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Economic Impact of Visitor Segments in Osceola County 2012

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Economic Impact of Visitor Segments in **2012** Osceola County



Report Prepared for
Experience Kissimmee

By
The Dick Pope Sr. Institute *for* Tourism Studies.



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Economic Impact of Visitor Segments in Osceola County 2012



Executive Summary

The main purpose of this report is to document the economic effects of tourism in Osceola County. Few industries have as much impact on the economy of Osceola County. In 2012, a total of 5.9 million tourists visited the area, spending on average \$5.8 million per day, resulting in \$2.1 billion in direct spending effect. The total economic contribution of tourism to the county is \$3.1 billion, resulting in an estimated multiplier of 1.48. The total economic contribution of tourism accounts for about 28% of the gross economic product of the county. In total, the tourism industry supported one in every seven Osceola County jobs for an estimated 38,204 jobs in 2012.

The total economic impact as a result from tourist spending generated a total of \$401 million in taxes for the federal, state and local governments. The total room tax generated was estimated at \$36,931,578. In addition, sales tax due to tourist spending was estimated at \$46.8 million. Without the taxes generated by tourism, Osceola County residents would have had to pay \$900 in taxes to keep the same level of county services and infrastructure.

The economic impact estimation was derived from intercept surveys conducted at 26 locations in the county. The venues were selected by Experience Kissimmee based on specific targeted segments. A total of 2,838 surveys were collected. Respondents were grouped according to a “purpose-oriented” segmentation. The following segments were identified: leisure, SMERF, business, amateur sporting events, festivals, consumer and trade shows, spring training, and entertainment. The market segmentation also included demographic profiles such as age, education, and income within the “purpose-oriented” segmentation.

The data collected indicated that the meeting segment spent the most per day per person at \$84.23, followed by festivals (\$79.13), domestic leisure (\$79), leisure international (\$77.40) and sports (\$73.84).¹ The total direct tourist spending accrued largely to four industry sectors: Retail trade (NAICS 44-45), Transportation & warehousing (NAICS 48-49), Arts-entertainment & recreation (NAICS 71), and Accommodation & food services (NAICS 72). Sixty two percent of the secondary effects accrued to four specific sectors: 28% to Real estate & rental (NAICS 53), 13% to Professional- scientific & technology services (NAICS 54), 12% to Administrative & waste services (NAICS 56), and 9% to Finance & Insurance (NAICS 54).

Within the tourist sector, the direct spending accrued largely to accommodation and food services. Twenty-nine percent of their budget was spent on accommodation, followed by food and beverage (27%), clothing (17%), groceries (7%), theme parks and recreation (7%), shopping (6%), gasoline (4%), car rental (3%), and others (2%).

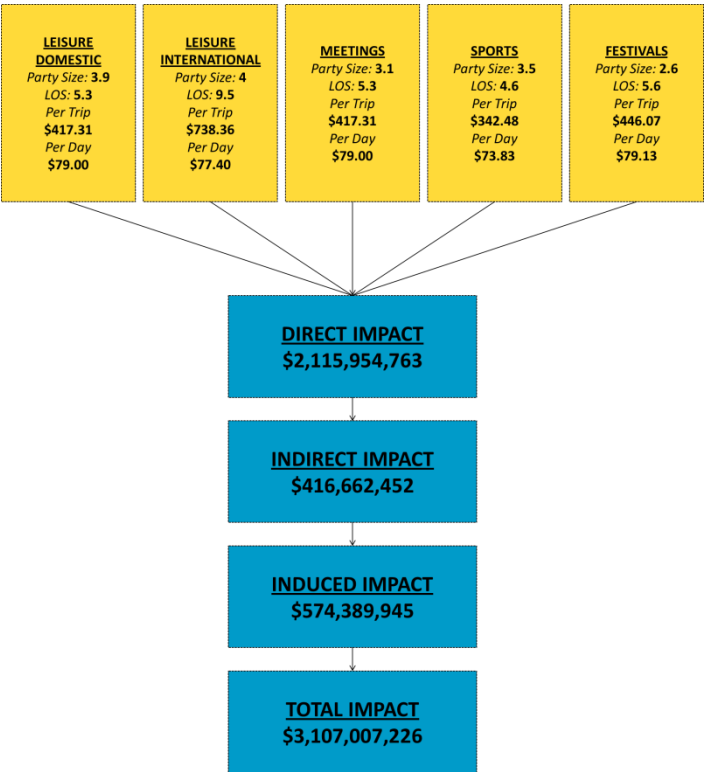
Tourism is a vital source of employment in the county that complements other sectors. One in every seven jobs is supported by the tourism industry. The direct tourist spending supported a total of 29,207 jobs. The Accommodation & food services (NAICS 72) created 16,178 jobs, followed

¹ The meeting segment was compiled by surveys collected at two specific venues.

by Retail trade (NAICS 44-45) with 10,340 jobs. The remainder of the jobs originated in the Transportation & warehousing (NAICS 48-49), Arts-entertainment & recreation (NAICS 71) sectors.

The majority of respondents to Kissimmee stayed in hotels, traveled in groups of 3.8 persons per party, and reported 5.8 nights as their average length of stay. Ninety-two percent of respondents whose main motivation for visiting Kissimmee was for business and convention stayed in hotels. Fifty-seven percent of those visiting Kissimmee for leisure stayed at timeshare hotels. Respondents whose main reason was attending festivals stayed the least in hotels and timeshare. The trip characteristics and spending profile of the respondents are depicted in figure 1.

Figure 1. Total Economic Impact in Osceola County



Note: 1 Spending Figures reveal un-weighted average per segment

Background and Purpose of the Study

This report documents the economic and financial impact of tourism segments visiting Osceola County in accordance to the requirements established by the Osceola County Board of County Commissioners' Procurement Services Office for the Osceola County Tourism Economic Impact Study. The report is based on proposal #11-06 submitted by the Dick Pope Sr. Institute for Tourism Studies of the Rosen College of Hospitality Management at the University of Central Florida to the Osceola County Board of County Commissioners' Procurement Services Office. A statement of work reflecting the tasks was agreed upon on August 31, 2011.

