

The Impact of Day Trips to Daytona Beach
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Introduction

Tourist-based areas such as Daytona Beach, Florida are popular day-trip destinations of nearby population centers. These “daytrippers” can obtain desirable resort recreation at little cost and travel time. Nevertheless, tourism studies generally focus on traditional vacation visitors who have a greater and more measurable economic impact, especially on overnight accommodations and dining sectors of a local economy [ref]. Moreover, despite the absence of systematic survey evidence, tourist-area public policymakers tend to presume that daytrip visitors generate a substantial, net-positive economic impact.

However, in contrast to their smaller economic benefits, daytrippers may also add substantially to policing and refuge collection, resource degradation, and tourism infrastructure cost for a destination community. Beach communities near urban areas share a special set of problems from daytrippers. Public beaches make it especially difficult to recoup costs imposed on a municipality for lifeguards, traffic control, beach cleanup, and a host of other burdens. The coastal cities in the Daytona Beach area confront additional problems stemming from beach driving and endangered species restrictions.

This paper addresses the issues associated with daytripper tourism by developing a survey design for measuring their spending, activity preferences, and visitation patterns. The survey design was implemented to estimate the annual per capita expenditures and visitation rates of Central Florida daytrippers in the Daytona Beach area economy. Weighted univariate and loglinear regression analysis are then presented from the survey results. The paper concludes with an evaluation of the proposed survey methodology and recommendations for public policymakers in coastal daytripper destinations.

A Brief History of Daytona Beach

The Daytona Beach area was selected for this daytripper study because daytripper usage had reached crisis proportions for tourism policymakers badly in need of data and economic analysis. Daytona Beach has long promoted itself as “The World’s Most Famous Beach” (ref). Its fine sand and hard-packed, level surface began attracting racecar enthusiasts in the early 1900s. The professional racing circuit moved off the beach in the late-1950s with the opening of the Daytona International Speedway, the tradition and romance of beach driving persisted

Daytrippers from the Orlando area have become accustomed to driving directly onto Daytona beaches, accompanied by all the comforts of home such as umbrellas, coolers, and stereos equipment. Thus, the cost food, entertainment, and concessions for daytrippers can be reduced dramatically. Moreover, many daytrippers prize beach “cruising” as a recreational experience itself which combines America’s love of cars and the beach.

However, these benefits for daytrippers translate into losses for Daytona area municipalities. Cars on the beach damage the natural environment, threaten the survival of endangered species, obstruct natural vistas, introduce traffic hazards to other users of beach resources, occupy scarce beach space, discourage tourism at beachfront hotels, sharply deter

tourism spending with beach concessionaires and at nearby eating & drinking establishments, and raise the local public expenses for policing and maintaining the beach.

By 1996, major restrictions were finally imposed on beach driving to comply with The Endangered Species Act to protect sea turtle nesting sites. County authorities permanently ended driving on one-third of area beaches and on all beaches during the lengthy May-to-October turtle nesting season. In addition, nest marking, rut raking, and new beachside lighting ordinances were put in place. Rather than helping the tourism economy, these restrictions further raised the cost of beach maintenance and patrols while daytripper tourism revenues diminished.

The Study Design and Survey Instrument

Surveying daytripper visitation patterns and expenditures presents several methodological problems. First, traditional tourism surveys ignore visitors residing in the local region (typically, within 30 or 60 miles of the destination site) because expenditures have no net economic impact if they would have been injected elsewhere in the local economy (Leeworthy, Wiley, English, and Kriesel). However, Daytona Beach and similar daytripper destinations experience minimal non-tourist spending from population centers beyond their governmental boundaries. Adding to their economic isolation, a 10-mile wide stretch of environmentally-sensitive, growth-restricted land separates the city of Daytona Beach and nearby Florida coastal communities from inland cities. Consequently, spending by daytrippers at Atlantic beaches can generate nearly as large a multiplier as that resulting from out-of-state tourists.

A more practical impediment also has prevented daytripper surveys from being conducted. The most common tourism expenditure survey method is to interview people at the destination site and secure a follow-up survey to obtain spending outcomes of their visit (Leeworthy, et al.). If tourism is seasonal, the surveys can be administered during two or more times during the year and separate estimates made for each. But for daytripper venues like highly-seasonal and event-dominated Daytona Beach, this site interview methodology becomes infeasible or biased. Unencumbered by the rigidities of airline and hotel reservations or departure schedules, daytrippers have the flexibility to adjust their length of stay even after arriving at their destination. They may even alter their the itinerary or cancel travel altogether if weather or ocean riptide currents that day are unfavorable.

Thus, the number and type of daytrippers can and does vary enormously between weekend and weekday, morning and afternoon, event and non-event weeks, rainy and clear weather, hot and cool temperatures, as well as a host of other factors. Minimizing sampling bias would be prohibitively costly because surveyors would need to contact site visitors on many different days and times. Costs would also escalate because the site interviewer need to reliably distinguish daytrippers from other tourists, an issue clouded further in resort destinations like Florida with their large number of seasonal residents.

A more tractable approach is the one proposed here and implemented in the survey design for daytrippers to Daytona Beach. First, in order to restrict the sampling frame to daytrippers and local visitors to the Daytona Beach coast area, a Central Florida resident impact zone was identified and a random sample surveyed. In this particular survey, the designated geographical zone was constrained to a driving distance of approximately 65 miles in all directions. Beyond that distance, day trips involve too much travel time and the Gulf Coast, Jacksonville, or southern Florida beaches become the more viable alternative. U.S. postal zip code areas for all or portions of nine Florida counties met this proximity standard. A pseudo-random sample of Central

Florida resident addresses was then drawn from a telephone data-base.

Because of the invasive nature of spending and income questions, response bias was minimized and response rate encouraged by ensuring respondent anonymity. Instead, an unusually large number of surveys were mailed (approximately 5500) to ensure a sufficiently large response sample. To further encourage the highest possible response rate, the survey instrument was limited to a single page form, along with a postage-paid return envelope, confidentiality assurance, and courtesy coupons from beachside businesses. The response rate was nearly 10 percent, and few (less than five percent) of the most sensitive items such as income were left blank.

Unlike other surveys, this study focused exclusively on how Central Florida residents patronize the beach resources and surrounding businesses. Seasonal fluctuations in beach use were avoided by contacting respondents at their home addresses and asking about annual visitation patterns for typical visits to the beach. Moreover, this study allowed for comparison of county-based beaches around Daytona and New Smyrna with the nearby, competing beaches of Cocoa/Canaveral, and Flagler/St. Augustine. Another advantage of this survey is the richness of information collected from Central Floridians about demographics, beach usage, and spending in tourism-related sectors of our beachside economy.

Because of the potential for nonresponse bias, survey responses were carefully adjusted to match the known resident profiles. The resulting profiles were re-weighted to mirror the actual Census of Population distributions on a age-county specific bases for each target county in the Central Florida region. Spending levels were also computed for annual per person totals for Central Florida residents.

