaches and by boat by traveling just offshore on selected days. Counts data were supplemented by data from a beachcam available for a beach segment in Fort Myers Beach. The beachcam data helped to establish a pattern of daily use on Southwest Florida beaches, but the level of beach use was established using the Captiva foot and boat counts.

This report is divided into three sections. The first section provides estimates of the number of visits made to each of Captiva's beaches during winter 2018. A geographical origin breakdown of beach visitor. The second section provides information on the characteristics of the beach users including their beach experience and the value they place on their beach visit. The third section provides estimates of the spending by Captiva beach users on Captiva and elsewhere in Lee County. A distinction is drawn between the impacts on Captiva, which receives spending by all non-residents, and the impact on Lee County as a whole, which reflects the spending of out-of-county visitors.

Beach Use Winter 2018

Beach Use by Beach

During the Winter (November – April) season of 2018, there were a total of 277,222 visits made to Captiva's beaches (Table 1). This was an increase of 10.9 percent (27,186 visits) over the number of beach visits in 2010, measured prior to the 2013-14 Beach Maintenance Project. Some of this increase reflected the contrast between the exceptionally cold winter in 2010 and the warm winter in 2018.

Table 1.1 Visits to Captiva Beaches Winter 2018		
Beach	Winter 2018	Percent
South Seas	107,505	38.8
Hagerup Beach	30,424	11.0
Village	69,968	25.2
Tween Waters- Gold Coast	45,639	16.5
Turner Beach	23,686	8.5
Total	277,222	100.0

There was a large increase in the number of visits to the South Seas beaches, as well as to the Village Beach, since 2010. The growth of the vacation rentals-by-owner industry undoubtedly increased the tourist occupancy of individually-owned condominiums and single-family homes on the island and this was a major reason why visits to these two beaches increased substantially. The public beaches on the island (Hagerup Beach and Turner Beach) experienced a reduction in use since 2010. Both are severely constrained by the available parking. Additionally, the northern and southern boundaries of Hagerup Beach were more narrowly defined in 2018 and this probably resulted in a shift of some beach

users to the adjacent beaches. Tween Waters Beach experienced a decline in usage since 2010, especially at the northern end where we found fewer users from the nearby condominiums. Usage of the Gold Coast Beach was low in 2018 as it was in 2010 and is also severely constrained by a lack of public parking.

Origin of Beach Users

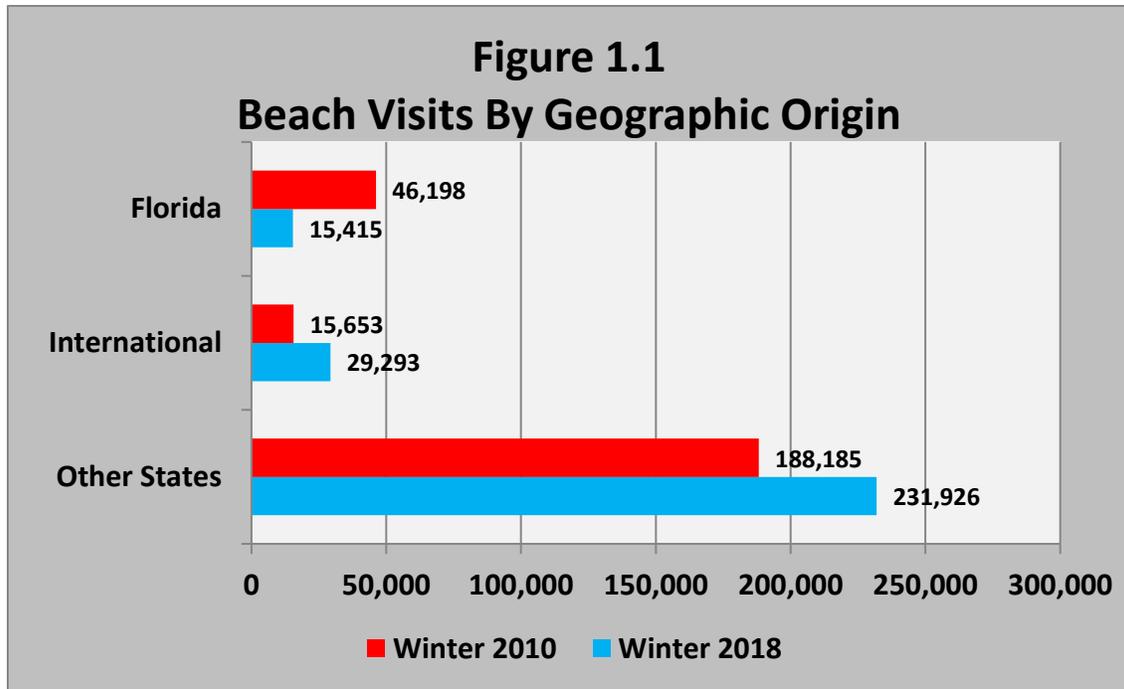
The vast majority of Captiva beach visits are made by non-residents of the island (more than 99 percent).