Tourism is big business in Osceola County. The recent Great Recession has negatively impacted the tourism industry in the County. However, it is expected that tourism may make a come-back in 2012 to the extent that tourist arrivals to the County may surpass numbers in previous years.² By several accounts, arrivals are expected to reach the 6 million visitors' mark. The expected increase in arrivals corresponds with a time in which there are increased activities supporting the industry at the county level. For example, Experience Kissimmee and the County are investing in revamping the tourist infrastructure, in particular the I-192 corridor; Experience Kissimmee has added 13 new positions, becoming more aggressive in its marketing of the area; and the private sector seems to follow suit with its investment in hospitality properties.

The County once again wants to play a pivotal role in the tourism development of Central Florida. The County has some unique advantages as being in proximity of the major theme parks and the international airport and a sizeable and diversified restaurant industry. In addition, its hotel room inventory accounts to more than one-third of the total room inventory in the Central Florida area. The area has 184 properties with a total of 43,625 rooms. The accommodation sector provides a diversified portfolio of rooms, including hotel/motels, timeshare, vacation homes, condo hotels and campgrounds.³

Experience Kissimmee has consistently monitored the impact of the tourism industry on the County economy. Understanding the total contribution and the economic contribution of segments as a whole is relevant to policymakers, because the sector as part of the core of the hospitality industry determines the size and degree of sales in other related industries.⁴ A number of economic studies have investigated the impact of the tourism industry on the economy and concluded that the industry is not only sizeable and significant, but has become an important source and driver of businesses and jobs in the area. These studies facilitate the timely choices pertaining to investment in marketing, improvement in infrastructure, and steering of private business investment.

² See, for example, 2010 Osceola County Economic Profile, the Economic Development Department, http://www.chooseseosceola.com/files/Websites/EconomicDevelopment/00000000_document/101510_EDDProfile_2010.pdf.

³ For a discussion on the County tourism supply, see, for example, Collins, J. (2004), Efforts to promote Tourism as a Catalyst for Urban Redevelopment in Florida. <http://digital.lib.usf.edu:8080/fedora/get/usfldc:E14-SFE0000543/DOCUMENT>.

⁴ See Croes, R. R., & Severt, D. E. (2007). Research report: Evaluating short-term tourism economic effects in confined economies - conceptual and empirical considerations. *Tourism Economics*, 13(2), 289-307.

Experience Kissimmee commissioned the Dick Pope Sr. Institute *for* Tourism Studies (DPITS) of the Rosen College of Hospitality Management at the University of Central Florida in September 2011 to conduct an economic impact study of the tourism industry in the County. Planning and realization of tasks started at the end of September 2011. A number of focus groups were conducted with industry experts and stakeholders in the county to establish the market share of various tourism segments and to assist in the identification of potential survey sites.

The economic impact focused on a number of segments determined by Experience Kissimmee. After a number of meetings with the client, it was decided that the study should cover the following segments: leisure domestic, leisure international, sports, meetings, and festivals and events. The study adopted Getz' definition of an event which includes the events referenced previously that attract visitors to a destination.⁵ Visitors are defined according to the World Tourism Organization standards of someone residing outside the area of study, undertaking a short-term visit, and then return home. The distance of residing outside the area is determined at 50 miles.⁶ Visitors were divided into the segments targeted by the Experience Kissimmee and defined by purpose of visits.

For this purpose the DPITS conducted a number of focus groups and went through a number of iterations with the client in the design of a survey and sample selection. The questionnaire was composed of 10 questions. First, questions related to socioeconomic aspects included household income, education level, and age. Second, respondents were asked to state their expenditures in the area of Kissimmee regarding 14 spending categories. Finally, the last set of questions gathered information regarding their trip characteristics, such as purpose of the visit, number of nights, place of stay, party size, party composition, and if they purchased a vacation package. The distribution of the sample size was established based on the relevancy of each of the previously alluded to segments to the tourism industry of Osceola County.

Data were collected at 26 places in the Kissimmee area from December 2011 to September 2012. A total of 2,838 respondents participated in the survey, representing a response rate of 37% from a total of 7,670 persons who were approached at multiple venues. Eighty-three percent of the respondents were domestic travelers, while 17% were international travelers. Consequently, students from Rosen College of Hospitality Management at UCF collected more than 2,800 surveys over a period of almost a year. Students visited a number of places confined to a mutually agreed upon geographical area.

⁵ See Getz, D. (2008), Event Tourism: Definition, evolution, and research. *Tourism Management* 29, 403-428.

⁶ The study employed the definition of visitor by the Bureau of Economic Analysis:

http://www.bea.gov/scb/pdf/2011/06%20June/0611_travel.pdf

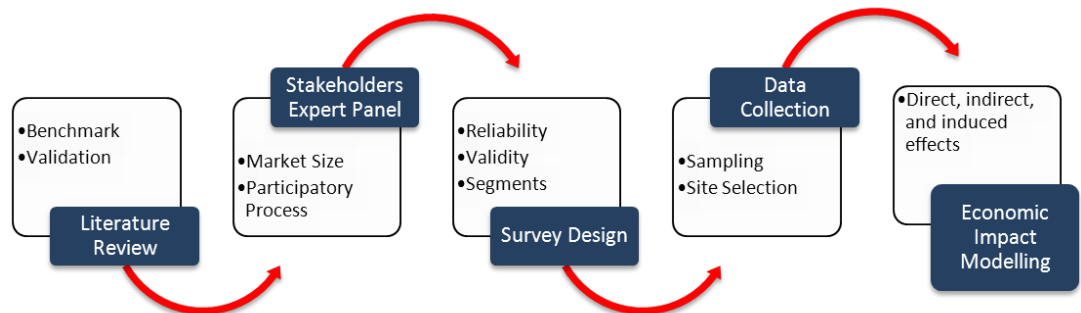
The Methodological Procedure

The technical approach is reflected in the DPITS proposal #11-6 in conformity with the objectives outlined in the RFP-11-2097-LC. The procedure consists of five steps:

- Literature Review
- Discussion with Tourism Stakeholders
- Expert Panel Survey Design
- Data Collection
- Economic Impact Model

The processes are reflected in Figure 2 below

Figure 2. Methodological Procedure



Project Process

The project process took a total of eleven months to be completed. Visitors were approached in multiple sites running the gamut from sport complexes, hotels, restaurants, theme parks and attractions, and shopping malls. The project process is depicted below in Table 1. The data collection was completed on September 16, 2012.