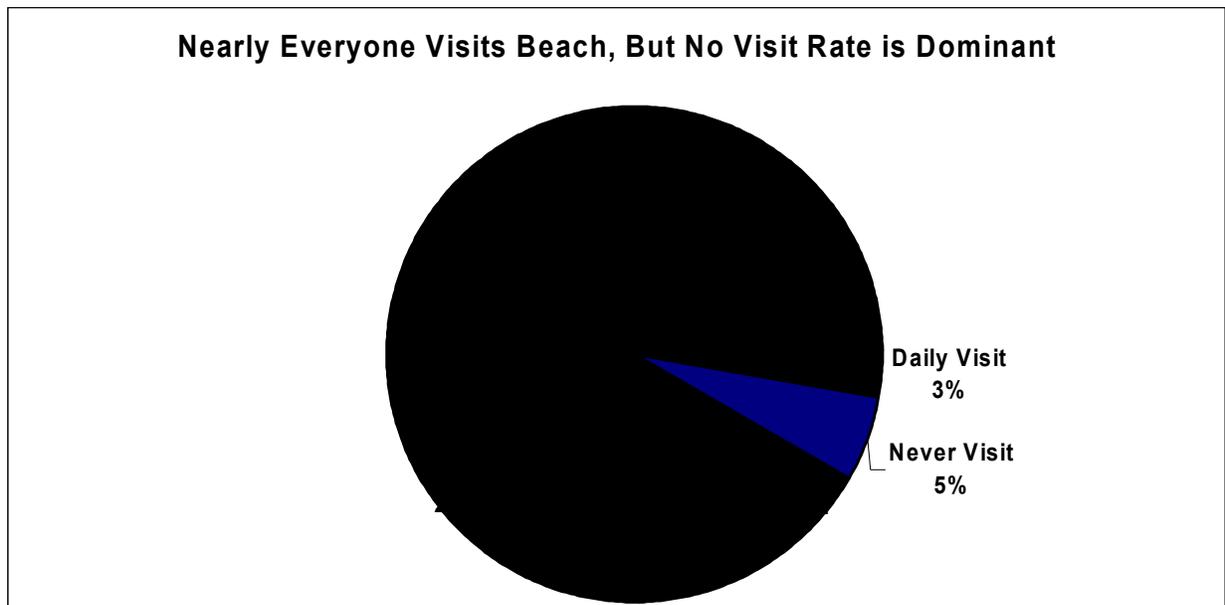


Figure 1

The Findings

The most emphatic survey result was that nearly every Central Florida resident visits the nearby beaches (Figure 1). Only one in twenty reported not going to the beach at least once a year. While the median number of visits was four to six times a year, nearly as many reported weekly beach visits as those visiting twice monthly, monthly, two to three times annually, or only once or twice a year. Only beach visitation on a daily or every other day basis was rare (3%).

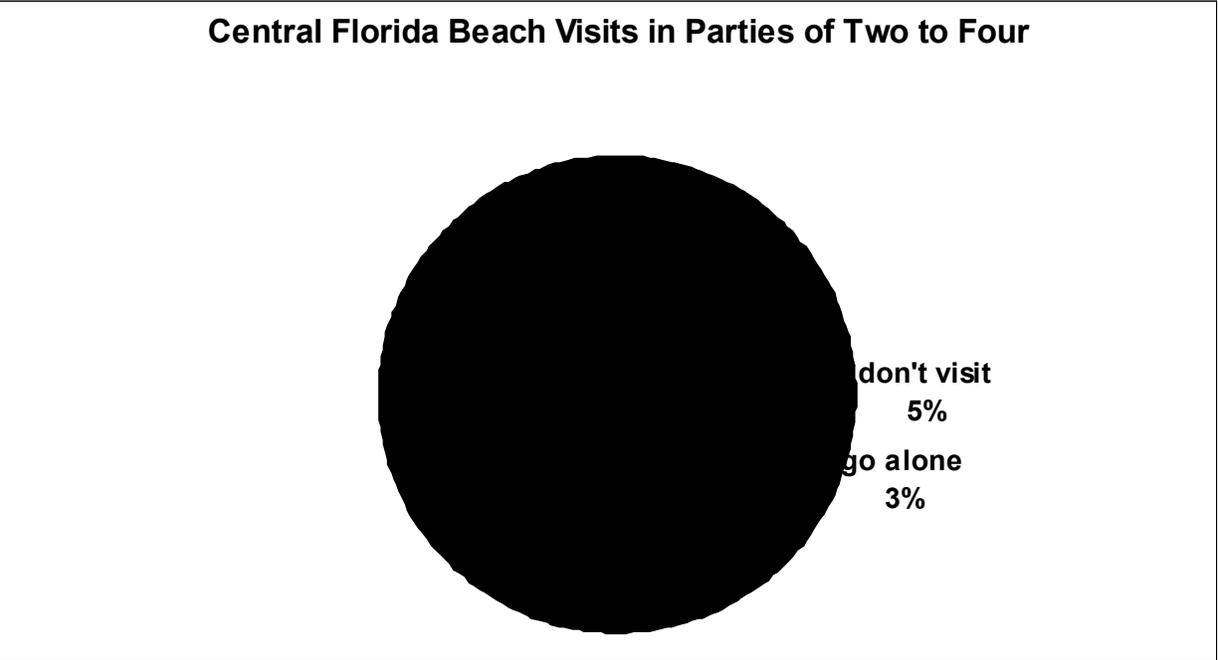


Figure 2

In addition, the survey found that Most Central Florida residents (78%) visit the beach in parties of from two to four persons. Larger groups of five or more were not an uncommon occurrence, but visits by individuals were indeed rare (Figure 2).

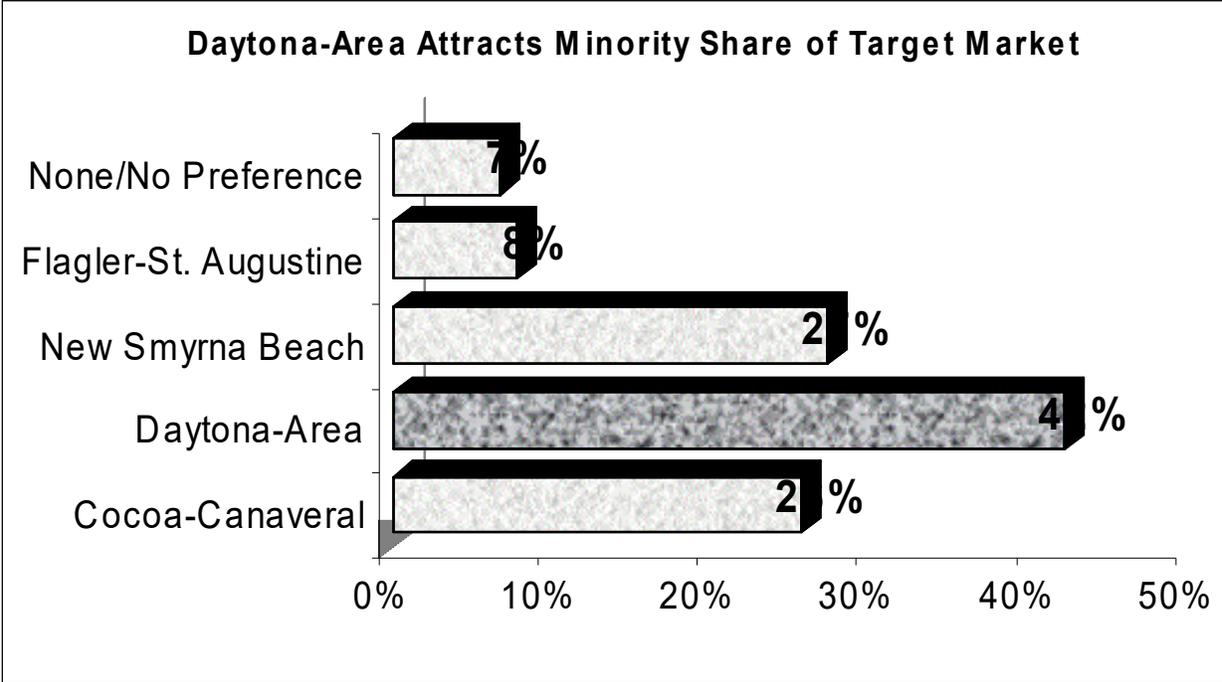


Figure 3

All Central Florida residents in the survey region within 60 miles of Daytona Beach, its primary daytripper target market, currently have access to both driving and non-driving beach areas. Yet the non-driving beaches of Cocoa/Canaveral or Flagler/St. Augustine, and the more limited driving areas of New Smyrna Beach were visited most often (Figure 3) by two-thirds of respondents (68%). By contrast, only 42% in the target region of Central Florida reported visiting Daytona-area beaches most often. Ten percent of weighted responses indicated more than one beach destination as their favorite.