Table 1.2 Visits to Captiva Beaches 2018 By Geographic Origin		
Geographic Origin	Winter	Percent
Captiva Residents	2,083	0.7
Other Lee County	10,911	3.7
Other Florida	2,420	0.9
Florida	15,414	5.6
Other States	231,926	83.8
International	29,293	10.6
Out of State	261,219	94.4
Total	276,633	100.0

Note: About 5 percent of the questionnaires did not contain geographic origin data. These were apportioned out across the categories for which data were available.

Residents of Lee County accounted for 12,994 visits or 4.4 percent of the total and residents of other counties in Florida accounted for 2,420 or 0.9 percent. The largest source of visitors to Captiva's beaches were the other states in the US, which accounted for 231,926 visits or 83.8 percent of the total.

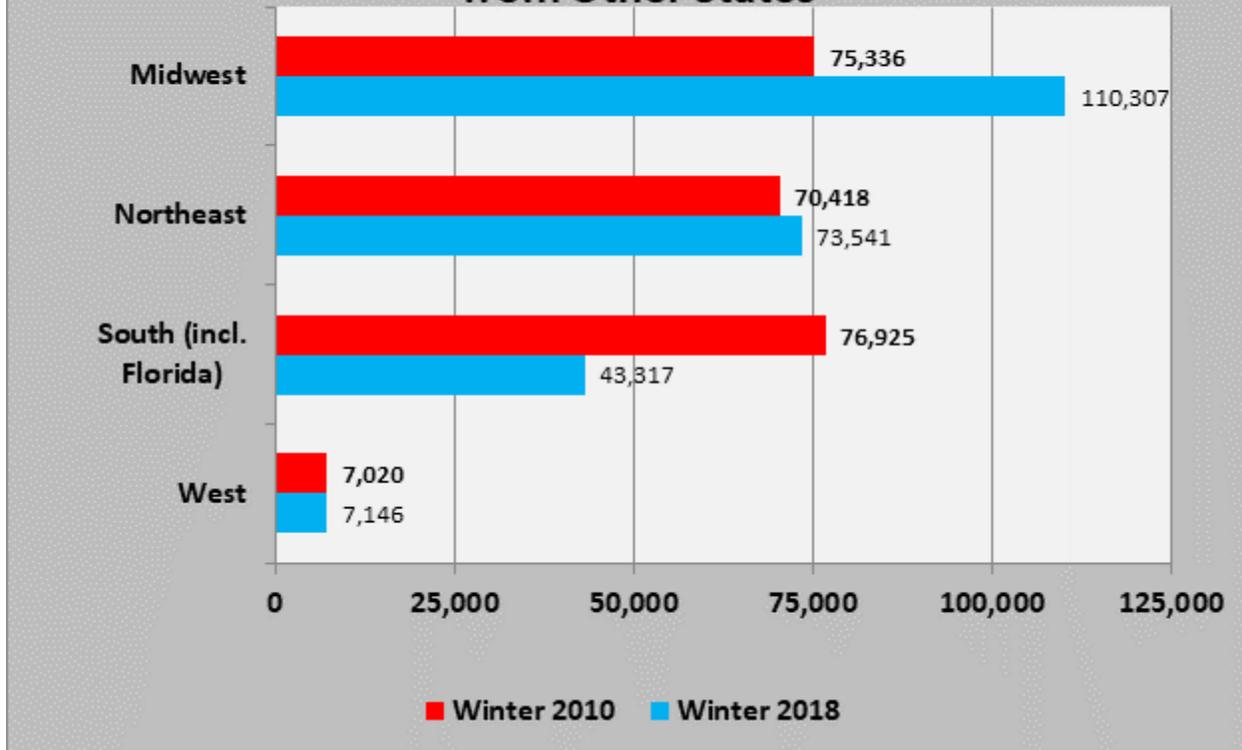
Visitors from other countries visited the island's beaches 29,293 times during the winter of 2018. There were more international (winter) visits to Captiva's Beaches than were made by residents of Florida.



The geographic origin of visits to Captiva Beaches is presented in Figure 1.1. By far, the largest number of visits was made by residents of other US states (and territories) in 2018, as was true in 2010. These visits grew by almost 44,000 between 2010 and 2018. There was also a substantial growth in international visits. However, visits by Floridians declined sharply between 2010 and 2018.

The U.S. geographic regional origins of visits in the Winter of 2018 and the Winter of 2010 are presented in Figure 1.2 (on page 6). The visits are broken down by census divisions. The Midwestern States were the largest source of visitors from other states both in 2010 and 2018. The second largest number of visits were made by residents of the Northeast and the third largest number of visits were made by residents of the South. A relatively small number of visits were made by residents of the West, presumably because of the large distances increase the cost of travel and making closer beaches and other tourist attractions more competitive.

Figure 1.2 Geographic Origin of Visitors from Other States



There was a striking change in the breakdown of beach visits by census division between 2010 and 2018. The number of visits made by residents of Midwestern States increased by more than 30,000 and the number of visits made by residents of the South declined by a similar amount. The number of visits made by residents of the Northeast increased slightly and the number of visits by residents of the Western States changed very little. The decline in visits from the South reflected the reduction in visits from Floridians that was noted in the discussion under Figure 1.1 above.