Initially, the sample size for the study consisted of 3,000 surveys covering a total visitors' population of about six million on an annual basis. The large sample size would allow the study to capture any seasonal effects. The distribution of the sample size has been established based on the relevancy of each of the following segments to the tourism industry of Osceola County: sports, leisure/vacation, meeting and conventions, groups, festival and events.

The distribution of the sample size of 3,000 surveys was eventually adjusted along the process of data collection, however, due to the practical difficulties of locating the identified segments. The initial distribution was changed in concurrence with the client and reflected the following sample: leisure (700); SMERF (500), Business (200), amateur sporting events (700), festival (300), consumer shows (300), spring training (200), and entertainment 100. A total of 7,670 persons were approached as potential respondents at 26 venues in the Kissimmee area. Of the 7,670 persons, 2,838 respondents participated in the surveys administered by the DPITS, resulting in a response rate of 37%.

The process of reaching out to a large number of visitors described previously provides a sound overall validity of the assessment of the impact of the tourism industry on the County economy.

Table 1. Project Process

Dec-11	→	DPITS team conducted a number of focus groups with stakeholders and industry experts.	May-12	→	DPITS team of students collected data at three events sites; approached 670 people and collected 336 surveys.
Jan-12	→	Together with Experience Kissimmee, research department Mr. M. Rudowski and Mr. L. Arcuri, DPITS crafted plan of events for data collection.	Jun-12	→	DPITS team of students collected data at three events sites; approached 502 people and collected 257 surveys.
Feb-12	→	Data collection began and took place at three events; DPITS team of students approached 1,311 people and collected a total of 451 surveys.	Jul-12	→	DPITS team of students collected data at three events sites; approached 416 people and collected 154 surveys.
Mar-12	→	DPITS team of students collected data at four events sites, approached 1,040 people and collected 348 surveys.	Aug-12	→	DPITS team of students collected data at three events sites; approached 667 people and collected 461 surveys.
Apr-12	→	DPITS team of students collected data at two events sites; approached 505 people and collected 108 surveys.	Sep-12	→	DPITS team of students collected data at three events sites; approached 1,151 people and collected 758 surveys.

An Insight to the Visitors Profile to the County

Demographic profiles are relevant for segmentation and strategic marketing. The segmentation in this report is based on purpose of visit and a number of socio-demographic profiles, such as age, education, and income. Age differences, educational, and income levels are considered important determinants of consumption patterns of visitors.

Place of residence is an important piece of information when assessing tourism demand for any destination. Detailed information was gathered through the survey of the respondents' place of primary residence. The respondents were mainly domestic tourists. Forty-four percent of the respondents were from Florida, followed by 7% from Georgia. Florida and adjacent states (in order of importance: Georgia, South Carolina, Louisiana and Alabama) represent 56% of total respondents. On the other hand, foreign visitors only made up 11% of all respondents. The top six countries are Canada (25%), United Kingdom (23%), Venezuela (12%), Puerto Rico (10%), Brazil (3%), Colombia (3%), Panama (2%), Scotland (2%), and Mexico (2%)⁷. See Figure 3.

Figure 3. Distribution of respondents from foreign countries

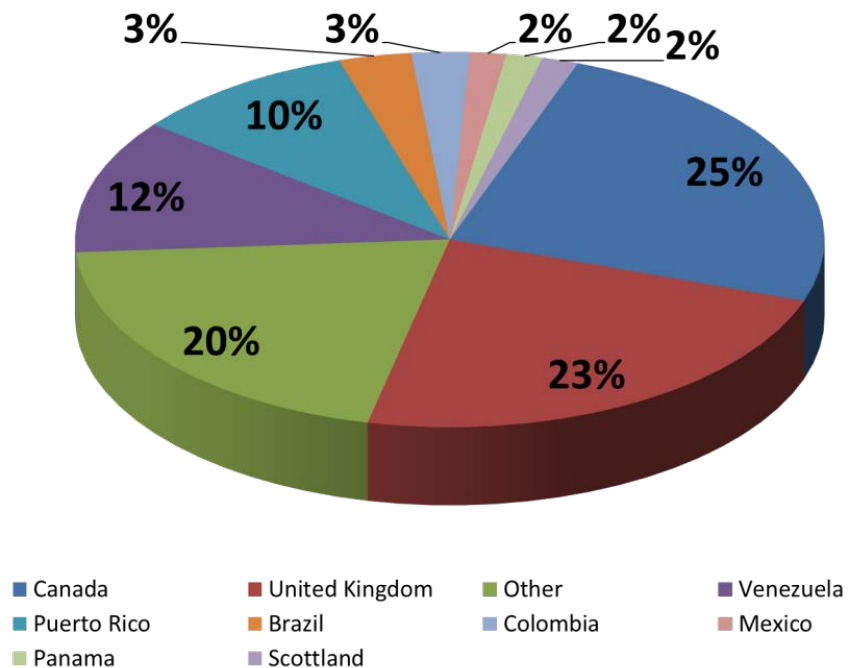


Table 2 summarizes the events that respondents visited. The most visited events by respondents were amateur sports (34%), followed by youth amateur sports (29%), and festivals (17%).

⁷ The distribution of respondent's from South America is consistent with the distribution of visitors to Osceola County. For additional details see: <http://www.visitflorida.org/gc/KissimmeeOsceolaResearch.pdf>

Table 2. Main events by respondents

	Events
Amateur Sports	34%
Youth Amateur Sports	29%
Festivals	17%
Consumer and Trade Show	10%
Spring Training	8%
Entertainment	2%
Total	100%

Note: See Annex for list of venues

The leisure segment reveals a ratio of close to eight to two in terms of domestic and international visitors, while respondents from the non-leisure segment were overwhelmingly domestic (94%). A break-down of respondents in the five segments indicates that respondents from the leisure and SMERF (social, military, educational, religious, and fraternal) segments have the largest number of attendees from international origin, compared to the other segments. See Table 3 for domestic and international respondents by leisure and events and Table 4 for a comparison of domestic and international respondents by segment.