Despite the tradition of beach driving and shortage of beachside parking, a majority (53%) of Central Floridians currently use off-beach parking (Figure 4). Only 28% reported ever parking on the beach, about the same percentage (26%) who park and stay at a hotel, motel, or condo. Thus, reducing beach driving would be a hardship for only 28 percent of beach visitors, and many of these beachgoers report that they also park at off-beach locations already.

The survey also allowed comparisons of income distribution for people who park on the beaches with those who never do (Figure 5). Surprisingly, the survey found virtually no detectable differences. Despite the locally-prevailing contention that beach parking is necessary for lower-income households to obtain inexpensive recreation amenities, the data provides no support whatsoever for this argument. Those who never park on the beach have no income differences from those who choose to park on the beach.

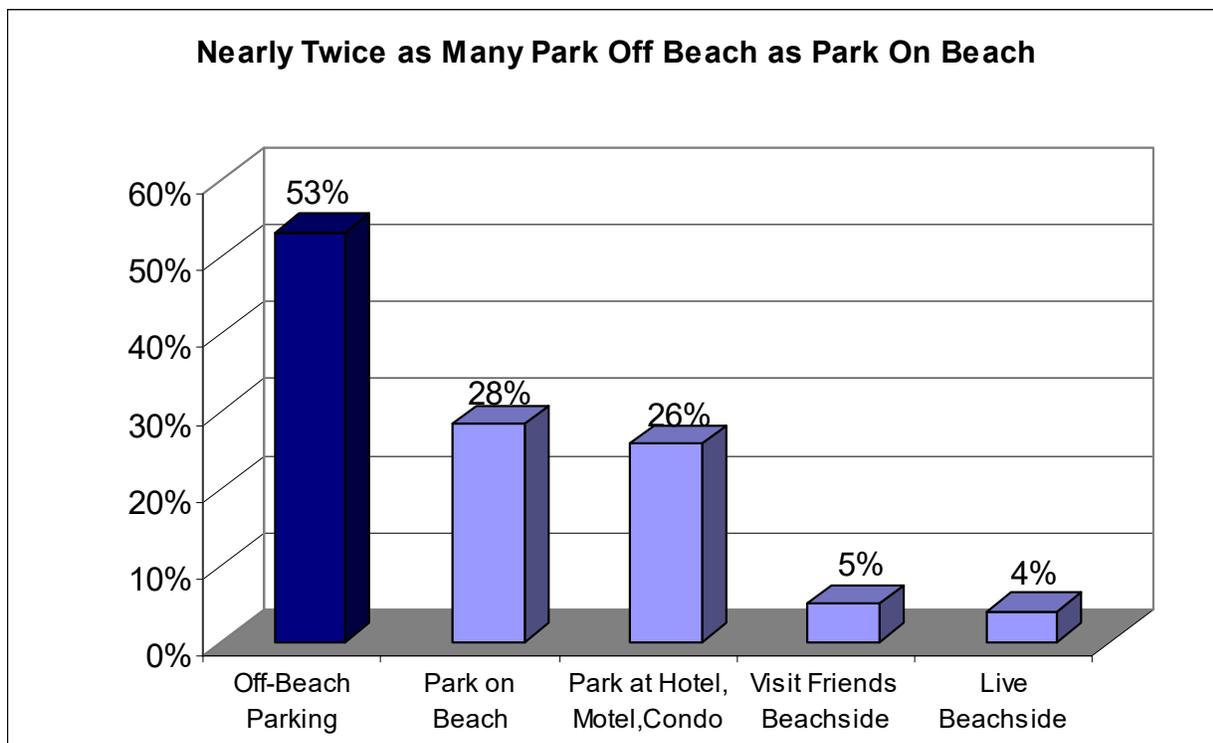


Figure 4

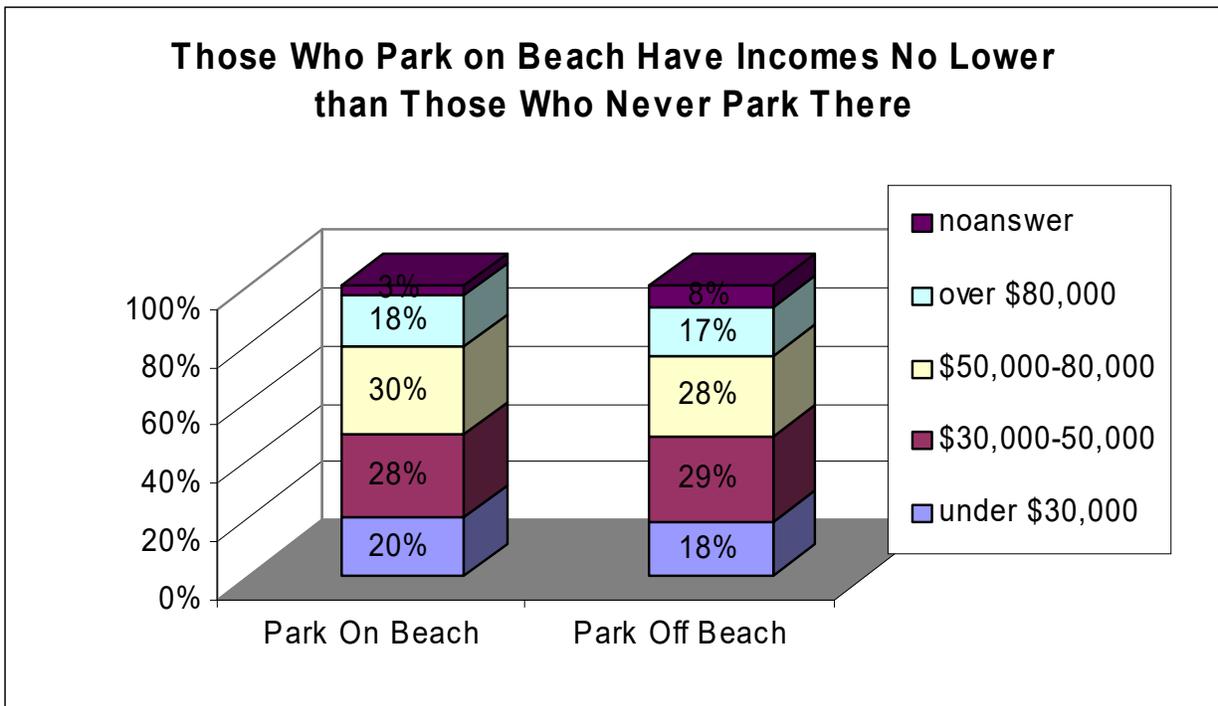
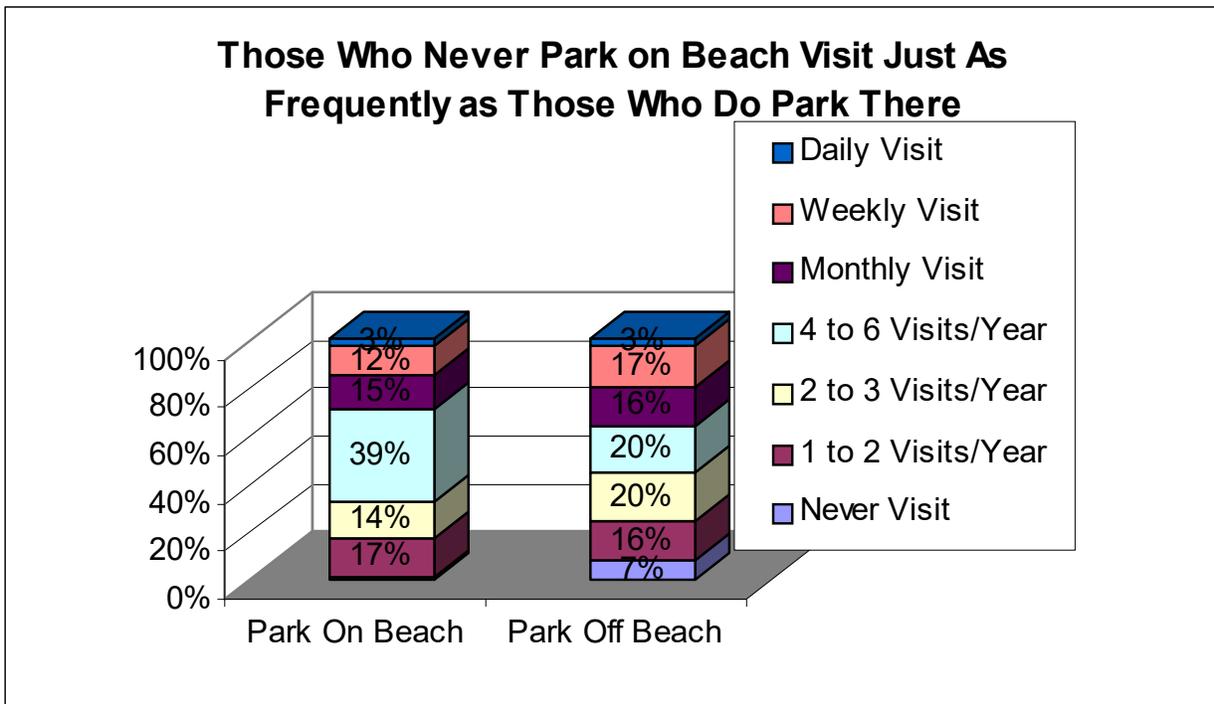