Most international beach visits were made by Canadians, both in 2018 and in 2010 (See Figure 1.3 on the next page). Virtually all the rest of the international visits were made by Europeans. There were significant increases in both Canadian and European beach visits since 2010. Canadian visits doubled and European visits increased by more than 60 percent. Visits from elsewhere in the world were very small in both 2010 and 2018.

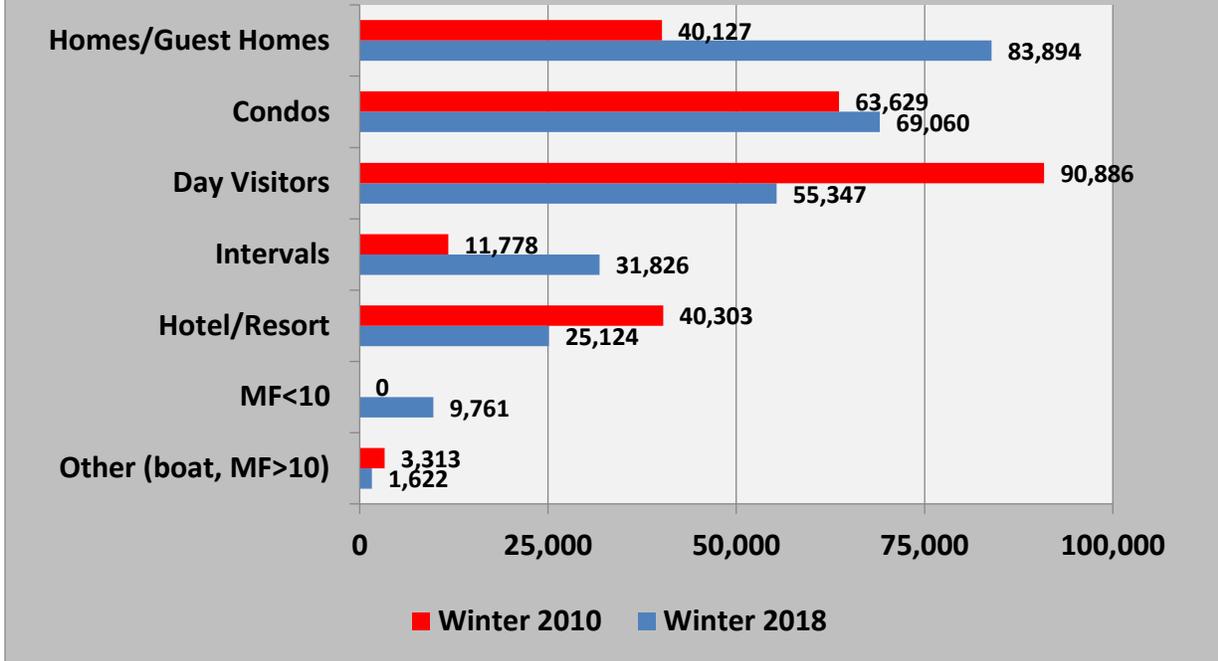
**Figure 1.3
Geographic Origin of
International Beach Visits**



Beach Use By Housing Type

Respondents to the survey were asked which type of housing they were using during their stay on Captiva. The results are summarized in Figure 1.4, both for Winter 2018 and Winter 2010.

**Figure 1.4
Beach Visits by Housing Type**



In 2010, day visitors were the largest group of respondents to this question on the survey, whereas in 2018 the largest group was composed of those staying in homes/guest (single family homes). The growth in homes/guest homes in 2018 reflected the strong development of vacation-by-owner (Internet) rentals on the island since 2010. The use of condominiums also experienced an increase, probably for the same reason, although the increase in this case was less dramatic. Most of the other changes reported in Figure 1.4 are a result of increased survey efforts on this question at the request of the CEPD Board. For example, the decline in the number of respondents reporting that they had stayed in Hotel/Resorts was because South Seas Resort is a “catchall” term. A number of these respondents were transferred to intervals and condominiums based on their location on the beach and on the number of nights they were renting. (The South Seas intervals are adjacent to the northern South Seas beaches.)

Beach Visit Characteristics

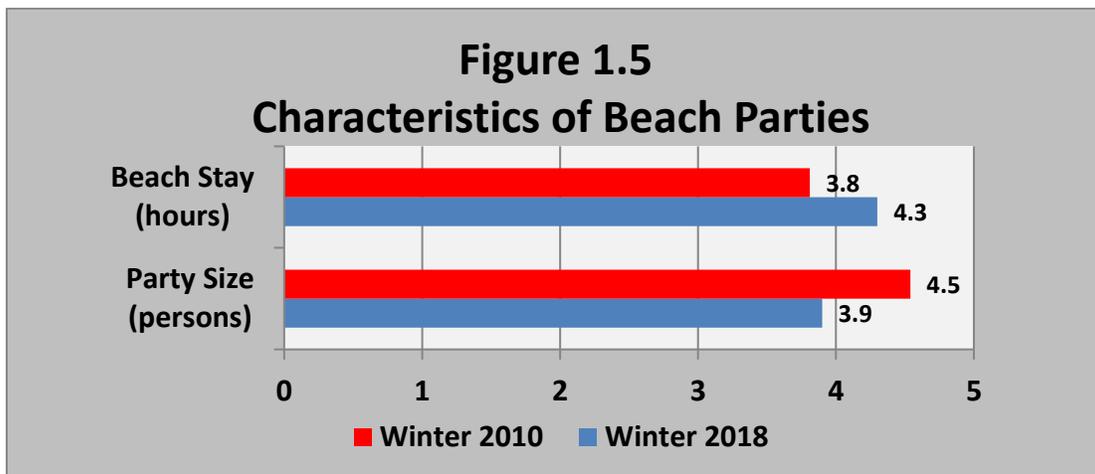
Most people on Captiva’s beaches in the winter of 2018 came to swim or enjoy the sun (84 percent).