Table 3. Domestic and international respondents

	Leisure	Events
United States	83%	94%
Other Country	17%	6%
Total	100%	100%

Table 4. Domestic and international respondents by segment

	Leisure	SMERF	Business	Sports	Festivals
United States	82%	82%	97%	95%	90%
Other Country	18%	18%	3%	5%	10%
Total	100%	100%	100%	100%	100%

One third of those visiting for leisure purposes are younger than 40 years old, while a little over (22%) is older than 55 years. On the other hand, those visiting for other reasons than leisure seem more senior in the demographic profile. For example, in the non-leisure category only 18% is younger than 40 years old, 39% are between 40 and 50 years old, and 28% are older than 55 years.

Table 5. Respondents by age

Age group	Leisure	Non-Leisure
18-24	4%	2%
25-34	13%	6%
35-39	15%	10%
40-44	14%	17%
45-49	16%	21%
50-54	16%	16%
55-64	15%	15%
65 or more	7%	13%
Total	100%	100%

The segment of festivals appears to contain the largest number of visitors with a more mature age profile. Forty-four percent of those belonging to this segment are older than 55 years. On the other hand, the business segment reveals the largest number of visitors (22%) who are younger than 34 years. Table 6 summarizes respondents by age and segment.

Table 6. Respondents by age and segment

Ager Group	Leisure	SMERF	Business	Sports	Festivals
18-24	3%	6%	5%	2%	4%
25-34	13%	14%	17%	4%	10%
35-39	15%	12%	13%	11%	6%
40-44	14%	11%	12%	20%	9%
45-49	17%	16%	14%	24%	11%
50-54	16%	20%	17%	15%	16%
55-64	16%	13%	14%	11%	25%
65 or more	7%	8%	8%	12%	19%
Total	100%	100%	100%	100%	100%

More than half of the respondents visiting the County enjoy an education level of at least a college degree (see Tables 7 and 8). The leisure segment reveals that 57% of visitors have at least a bachelor's degree, while the non-leisure segment is slightly lower with 52% having at least a bachelor's degree. When arranging the respondents into the five segments, leisure, SMERF, business, sports and festivals, the results indicate that the business segment has the largest number of respondents with at least a college degree (66%) and the festival segment has the least number of respondents with at least a college degree with only 39% (Table 8).

Table 7. Respondents by educational levels

Education Level	Leisure	Non-Leisure
Less than high school	1%	1%
High School	16%	20%
2-year college/technical/associates degree	25%	27%
4-year college degree	37%	35%
Master's degree	17%	14%
Doctorate Degree	3%	3%
Total	100%	100%

Table 8. Respondents by educational level and segment

Education Level	Leisure	SMERF	Business	Sports	Festivals
Less than high school	1%	2%	2%	0%	2%
High School	17%	17%	14%	17%	31%
2-year college/technical/associates degree	26%	24%	19%	26%	28%
4-year college degree	36%	34%	51%	38%	25%
Master's degree	18%	18%	12%	16%	11%
Doctorate Degree	3%	5%	3%	3%	3%
Total	100%	100%	100%	100%	100%

Overall respondents visiting the County enjoyed relatively high annual incomes as shown in Tables 9 and 10. Nearly one-third of the respondents reported an annual income exceeding \$90,000. Classifying the respondents into leisure and non-leisure visitors reveals that about half (47%) of the non-leisure respondents enjoyed an income exceeding \$90,000 per year, while only 37% of the leisure respondents enjoyed an annual income higher than \$90,000.

Table 9. Respondents by household income

Household Income	Leisure	Non-Leisure
Under \$20,000	3%	3%
\$ 20,000 to \$29,999	3%	2%
\$ 30,000 to \$39,999	5%	5%
\$ 40,000 to \$49,999	7%	7%
\$ 50,000 to \$59,999	10%	9%
\$ 60,000 to \$69,999	11%	8%
\$ 70,000 to \$79,999	10%	8%
\$ 80,000 to \$89,999	12%	10%
\$ 90,000 to \$99,999	11%	10%
\$100,000 or more	27%	37%
Total	100%	100%

A further classification of the respondents into the five segments previously referenced reveals that the business segment, as expected, enjoyed the largest of annual income compared to the other segments as summarized in Table 10. More than half (52%) of respondents whose main purpose of visit was business had an income exceeding \$100,000. The SMERF segment had the least number of visitors with an income higher than \$100,000, while the segment of respondents whose purpose was attending a festival had the largest group (25%) earning less than \$50,000 annually.

The accommodation industry is an important component of the tourism sector, and it determines the degree of competitiveness of a destination. The lodging industry drives the economic ripple effects of tourist spending throughout the regional economy. It represents between 30% and 40% of the average spending of the tourist. That is why it is important to determine the proportion of visitors to the County staying in hotels. The majority of respondents reported staying in hotels and timeshare properties as shown in Table 11.

Ninety-two percent of the respondents in the business segment stayed in hotels, followed by sports, SMERF, leisure and festivals. The respondents grouped in the leisure segment are more

likely to stay at timeshares, while those whose main motivation is attending a festival are more likely to stay at friends and relatives as revealed in Table 12.

Table 10. Respondents by household income and segment

Household Income	Leisure	SMERF	Business	Sports	Festivals
Under \$20,000	4%	4%	2%	2%	5%
\$ 20,000 to \$29,999	3%	3%	2%	2%	4%
\$ 30,000 to \$39,999	5%	7%	0%	4%	7%
\$ 40,000 to \$49,999	7%	8%	6%	6%	9%
\$ 50,000 to \$59,999	10%	13%	7%	8%	13%
\$ 60,000 to \$69,999	11%	14%	8%	8%	7%
\$ 70,000 to \$79,999	11%	3%	8%	8%	9%
\$ 80,000 to \$89,999	13%	15%	4%	12%	6%
\$ 90,000 to \$99,999	11%	11%	13%	12%	6%
\$100,000 or more	25%	24%	52%	38%	35%
Total	100%	100%	100%	100%	100%

Table 11. Respondents by place of stay

Place of Stay	Leisure	Events	Total
Hotel	45%	66%	56%
Motel	0%	4%	2%
Timeshare	50%	6%	29%
RV	0%	5%	2%
Friends/Relatives	2%	8%	5%
Vacation Home	2%	5%	3%
Rental	1%	5%	3%
Total	100%	100%	100%