Figure 5

Equally unexpected was the finding that people who always park off-beach report remarkably similar visitation rates as beach-parking visitors (Figure 6). Despite the commonly-voiced claim that they constitute the lifeblood of Daytona Beach tourism, people who park on the beach do not have visitation patterns any different from everyone else. Another common argument of beach driving is that on-site parking eliminates the need to carry food and beach paraphernalia from more distant off-beach lots. However, the survey found that nearly as many who never park on the beach also bring along food and beverage.

Figure 6



Three-Fourths of Central Floridians are Daytrippers

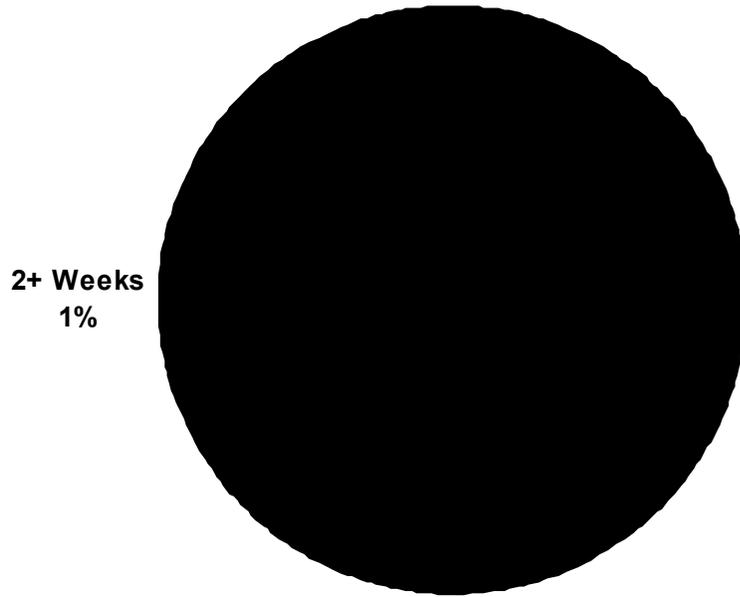


Figure 7

Daytrippers More Common for Those Who Park On Beach

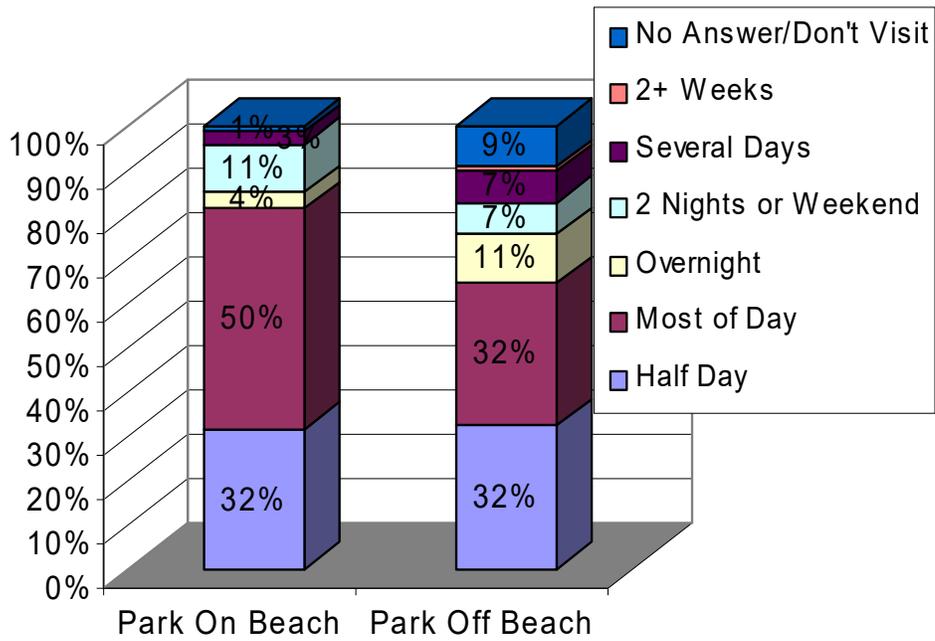


Figure 8

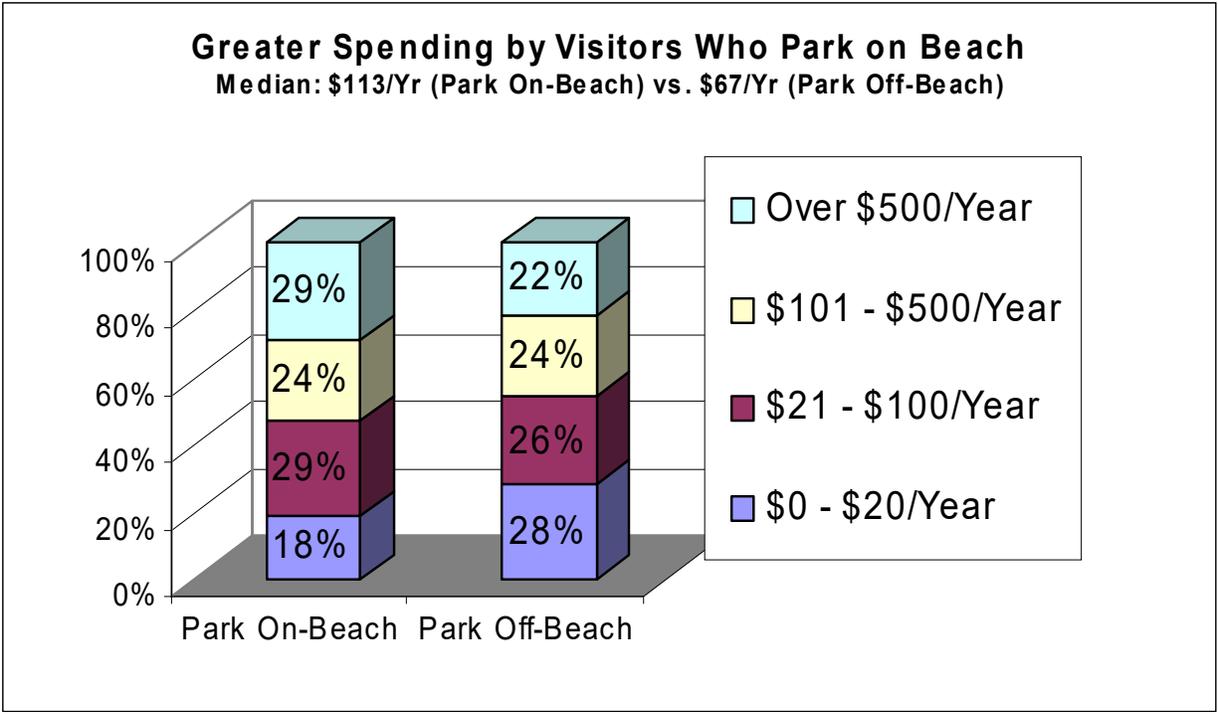


Figure 9

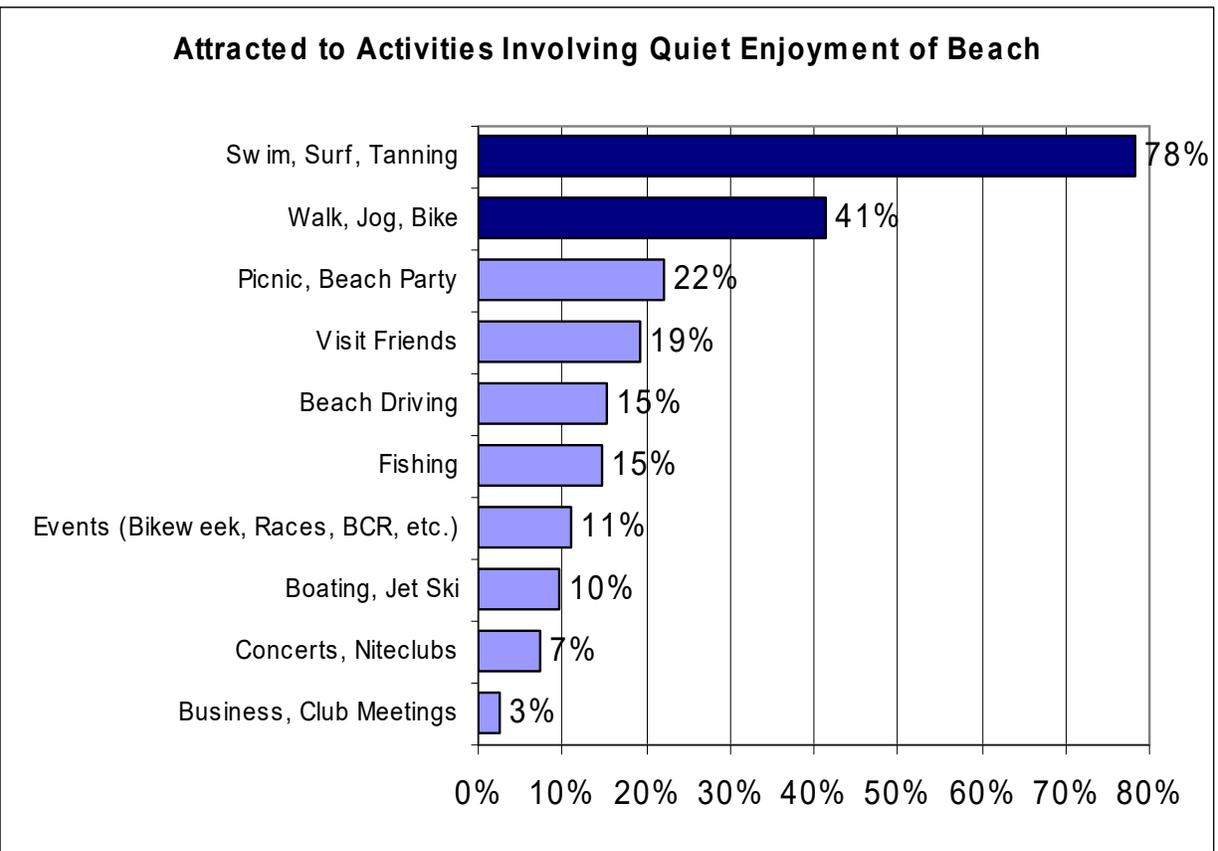


Figure 10

The survey did confirm our expectation that most Central Floridians are daytrippers when

it comes to beach visits (Figure 7). However, people who never park on the beach were more likely to stay at least one night at beach area accommodations, thus contributing more each visit to the bigger-ticket lodging and dining segments of the beach-area tourist economy (Figure 8).