A sizeable number also enjoyed walking and shelling in 2018 (when multiple answers to the question were allowed for the first time).

Table 1.3 Purpose of Beach Visit Percent		
Purpose	Winter 2018	Winter 2010
Swimming/Sunning	84.0	87.6
Walking/Shelling	46.2	7.1
Fishing	3.0	2.8
Other	10.8	2.5

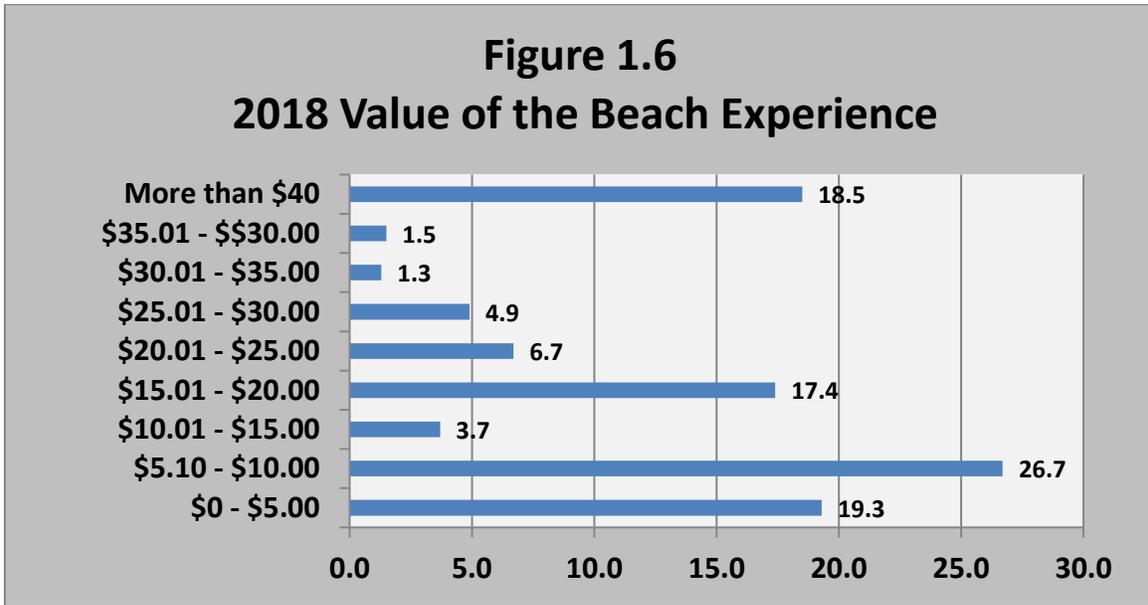
Note: multiple answers allowed in 2018 but not in 2010

The average beach party was composed of 3.9 persons in 2018, compared to 4.5 persons in 2010. The 2018 beach parties enjoyed the beach for 4.3 hours during their visit in 2018 and for 3.8 hours in 2010.