Table 12. Respondents by place of stay and segment

Place of Stay	Leisure	SMERF	Business	Sports	Festivals
Hotel	38%	56%	92%	70%	48%
Motel	0%	1%	0%	3%	7%
Timeshare	57%	29%	8%	8%	5%
RV	0%	0%	0%	2%	13%
Friends/Relatives	2%	10%	0%	5%	17%
Vacation Home	2%	2%	1%	6%	5%
Rental	1%	1%	0%	6%	6%
Total	100%	100%	100%	100%	100%

Note: The Vacation Home sector is under represented in the sample of respondents. The main objective of data collection was to intercept respondents by the purpose of their visit and not place of stay

The Economic Impact

The study tracked the spending of the respondents visiting the County. The spending impacts the sales flow of businesses, the amount of jobs generated by the impact, the incomes resulting from the increased sales, and the amount of taxes that these sales generate. More specifically, the economic impact analysis answers the following questions:

1. How much do tourists spend in the County? Key indicators, such as spending per tourists, spending per day, spending per party size, spending by type of tourists (for example comparing first timers with repeat visitors) will be elucidated.
2. What portion of sales by local businesses is generated by tourism?
3. How much income does tourism generate for households and local businesses in the County?
4. How many jobs are created by tourism in the County?
5. How much tax revenue does tourism generate?

The analysis estimates are based on multipliers calculated from an Input-Output model. The study used the IMPLAN model to estimate the interrelationships among industries in the County. The application of the model allowed the impact of the direct tourist spending to be converted into additional indirect and induced effects on sales, income, wages and jobs by category of the five segments. For a further discussion on the model, see annex 1.

The report documents fourteen spending categories divided into four main economic sectors (retail sector, transportation, accommodation and food services, and entertainment and recreation) spread over twenty economic sectors. Four measures of economic activity covering sales, income, value added and jobs are documented for each sector. Table 13 summarizes the economic impact of the tourism industry in Osceola County. The total contribution of tourist spending was more than \$3.1 billion resulting from \$2.1 billion in direct spending effects (68% capture rate), over \$1 billion in direct income, \$1.3 billion in value added and supported more than 29,000 jobs.

Table 13. Economic impact

	Direct	Indirect	Induced	Total
Total Output	\$2,115,954,829	\$416,662,452	\$574,389,945	\$3,107,007,226
Total Value Added	\$1,270,480,738	\$272,206,758	\$376,504,861	\$1,919,192,357
Employment (# of Jobs)	29,207	3,648	5,349	38,204
Employee Compensation	\$762,947,711	\$113,865,461	\$187,525,467	\$1,064,338,638
Proprietors Incomes	\$28,519,073	\$11,801,630	\$10,157,605	\$50,478,309
Other Type of Incomes	\$264,210,028	\$125,980,631	\$141,096,813	\$531,287,472
Indirect Business Taxes	\$214,803,926	\$20,559,035	\$37,724,976	\$273,087,937

The total direct tourist spending amounted to \$2.1 billion (\$2,115,954,763) and was generated by a total of 5.9 million tourists who visited the area in 2012. The total economic contribution of \$3.1 billion resulted in an estimated multiplier of 1.48. This multiplier translated a significant portion of

sales into household income. This is captured by the induced effects which were significantly higher than the indirect effects (see Table 13).

The induced effects are higher than the indirect effects, because the impact on wages and salaries is more significant than business sales. This higher impact of the induced effects is due to the labor intensity aspect of the tourism industry, which payroll is received by employees working in the hospitality industry and supporting industries that were re-spent in the local economy to support their households.

Table 14. Total Employment Impact by Sector

Industry Sector	Direct	Indirect	Induced	Total
11 Ag, Forestry, Fish & Hunting	0	28	18	45
21 Mining	0	15	6	21
22 Utilities	0	13	8	21
23 Construction	0	123	29	152
31-33 Manufacturing	0	16	12	28
42 Wholesale Trade	0	36	46	83
44-45 Retail trade	10,340	83	1,239	11,662
48-49 Transportation & Warehousing	1,523	220	82	1,825
51 Information	0	60	38	98
52 Finance & insurance	0	210	280	490
53 Real estate & rental	0	420	534	954
54 Professional- scientific & tech svcs	0	609	174	783
55 Management of companies	0	6	1	7
56 Administrative & waste services	0	891	266	1,157
61 Educational svcs.	0	9	110	120
62 Health & social services	0	0	1,330	1,331
71 Arts- entertainment & recreation	1,167	76	81	1,324
72 Accommodation & food services	16,178	282	579	17,039
81 Other services	0	173	337	510
92 Government & non NAICs	0	375	180	555
Total	29,207	3,648	5,349	38,204

The total economic effects of the tourism industry supported 38,204 jobs, reflecting its importance as a significant source of employment. The total labor income exceeded \$1.0 billion dollars. Each direct job generated \$26,122 in earning on average, which is the lowest average annual wage of all industries in the county.⁸ The industry supported more than 29,000 jobs directly, which reveals that tourism is the largest employer in the county.⁹ One in every seven jobs in the county is supported by the tourism industry. Table 14 summarizes job creation by sector. The accommodation and food services and retail sectors largely supported employment generation: 91% of total direct generation was supported by these two sectors, while the secondary effects accrued largely to services and retail. Secondary job opportunities are realized across all sectors in the economy (see Table 14).

⁸ See <http://edr.state.fl.us/content/area-profiles/county/osceola.pdf>

⁹ See U.S. Census Bureau:
http://factfinder2.census.gov/bkmk/table/1.0/en/ACS/11_5YR/DP03/0500000US12097.

Table 15 breaks the effects of tourist spending down into 20 sector groupings. The economic role of tourism goes beyond the hospitality industry (e.g., hotels, restaurants, transportation and theme parks). The industry's role is much bigger due to its needs of inputs from other sectors to produce tourism and leisure services. The supporting sectors span the range of farm, agri-food and industrial production, manufacturing, construction, utilities, and telecommunication.