Visitors who park on the beach do spend somewhat more each year than those who never park on the beach (Figure 9). The survey estimates were \$113 for the former vs. \$67 for the latter in annual median expenditures. A portion of this difference, however, consists of spending for beach parking passes and permits whose revenue only partially offsets the additional policing and vehicle assistance costs created allowing cars on the beach. What draws Central Florida residents to local beachside areas? Most (78%) responded that it was swimming, surfing, and sun bathing (Figure 10). Walking, jogging, and biking were clearly the second most popular (41%). Beach driving was tied for a distant fifth (15%) and Events (such as controversial, high-public-service-cost Bike Week, Race Week, Spring Break, and Black College Reunion) were buried deep in seventh place. The findings indicate that non-intrusive, environment-friendly activities are also far more attractive to beach-area visitors than noisier, invasive, and fiscally-costly activities.

Surprisingly, interest in beaches for swimming, surfing, tanning, and fresh air exercise was as great among people who park on the beach as it was for those who never park on the beach (Figure 11)! However, on-beach parking visitors were considerably more attracted to beach parties and picnics, fishing, events, boating, and concerts & nightclubs than were off-beach parking patrons. Ironically, the visitors who are being restricted from parking on the beach are the very same ones who provide most of the regional support for events, clubs, and partying responsible for the honky-tonk reputation of the Daytona-area beaches.