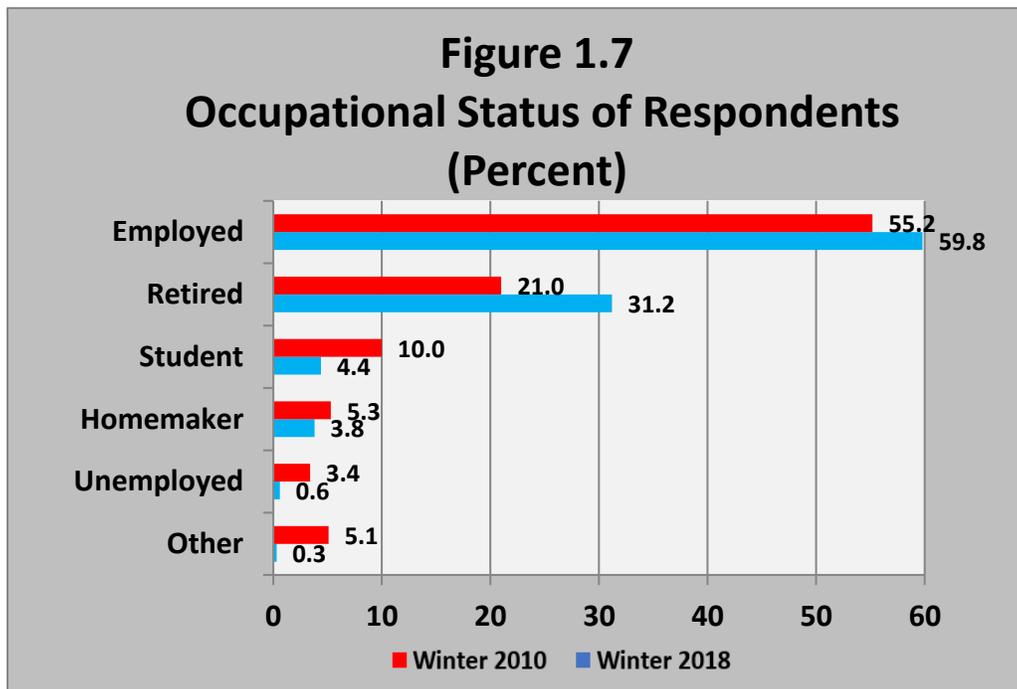


Respondents were asked to place a value on their beach visit on the day they were interviewed. It was explained that the local government was planning to maintain the beach by placing additional sand and

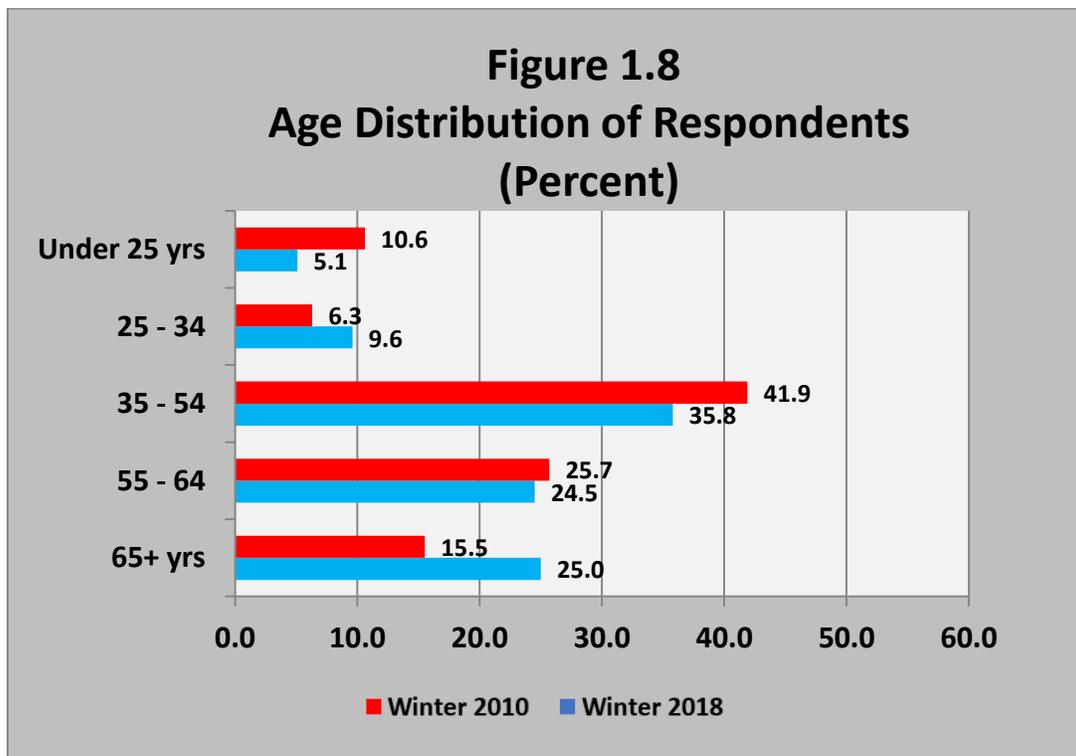
they needed to be sure that value of the benefits (including recreation) from the project exceed its costs. See Figure 1.6 below.



The median respondent placed a value of \$15.09 in 2018. This compared to a median value of \$9.15 in 2010., an increase of over 60 percent. This sharp increase reflected the warmer winter in 2018 as well as the strong economy compared to the Great Recession that characterized 2010.



The significant improvement in the economy that occurred since the Great Recession of 2010 also shows up in the occupational status of the visitors to the island’s beaches. (See Figure 1.7 on previous page). The percent of respondents who said they were unemployed fell from 3.4 percent in 2010 to 0.6 percent as the economy strengthened in 2018., while the those who said they were employed rose from 55.2 percent to 59.8 percent. A similar trend is shown by the share of students in the responses. College enrollments tend to rise during recessions, as the opportunity cost of attending college (in terms of foregone wages) falls. When the economy recovers, college enrollments fall. The share of students in Captiva winter beach visitors declined from 10 percent in 2010 to 4.4 percent in 2018. Figure 1.7 shows a sharp increase in the number of retirees who were interviewed on the beach in 2018 (31.2 percent) compared to 2010 (21 percent). The improvement in the economy was also a factor in this case, but entry of the post-World War II Baby Boom into retirement also played a part.