Table 15. Tourism Spending Economic Contribution to Osceola in 2012

Sector	Direct	Indirect	Induced	Total
11 Ag, Forestry, Fish & Hunting	\$0	\$2,296,262	\$1,487,183	\$3,783,446
21 Mining	\$0	\$1,811,862	\$699,502	\$2,511,364
22 Utilities	\$0	\$5,519,962	\$3,139,161	\$8,659,123
23 Construction	\$0	\$16,210,548	\$3,766,856	\$19,977,404
31-33 Manufacturing	\$0	\$5,396,370	\$4,156,054	\$9,552,424
42 Wholesale Trade	\$0	\$5,181,468	\$6,555,980	\$11,737,448
44-45 Retail trade	\$619,348,423	\$4,991,429	\$74,184,503	\$698,524,355
48-49 Transportation	\$174,643,241	\$25,219,123	\$9,432,584	\$209,294,948
51 Information	\$0	\$15,955,530	\$10,296,525	\$26,252,055
52 Finance & insurance	\$0	\$36,606,899	\$48,872,432	\$85,479,332
53 Real estate & rental	\$0	\$117,969,662	\$149,802,521	\$267,772,183
54 Professional- scientific svcs	\$0	\$53,764,970	\$15,350,176	\$69,115,145
55 Management of companies	\$0	\$794,892	\$117,920	\$912,812
56 Administrative & waste services	\$0	\$48,376,275	\$14,475,178	\$62,851,453
61 Educational svcs	\$0	\$501,863	\$5,895,755	\$6,397,619
62 Health & social services	\$0	\$44,279	\$133,138,875	\$133,183,155
71 Arts- entertainment & recreation	\$148,127,803	\$9,627,185	\$10,301,722	\$168,056,710
72 Accommodation & food services	\$1,173,835,362	\$20,491,082	\$41,989,902	\$1,236,316,346
81 Other services	\$0	\$12,806,716	\$24,897,169	\$37,703,886
92 Government & non NAICs	\$0	\$33,096,074	\$15,829,946	\$48,926,020
Total	\$2,115,954,829	\$416,662,452	\$574,389,945	\$3,107,007,226

The breakdown reveals the money flows from the direct spending of tourists accruing to suppliers and vendors, salaries and wages for households providing labor for tourism and supporting industries, and government taxes. Accommodation and food services and retail sectors in the county were largely the main recipients of the direct effects of tourism spending in 2012. These two groupings accounted for 85% of total sales in 2012. On the other hand, secondary effects accrued largely to services and retail. The majority of the secondary effects were induced effects supported by the consumption of household incomes.

The spending per segment as classified as leisure domestic, leisure international, meetings, sports, and festivals reveals that the meeting segment spent \$84.23 per day per person, followed by domestic leisure and festivals, leisure international, and sports (see Table 16). On the other hand, leisure international stays longer (9.5 nights) and spent the most per trip (\$738), nearly twice as much compared to the meetings segment. Overall, the leisure segments spent on average 6.1 nights, followed by the SMERF, events, and business markets.

Figure 4. Spending Distribution by Segment

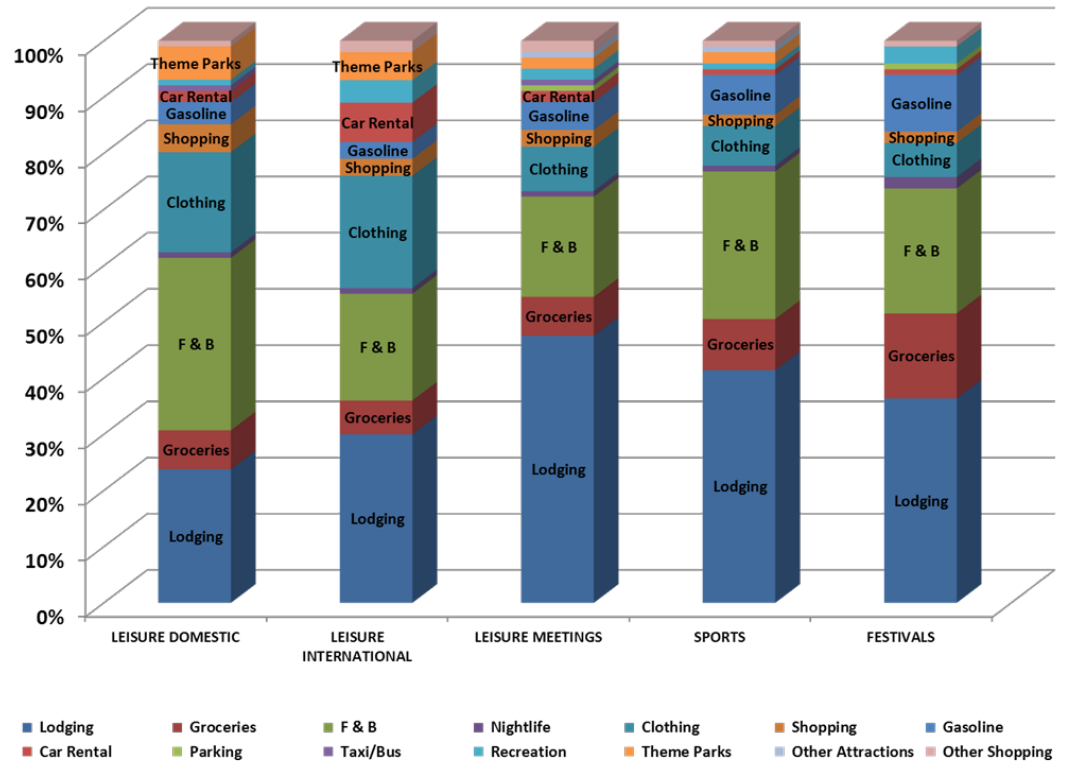


Table 16. Trip Characteristics by segment

Trip Characteristics	LEISURE DOMESTIC	LEISURE INTERNATIONAL	LEISURE MEETINGS	SPORTS	FESTIVALS
Party Size	3.9	4.0	3.1	3.5	2.6
LOS	5.3	9.5	4.5	4.6	5.6
Per Trip	\$417.31	\$738.36	\$381.91	\$342.48	\$446.07
Per Day	\$79.00	\$77.40	\$84.23	\$73.83	\$79.13

It is important to consider not only total expenditures, but also the distribution across the different spending categories. The distribution of the total direct spending in order of magnitude is as follows: accommodation (29%), followed by food and beverage (27%), clothing (17%), groceries (7%), theme parks and recreation (7%), shopping (6%), gasoline (4%), car rental (3%), and others (2%). The distribution indicates that over half of the expenditures accrued to the accommodation and restaurant sectors, while the other half went to miscellaneous items, including shopping. The spending distribution is a good indication of the variety of offerings available in the county and is an important tool for business intelligence and development. The results are reported in Figure 4.