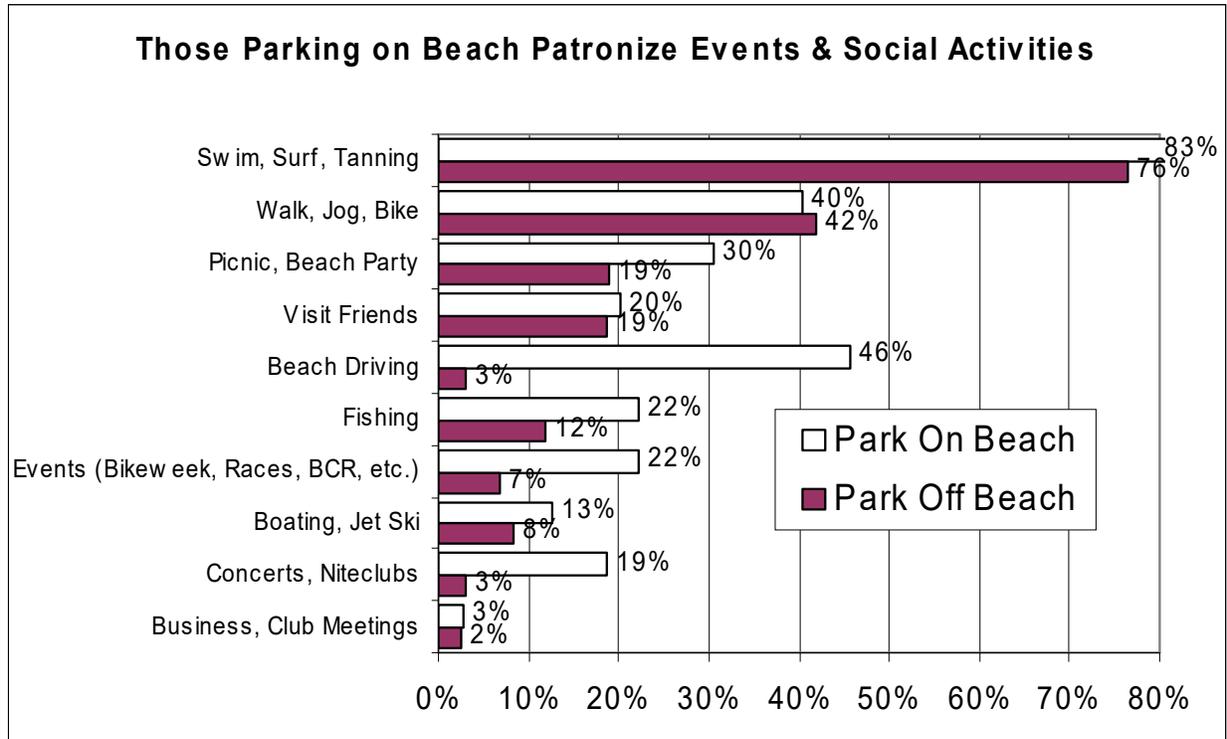


Figure 11

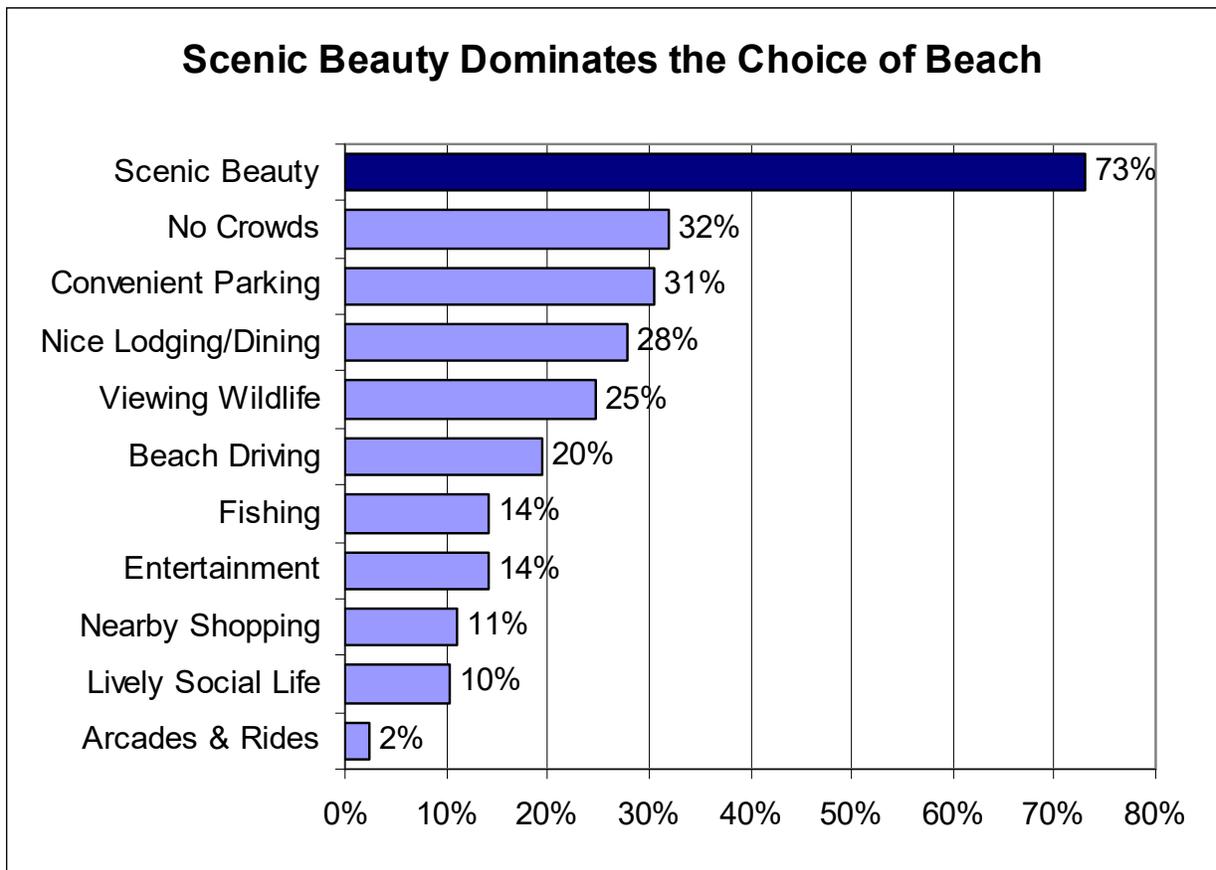


Figure 12

A similar message was communicated in respondent characteristics used to describe favorite beach of residents. Scenic beauty (73%) was the dominant choice (Figure 12). No other reason drew even a third of the weighted responses! Beach driving was mentioned by only one-fifth of Central Florida residents and trailed factors such as the absence of crowds, convenient parking, quality lodging and dining, and wildlife viewing. Notably, arcades and amusement rides (2%) were particularly ignored as important characteristic of their favorite beach. Among only those who park on the beach, an unexpectedly similar pattern of response was registered for most items (Figure 13). The major exceptions were the high preferences for beach driving (56%) and convenient parking (49%). This finding suggests that a smoother transition to reduced beach parking can best be accomplished when nearby parking is enhanced.