The age distribution in Figure 1.8 shows fewer respondents aged under 25 years in 2018 than in 2010, in line with the decline in the number of students who were interviewed. It also shows an increase in the proportion aged 65+ years, again in line with the increased share of retirees.

Economic Impact of Captiva Beach Use

An economic activity generates an impact on the income and employment of an economy ("an economic impact" because of spending made in connection with the economic activity. In the case of beach visits, the economic activity is created by spending by those visiting the beach. This includes spending on items consumed at the beach, such as food and drink, sunscreen, umbrellas rentals, and entertainment (jet skis, windsurfing, fish bait). It also includes the cost of local transportation to the beach (including car rentals, taxis, gasoline, tolls and parking). Finally, the economic impact includes tourist-type expenditures such as lodging and dining. Average tourist-type expenditures per day are credited to the beaches for days in which the tourist visited the beach.

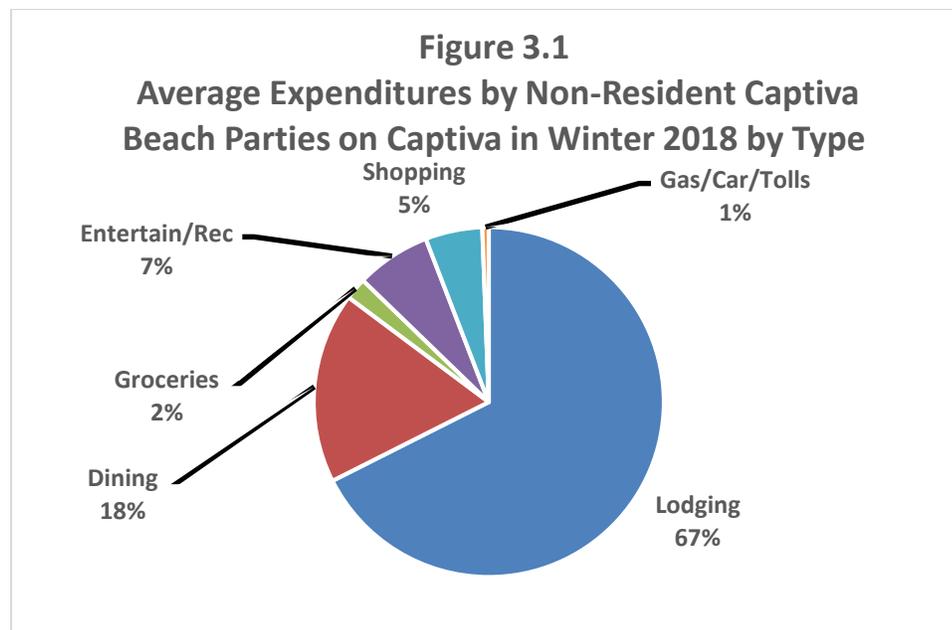
In determining the economic impact of beaches, expenditures made by residents are excluded on the grounds that if the residents did not go to the beach on a particular day, they would have spent the dollars on alternative activities in the local economy --the impact of the dollars that would have been spent on the beach would not have been "lost". In the case of non-residents, the dollars would be lost because it is assumed that they came to the local economy in order to enjoy the beaches.

Economic impact varies by geography. There is the impact on Captiva itself which consists of expenditures made by non-residents of the island on the island. There is also an impact on Lee County. This consists of the expenditures made by non-residents of Lee County ("out-of-county visitors") on the island and elsewhere in Lee County (on days when out of county visitors visited Captiva's beaches). Finally, there is the impact on the economy of the state, which consists of the expenditures made by

non-residents of the state ("out-of-state visitors") on Captiva, elsewhere in Lee County and elsewhere in Florida.¹

Non-Resident Expenditures on Captiva

Non-resident beach users have a positive impact on Captiva's economy by creating sales (production) and, as a result, employment and income for Captiva's businesses. In the Winter of 2018, non-residents of the island made 276,632 visits to the island's beaches. (See Table 1.2 above.) They traveled in 65,842 parties which shared expenditures. Each party contained an average of 3.9 persons and were on the island for 8 days. The parties visited the beach almost every day while on the island resulting in, on average, 7.4 days per party.



The average non-resident party spent \$4,708.92 while visiting on the island. More than two-thirds of every dollar was spent on lodging and 18 percent was on dining. The remaining categories of expenditure were relatively small: entertainment/recreation 7%, (visitors enjoyed the beach which did

¹ It is a coincidence of this study that the economic impact of out of county Captiva beach visitors on the county economy is about equal to the economic impact of out of state Captiva beach visitors on the state economy.

not involve large expenditures) and the island lacks a full-service grocery and gas station which caused these expenditures to be made off the island.

Average party expenditures were divided by the length of stay to calculate daily expenditures and these were multiplied by the average number of beach days to estimate the contribution of the beaches to total expenditures per party. Finally, these party expenditures were multiplied by the total number of parties to obtain total expenditures by nonresidents of the island that can be attributed to the beaches. The results are given in Table 3.1.