Impact on Public Revenues

The total amount of taxes generated by visitors' spending in 2012 was estimated at \$241.7 million for the state and local governments, and \$159.1 million in federal taxes. Taxes generated by spending of visitors in direct related to hospitality industry businesses (hotels, restaurants, shopping, transportation, etc.) amounted to \$187.6 million. The study further estimated a total of \$217.5 million in sales tax in 2012.

A total of \$31.1 million in sales tax resulting should have been apportioned to the County by the state. An amount of \$15.6 is estimated as the County's portion of the state half-cent sales tax (derived from the total sales tax) that should be apportioned to the County. This equals to 50.1% of the total sales tax (in 2008 that figure was 42%). The remainder of the amount is derived from the 1% additional sales tax distributed to the County by the state. An estimated \$1.9 million was generated by the fuel tax apportioned to the County based on the County's portion of 7.75 cents per gallon of gasoline sold. In addition, the County collected an estimated amount of \$32.1 million in room tax.

The amount of taxes generated by tourism spending has saved each resident in the County an amount of \$900 per year.¹⁰ In other words, in the absence of a tourism industry in the County, residents would have paid \$900 in additional taxes to keep up the current level of government services and infrastructure. In addition, taxes derived from tourists also include high yields as tourists do not utilize most of the infrastructure and public services.

¹⁰ The Osceola County Profile, 2011, estimated the 2010 county population at 268,685. Visit:

<http://www.eflorida.com/profiles/CountyReport.asp?CountyID=30&Display=all>.

Conclusions

A total of 5.9 million travelers visited the County, spending on average \$62 per person during 5.8 nights. This spending resulted in a \$3.1 billion economic contribution and the generation of more than 32,000 jobs and over \$401 million in taxes. Approximately \$59 dollars per each \$100 in tourist spending is value added, of which labor absorbs a significant portion. Close to \$35 dollars of each \$100 dollars in visitor spending went into salaries and wages. One in every seven jobs in the County is supported by tourism.

The importance of labor in delivering the tourist offerings is validated by the higher induced effects stemming from tourist spending compared to the indirect effects. If it were not for the tourism industry, each resident in the County would have had to pay an additional \$900 in taxes to keep the same level of county services and infrastructure. These findings confirm the relevance of the tourism industry in the local economy. Tourism is important because it creates jobs, supports schools, libraries, builds roads, generates household income, investments and business opportunities, and diversifies the economy.

The findings reveal that the County is on its way to bounce back from the Great Recession in terms of the productivity of its tourism industry. The total economic impact of \$3.1 billion, adjusted for inflation represents \$2.8 billion in 2007 dollars (the year prior to the Great Recession). In 2007, the total economic contribution of tourism was \$2.7 billion. The adjusted amount for inflation therefore is higher than the total economic impact estimated in 2007. The finding of this study supports the hypothesis that 2012 would be a 'comeback' year for tourism in Osceola County.

The results of the impact study suggest that destination marketing efforts and resources are paying off. The tourism industry in the county is resilient, dynamic and vital in supporting employment, generating income, taxes and business opportunities. Continuing therefore leveraging destination marketing for economic benefits is prudent and wise in the future. The findings in the report facilitate timely choices pertaining investment in marketing, improvements in infrastructure, and steering of private business investment.

Annex 1

A Social Accounting Matrix (SAM) was used to measure the economic impact of Tourism. The SAM represents the various flows of goods, services, and income among all agents within an economic entity, during a given reference period. The SAM matrix is an extension of the input-output model developed by Wassily Leontief in the 1930s, which includes the structure of production and data on income distribution and the demand from institutions.

For Osceola County, the data for the SAM was developed by IMPLAN. A SAM is a square matrix in which each sector or account has its own row and column. Expenditures are listed in the columns and income, in the rows. As each account must balance, the totals for the row and the column are identical. In a SAM, there are six key types of accounts: production activities, factor of production, institutions, government, capital, and the rest of the world (Isard *et al.*, 1998). This concept was first formulated by Pyatt and Thorbecke (1976) as a conceptual and modular framework for government policy and planning.

To move from the information in a SAM transaction table (denoted as z matrix) to a SAM model for Osceola County, we must first define the technical coefficients of production. In the SAM, a z matrix denotes the monetary flows from sector i to sector j . To develop the set of technical coefficients of production or direct input coefficients, we take the observed z_{ij} , which represents the flow from i to j in the transaction table, divided by X_j , the total gross output of j . These coefficients are denoted by a_{ij} , so that $a_{ij} = z_{ij} / X_j$.

As a result, this is called the *A matrix*, which takes the form of:

$$A = \begin{bmatrix} a_{1.1} & a_{1.2} & \dots & a_{1.40} \\ \vdots & \vdots & \vdots & \vdots \\ \vdots & \vdots & \vdots & \vdots \\ a_{40.1} & a_{40.2} & \dots & a_{40.40} \end{bmatrix}$$

Capital, Inventory, Foreign Trade and Domestic Trade are excluded from this matrix (considered to be exogenous accounts, see Table 1). Now that all the coefficients have been calculated for the endogenous accounts, each of the Z_{ij} can be rewritten as $Z_{ij} = a_{ij} X_j$ and expressed for each of the endogenous sectors as:

$$X_1 = a_{1.1} X_1 + a_{1.2} X_2 + \dots + a_{1.40} X_{40} + Y_1$$

$$X_2 = a_{2.1} X_1 + a_{2.2} X_2 + \dots + a_{2.40} X_{40} + Y_2$$

\vdots

$$X_{40} = a_{40.1} X_1 + a_{40.2} X_2 + \dots + a_{40.40} X_{40} + Y_{40}, \text{ where } Y \text{ represents the final demand.}$$