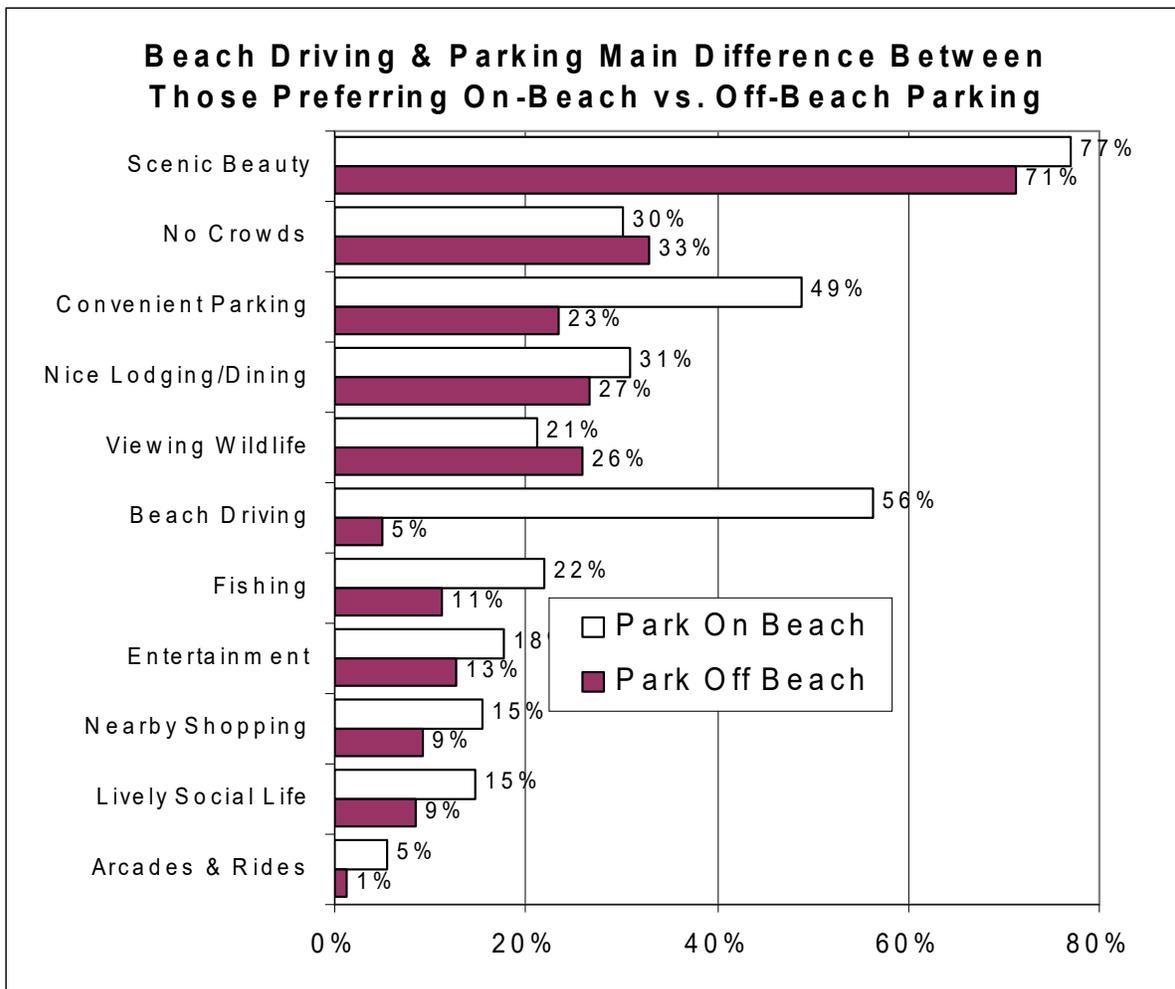


Figure 13

Equally interesting were the reasons respondents cited for *avoiding* certain beaches. Noisy or rowdy crowds (35%), cars on the beach (24%), long walks to parking (24%), high prices in the area (22%), road traffic (22%) and concerns about safety (19%) clearly topped this list (Figure 14). By contrast, lack of quality lodging, dining, and entertainment were in low single digit percentages. Of particular interest to policymakers, cars on the beach was a more common reason for avoiding a beach than was the attraction of beach driving (24% versus 15%). Cars on the beach was an especially strong dissuading factor for nearly one-third of those who never park on the beach, and Two in five were also dissuaded from visiting beaches with Noisy/Rowdy Crowds. By contrast, Distant Parking was of much less concern to those who always park off-beach (Figure 15).