Table 3.1 Direct Expenditures by Non-Residents on Captiva, Attributable to the Beaches In Winter 2018, Millions of Dollars		
Category	Winter 2018	Percent
Lodging	\$188.0	67.6
Dining	\$49.1	17.7
Groceries	\$5.6	2.0
Ent/Recreation	\$19.2	6.9
Shopping	\$14.6	5.3
Gas, Car, Tolls	\$1.7	0.6
Total	\$259.3	100.0

The expenditures in Table 3.1 are called “direct” by economists. This is in contrast to “indirect” expenditures which occur as the “front line” industries (especially lodging and dining) expand production in response to the spending of beach tourists.

The direct expenditures by non-residents on the island amounted to \$259.3 million in the winter of 2018 with more than 85 percent consisting of lodging and dining. The 2018 amount is much larger

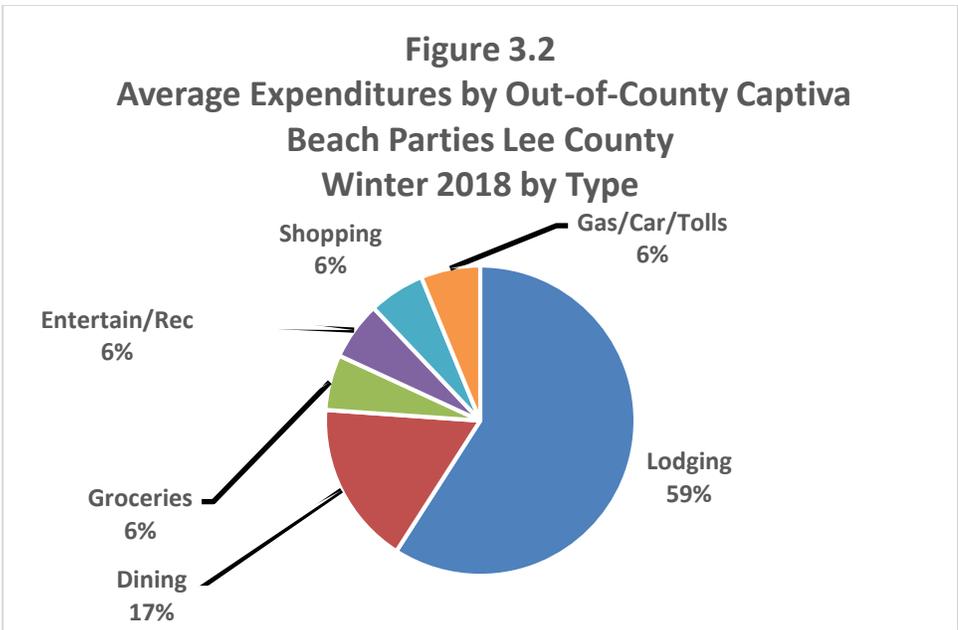
than the amount that was reported in 2010. A large increase was expected because of the recovery from the Great Recession that depressed the 2010 figure, and because there were more non-residents who visited the island in 2018. There is an additional factor, however, created by a change in the statistical estimating techniques that were used in 2018.

Direct Expenditures by Out-of-County Beach Visitors on Captiva and Elsewhere in Lee County

Captiva's beach visitors make expenditures in other parts of Lee County as well as on Captiva itself. When these expenditures are made by out-of-county residents, they create employment and income elsewhere in the county, as well as on Captiva. Out-of-county visitors made 263,640 beach visits on the island 2010. (See Table 1.2) This amounted to 95.3 percent of total non-resident beach visits.

Out-of-county visitors traveled in 62,365 parties who shared expenditures. Each party contained an average of 4.0 persons and were on Captiva for 8.4 days. The parties visited the beach almost every day while on the island resulting in, on average, on 7.7 days per party.

The average out-of-county party spent \$4,157.92 on Captiva and an additional \$867.19 elsewhere in Lee County, making a total of \$5,025.10 spent in the county as a whole during the winter 2018 season. Spending elsewhere in Lee County amounted to 17.3 percent of the total.



The most striking differences between the distribution of expenditures in Lee County by out-of-county Captiva Beach visitors (as in Figure 3.2) and the distribution of expenditures on the island (Figure 3.1) above is the increased importance of grocery expenditures and gas/car/tolls expenditures). The explanation is that most Captiva beach visitors buy groceries in Sanibel or before crossing the Causeway, and they rent cars at the airport. They also pay tolls on the Sanibel Causeway and elsewhere in the county.

Average party expenditures were multiplied by the total number of out-of-county parties to obtain direct expenditures by out of county Captiva Beach Visitors during their stay in Lee County. The results are given in Table 3.2.

Table 3.2 Direct Expenditures by Out of County Visitors Attributable to Captiva's Beaches In Winter 2018, Millions of Dollars				
Category	Captiva	Elsewhere in Lee Co.	Total in Lee County	Percent
Lodging	\$177.0	\$8.2	\$185.2	59.1
Dining	\$45.5	\$7.9	\$53.4	17.0
Groceries	\$5.1	\$13.0	\$18.1	5.8
Ent/Recreation	\$17.2	\$1.8	\$19.0	6.1
Shopping	\$13.0	\$5.3	\$18.3	5.9
Gas, Car, Tolls	\$1.5	\$17.9	\$19.4	6.2
Total	\$259.3	\$54.1	\$313.4	100.0
Percent	82.7	17.3	100.0	

Out-of-county Captiva Beach Visitors spent \$313.4 million in Lee County during the winter of 2018. Over 80 percent of expenditures were spent on the island.