By using these equations, we can make explicit the dependence of inter-industry flows on the total output of each activity, and with a matrix notation the system of equations may be compactly expressed as:

$$X = AX + Y, \text{ where } A = \begin{bmatrix} a_{1,1} & a_{1,2} & \dots & a_{1,40} \\ \vdots & \vdots & \vdots & \vdots \\ a_{40,1} & a_{40,2} & \dots & a_{40,40} \end{bmatrix}, X = \begin{bmatrix} X_1 \\ X_2 \\ \vdots \\ X_{40} \end{bmatrix}, Y = \begin{bmatrix} Y_1 \\ Y_2 \\ \vdots \\ Y_{40} \end{bmatrix}$$

In order to solve this system for the vector of gross outputs X as a function of the final demand vector Y , we first subtract AX from both sides, which results in $X-AX=[I-A]X=Y$

$$\text{where } I = \begin{bmatrix} 1 & 0 & \dots & 0 \\ 0 & 1 & \dots & 0 \\ \vdots & \vdots & \ddots & \vdots \\ 0 & 0 & \dots & 1 \end{bmatrix} \text{ is an } n \times n \text{ identity matrix.}$$

Provided that the matrix $[I-A]$ is non-singular, the multiplication of X by $(I-A)^{-1}$ yields the desired vector of gross outputs as a function of final demand. This is then expressed as $X=(I-A)^{-1}Y$.

We can now use this model to determine the total impact tourism on the Osceola County economy. For example, the increase in tourism-related consumption of local goods and services by the tourists will lead to a demand from other industries used for production of the original event-related products. Let's take an example, the restaurant operator needs bread, rice, cooking oil, spices, vegetables, meat, fruits, plastic plates, utensils, utilities etc. to make the special food. Because those ingredients are required for the special food production, even though other industrial sectors may not be directly participating in the event, other industrial sectors which produce those ingredients will have increase in sales, resulting in increase in output, employment etc. In other words, required inputs are more like a recipe list. Tourism products require certain lists of necessary inputs, just like an apple pie requires wheat, butter, salt, apple, cinnamon, eggs etc.

This reaction represents the intra-group effect and it leads to a greater use of the factors of production, increasing the income of the institutions that own the factors concerned. These movements are the extra-group effect, since the initial change alters the accounts of the groups, except for the one that initially underwent the change. Finally, a higher level of household income modifies the households' original consumption pattern, affecting the production sectors. This is the inter-group effect - the accounts where the exogenous change reacts to the adjustments to the new situation of all the other groups of accounts.

References

- Leontief, W Input-Output Economics. New York: Oxford Univ. Press, 1966
- Isard, W., I. Azis, M. Drennan, R. Miller, S. Saltzman, and E. Thorbecke, Methods of Interregional and Regional Analysis. Aldershot: Ashgate, 1998.
- Miller R.E. and Blair,P.D., Input-Output Analysis: Foundations and Extensions. Prentice Hall, Englewood, NJ, 1985.
- Pyan, G. and Round, J.T., Social Accounting Matrices: A Basis for Planning. Washington, DC: World Bank, 1985.

Annex 2

Table 17. List of venues and sample size

Venue	Sample #	Response %	Total # approached
AAA Crown	26	26%	101
Bazooka Soccer	97	23%	420
Caribbean Fusion	15	7%	206
Cheerleading	104	29%	362
County fair	111	27%	701
Diamond Softball	79	62%	127
Fun Spot	79	18%	433
Gatorland	80	24%	331
Gaylord Palms	415	49%	852
Gold Medal	28	20%	141
Mecum	236	44%	538
Medieval times	30	29%	102
Melia	8	24%	33
Old Town	51	53%	96
Puerto Rican Festival	16	6%	275
Rebel Games	130	50%	261
Rumba Fest	50	15%	336
Soccer Event	127	64%	197
Spring Training	218	72%	692
Timeshare	81	62%	131
USSSA Baseball	89	44%	204
West Gate	633	69%	921
Youth Basketball of America	118	67%	175
*Other	35	100%	35
Total	2856	37%	7670

Note: From a total of 2856 surveys, 2802 surveys were used for the analysis due to missing values.

*A sample of surveys was collected at the Celebration area.

Annex 3

Table 18. Participants and Spectators by Place of Stay (Events Only)

	Participants		Spectators	
	#	%	#	%
Hotel	444	71%	239	52%
Motel	14	2%	27	6%
Timeshare	27	4%	37	8%
RV (Recreational Vehicle)	8	1%	44	9%
Friends and Relatives	20	3%	65	14%
Vacation Home	34	5%	23	5%
Rental	38	6%	19	4%
Other	41	7%	10	2%
Total	626	100%	464	100%

*From 1374 event surveys collected, 284 surveys were excluded from the analysis due to missing value, day visitors or stay outside of Kissimmee area.

Annex 4

Table 19. Output Multipliers by Sector (Indirect and Induced)

Description	Output Multipliers		Total
	Indirect Effects	Induced Effects	
11 Ag, Forestry, Fish & Hunting	0.211	0.146	1.357
21 Mining	0.426	0.106	1.532
22 Utilities	0.091	0.146	1.236
23 Construction	0.192	0.238	1.430
31-33 Manufacturing	0.181	0.122	1.303
42 Wholesale Trade	0.122	0.266	1.388
44-45 Retail trade	0.201	0.314	1.514
48-49 Transportation & Warehousing	0.234	0.264	1.499
51 Information	0.197	0.165	1.362
52 Finance & insurance	0.329	0.184	1.513
53 Real estate & rental	0.099	0.083	1.181
54 Professional- scientific & tech svcs	0.223	0.315	1.538
55 Management of companies	0.342	0.254	1.596
56 Administrative & waste services	0.248	0.311	1.559
61 Educational svcs	0.291	0.434	1.725
62 Health & social services	0.226	0.382	1.608
71 Arts- entertainment & recreation	0.198	0.240	1.438
72 Accommodation & food services	0.188	0.254	1.442
81 Other services	0.263	0.349	1.612
92 Government & non NAICs	0.076	0.467	1.543

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