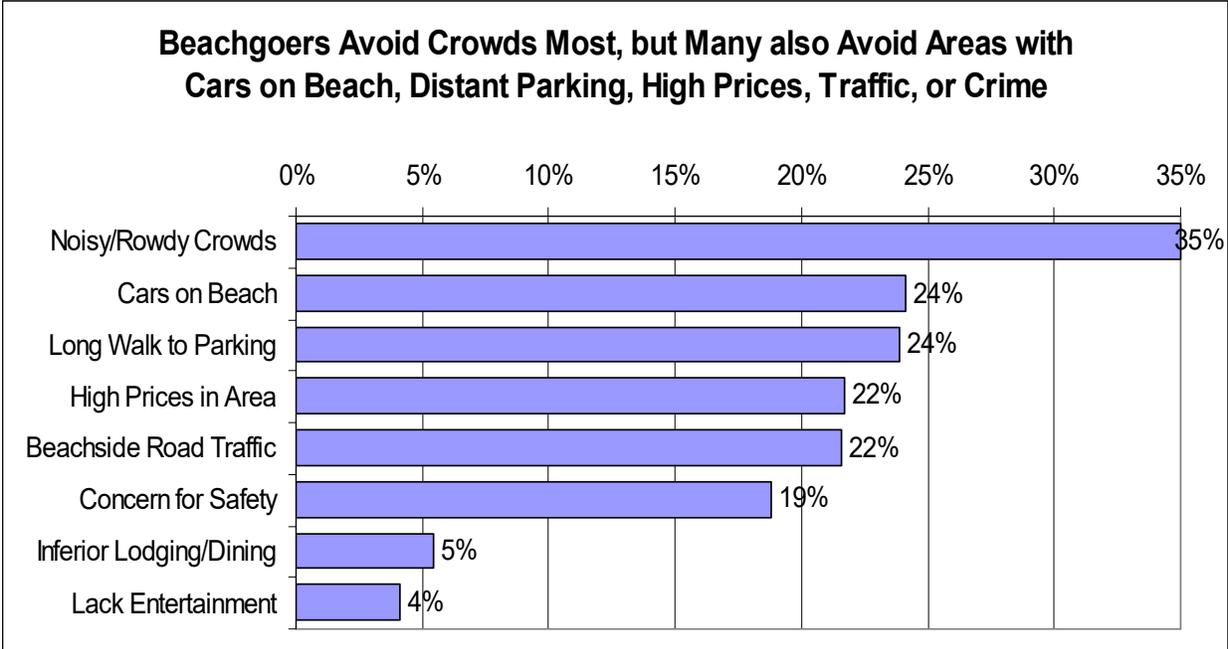


Figure 14

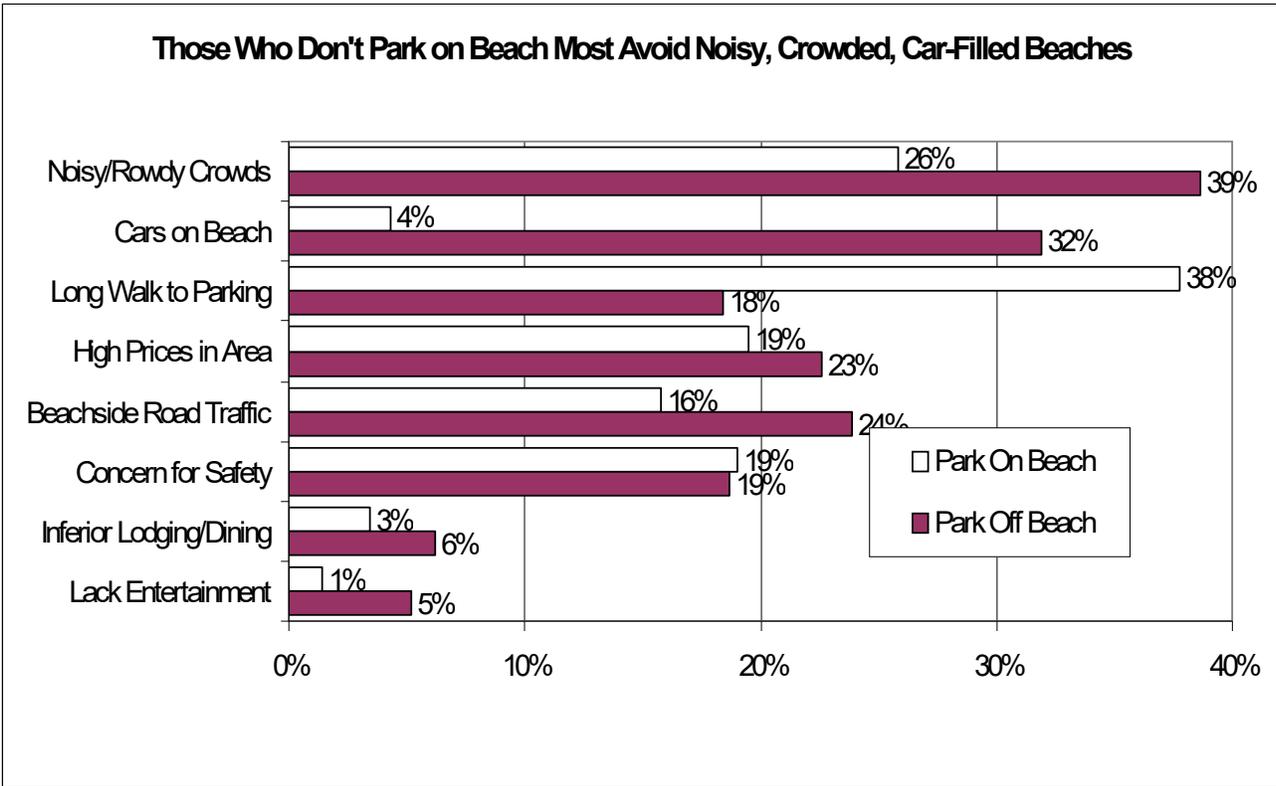


Figure 15

**Table 1: Weighted Regression Equation for Log10 Per Capita Annual Beachside Spending
(n = 461 who visit beach, R² = 55.6%, significance: *** at 10%, ** at 05%, * at 1% level)**

Lg10Percapspend = 1.14

Age Dummies (Default is *Age 30 to 45*):

- 0.415 Age<30*** - 0.077 Age46-64 - 0.329 Age>64**

Income Dummies (Default is *Income < \$30,000*):

+ 0.009 Inc30-50K - 0.124 Inc50-80K + 0.007 Inc>80K

Residence Dummies (Default is *Central Florida county other than Volusia*):

- 0.711 Volusia*** - 0.477 NonCenFL

Favorite Beach Area Dummies (Default is *Daytona Area*):

+ 0.054 Cocoa + 0.190 NewSmyrna** + 0.178 FlagStAug

Frequency of Beach Visitation Dummies (Default is *once or twice a year*):

+ 0.233 2-3/Yr* + 0.568 4-6/Yr*** + 0.918 Monthly*** + 1.10 Weekly*** + 1.73 Daily***

Size of Party Dummies (Default is *bring one other person*):

+ 0.554 Alone** + 0.0813 With2-3 - 0.030 With>3

Length of Stay Dummies (Default is *full day*):

- 0.233 HalfDay** + 0.311 Overnite* + 0.338 2Nites** + 0.353 FewNite* + 0.943 2Weeks**

What Brought Along Dummies (Default is *nothing*):

+ 0.0161 FoodBev + 0.162 BikeBoat

Where Park Dummies (Default is *off-beach parking*):

+ 0.182 ParkBeach + 0.278 StayFriends**

Reasons to Visit Dummies (more than one choice allowed):

+ 0.205 Scenic** + 0.0761 Viewing - 0.105 NoCrowd - 0.495 Fishing**
+ 0.151 BeachDrive + 0.0733 ParkNear + 0.120 Entertain + 0.130 NearShop
+ 0.336 Arcades + 0.375 NiceLodge*** + 0.149 LivelySoc

Events or Activities Dummies (more than one choice allowed):

- 0.072 SwimSurf - 0.0908 WalkBike + 0.626 Fish*** + 0.162 DriveBeach + 0.041 Boat
- 0.156 Business - 0.153 Visit - 0.148 Concert + 0.129 Picnics + 0.085 Events

Reasons for Avoiding Dummies (more than one choice allowed):

- 0.302 LongWalk*** - 0.0365 Crowds + 0.072 NoSafety - 0.085 HighPrices
- 0.0115 Traffic + 0.252 BadLodge + 0.091 CarsOnBeach + 0.162 NoEntertain

To investigate which of these factors are associated with daytripper spending, a regression model was designed. Nonlinearities and the effect of outliers were minimized by choosing the log of annual per capita spending as the dependent variable. The results of the weighted

regression are presented in Table 1.

As expected, those who visit for less than half a day spend significantly less than other daytrippers, who in turn spend significantly less than those who stay at least one night on beachside visits. However, no significant spending increases are evident among single-night, weekend, and lengthier visitors. Predictably, the more frequent the visits, the more that is spent annually. Spending is not affected, though, by whether or not beach visitors bring along food, beverages, bikes, or boats. Notably, parking on the beach does not affect annual spending levels after controlling for the other factors in the regression model.

Location produced a mixed pattern in the regression results. County residents spend significantly less than visitors from every other county in the region. As for choice of Atlantic beach destination, only New Smyrna visitors spend significantly more than visitors to the other three Central Florida beachside regions.

Those under 30 and over 65 year of age spend significantly less than other age groups. Unexpectedly, however, income displays no relationship to beachside spending. Lower income visitors do not spend significantly less than those with higher incomes.

Among factors attracting or deterring beach visitors, those coming for the scenic beauty or to fish spend significantly more, while those that avoided beaches located far from parking spent significantly less. Interestingly, none of the other factors measuring interests and preferences, such as beach driving and special events, tested significant in the model.

Conclusions

A much overlooked and controversial tourism segment was successfully examined using a survey design methodology dedicated to the particular challenges presented by the daytripper market. The findings confirm some conventional wisdoms but dispel several commonly-held beliefs about how Central Floridian use nearby beaches and how much they spend annually, what differences exist between people who do and do not park on the beach, and which factors do and do not attract beachgoers.

The survey results strongly suggests that beach driving discourages daytripper tourism more than it helps the beachside economy. However, the lack of beach parking cannot be rectified as long as low-priced and more convenient on-beach parking is available. In response to this dilemma and after prodded from environmental regulators, public policymakers in Daytona Beach acted.

Shortly after the survey was conducted, a large parking garage in the central tourism area was opened and service initiated by a free beach shuttle tram running regularly to this off-beach parking area. These parking and shuttle services were timed to match the banning of beach driving from the prime one-mile boardwalk and convention area of Daytona Beach. Because of the inherent disamenities from beach driving and parking, private tourism developers had made this a contingency for proceeding with expansion and investment projects in the area. A continued transition strategy of adding more car-free beaches in the Daytona area appears to be consistent with the findings of this paper. More generally, the paper suggests that daytripper destinations that pursue more resource-sustaining tourism strategies can reduce the adverse impacts of daytrippers without suffering dramatic declines in tourism revenues.

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