Direct Expenditures by Out-of-State Captiva Beach Visitors Elsewhere in the State

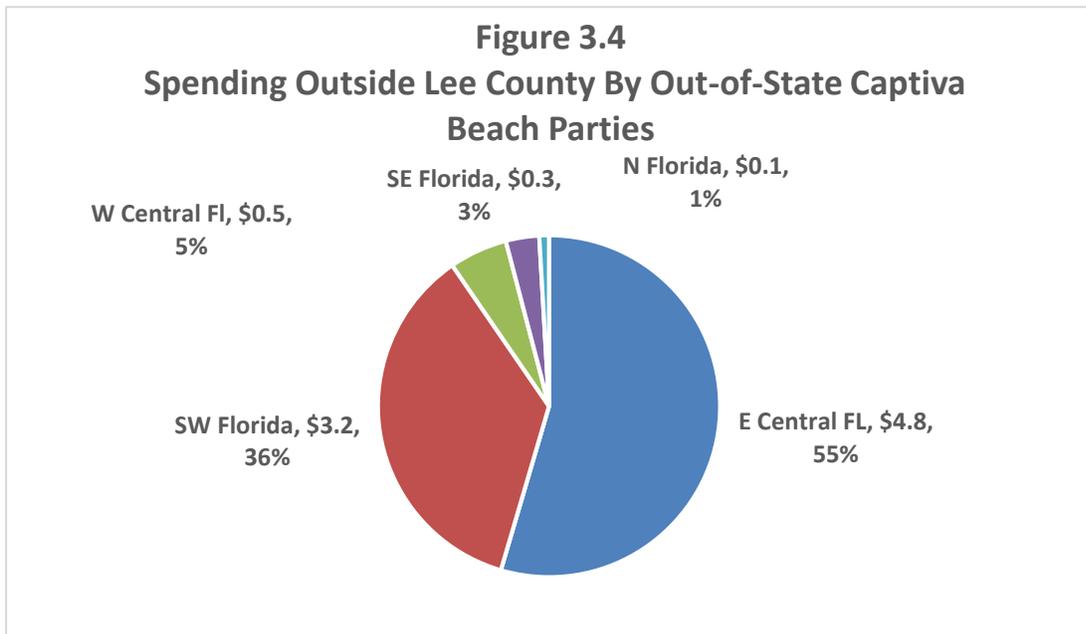
Captiva's beaches also have impacts elsewhere in the Florida outside Lee County. A total of 62,246 out-of-state parties visited Captiva's beaches in the Winter of 2018. They visited the beaches 261,219 times, accounting for 94.4 percent of all winter visits (See Table 1.2 above). Out-of-state beach visitors also visited other parts of Florida outside Lee County during their visit to Captiva. Their spending outside the county benefitted the various regional economies elsewhere in the State.

Almost one in four of state Captiva Beach parties visited other parts of Florida in the winter of 2018 (14,856 parties, 23.8 percent). A relatively large proportion of these were parties staying in Lee County who made a day visit to Captiva's beaches. It was decided to exclude these parties from an

analysis of the impact of Captiva’s beaches on the state economy because Captiva was probably not their main destination.

The number of out-of-state parties who stayed overnight on Captiva (the average stay was more than a week) was 49, 692. Almost one in five made at least one visit to another part of the state (9,186 parties, 18.5 percent). These parties were asked to list up to four other destinations that they had visited or planned to visit. Parties that named more than one destination accounted for 82.5 percent, and those naming a second destination were 17.5 percent. A small fraction named a third destination (2.5 percent) but they did not provide useable data. No parties specified a fourth destination.

Out-of-state Captiva Beach Parties (who stayed overnight on the island) spent \$8.3 million outside Lee County in the winter of 2018. A breakdown of these expenditures is given in Figure 3.4.



The largest expenditures were made in East Central Florida (the Disneyworld Area) (55 percent) and the second largest amount was spent in Southwest Florida from Sarasota County south to Collier County, excluding Lee County. A number of parties visited the Everglades in Collier County. Approximately five percent visited West Central Florida which includes the Greater Tampa-St. Petersburg area and a number of parties visited the Keys in Southeast Florida.

The total impact on the state included the expenditures made by out-of-state parties in Lee County (including Captiva and elsewhere in the county).

Table 3.2 Direct Expenditures by Out of County Visitors Attributable to Captiva’s Beaches In Winter 2018, Millions of Dollars			
On Captiva	Elsewhere in Lee County	Elsewhere in the State	Total in The State
\$258.9	\$48.1	\$8.3	\$315.3
Percent	82.1	15.2	2.7

Out of State Captiva Beach Visitors spent \$315.3 million in Florida during their visit in the winter of 2018. Of this, 82.1 percent was spent on Captiva, 15,2 percent was expended elsewhere in Lee County and 2.7 percent was spent outside Lee County.