



## Economic and Fiscal Impact Analysis

### Estimated Total Impact of Tourism in Beaufort County, SC, 2016

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**Table of Contents**

I. Introduction..... 1

II. Model and Assumptions..... 1

III. Results..... 3

IV. Conclusion..... 3

Appendix..... 4

## I. Introduction

This study of the economic and fiscal impact of tourism in Beaufort County, South Carolina in the year 2016 was performed by Regional Transactions Concepts, LLC, in association with Dr. John Salazar of the Lowcountry and Resort Islands Tourism Institute (LRITI) at the University of South Carolina Beaufort. These impacts result from spending by tourists during their visit to the county.

This analysis examines spending by tourists visiting each of three destinations in the county: the City of Beaufort, the Town of Bluffton, and the Town of Hilton Head Island. The estimated impact from spending by tourists at each of these locations is summed in order to indicate the total impact.

## II. Model and Assumptions

The models generated by Regional Transactions utilized the Regional Economic Models, Inc. (REMI) PI<sup>+</sup> economic modeling engine. The REMI model is an input-output (IO) and computable general equilibrium (CGE) model; it is also a New Economic Geography model, taking into account transportation and labor and resource availability in order to more accurately model economic activity across geographic regions. The model forecasts a baseline level of activity assuming all things constant except for normal economic growth. Changes to employment, income, or demand for products or services by either the private or the public sector can be input to the model. Based on these inputs, the REMI model generates a county level estimate of the resultant variation from the projected baseline, as well as the effects on every industry.

Visitor spending for each location was determined by a survey conducted by LRITI. The total number of visitors to each destination is listed in Table 1. Estimated total direct spending by tourists at each destination is listed in Table 2. For purposes of generating inputs to the model, the mean expenditures reported by each group for each category were weighted according to the proportion of survey respondents re-

porting spending in that category; this was then divided by the average number of persons per party reported by the respondents. Finally, this weighted average spend per person in each category was multiplied by the total number of visitors to the county for each destination reported by the Convention and Visitors Bureau for 2016.

<b>Segment</b>	<b>Count</b>
Beaufort (city)	219,914
Bluffton	122,364
Hilton Head Island	2,677,951
<b>Total Visitors</b>	<b>3,020,229</b>

Specialized output from the REMI model was then input to our own fiscal impact model in order to estimate the impact on local government revenue and expenditures, excluding hospitality, accommodations, and recreation tax revenue.

The numbers reported in the following include direct, indirect, and induced impacts. Direct impact include workers and output generated directly from visitor spending (for example, hotel room sales); indirect impacts are the jobs and output created for first and second tier suppliers; induced impacts are jobs and output generated from consumer spending of wages by workers affected by the direct and indirect impacts. Estimates are reported using the following metrics:

- *Employment* is the number of jobs or job equivalents created by economic activities resulting through direct, indirect, and induced effects from tourist expenditures.
- *Total compensation* is the aggregated impact on wages paid in Beaufort County, including fringes. This includes wages paid to workers holding jobs in the county who may reside elsewhere; likewise, it excludes wages earned by Beaufort County residents who work outside of the county.
- *Output* is the dollar value of all goods and

**Table 2 – Survey Results:  
Total Tourist Expenditures, All Visitor Segments (\$1000s)**

Question	Hilton Head	Bluffton	Beaufort
Transportation (around the area) - Estimated dollar amount spent	\$16,820	-	-
Lodging - Estimated dollar amount spent (excluding day visi-	\$494,794	\$4,171	\$17,257
Food-dining out - Estimated dollar amount spent	\$179,175	\$3,435	\$7,889
Food-groceries - Estimated dollar amount spent	\$87,165	-	-
Beaches - Estimated dollar amount spent	\$4,171	-	-
Shopping - Estimated dollar amount spent	\$111,175	\$3,435	\$5,987
Spas - Estimated dollar amount spent	\$8,432	-	-
Golf - Estimated dollar amount spent	\$39,008	\$10,633	\$6,656
Biking - Estimated dollar amount spent	\$12,109	-	-
Parks - Estimated dollar amount spent	\$700	-	-
Performance/visual arts - Estimated dollar amount spent	\$5,718	-	-
Festivals - Estimated dollar amount spent	\$2,888	-	-
Museum/historical tours - Estimated dollar amount spent	\$3,993	-	-
Boating/sailing - Estimated dollar amount spent	\$11,075	-	-
Nature based activities - Estimated dollar amount spent	\$1,748	-	-
Dolphin tours - Estimated dollar amount spent	\$6,863	-	-
Tennis - Estimated dollar amount spent	\$1,564	-	-
Fishing - Estimated dollar amount spent	\$5,277	-	-
Sporting events - Estimated dollar amount spent	\$1,056	-	-
Other cultural activities - Estimated dollar amount spent	\$3,896	-	-
Other sport activities - Estimated dollar amount spent	\$3,086	-	-
Other outdoor activities - Estimated dollar amount spent	\$5,881	-	-
Other expenses - Estimated dollar amount spent	\$32,062	-	-
<b>Total</b>	<b>\$1,038,655</b>	<b>\$21,674</b>	<b>\$37,790</b>

services produced within the county per year. This can also be thought of as *total sales*.

- *Net local government revenue* is the revenue collected by local (county and municipal) governments from all sources, including taxes, licensing, and fees, less expenses. Detailed impact estimates for *gross* local government revenues are presented in the Appendix.

### III. Results

Impact estimates for each destination are presented in the Appendix. The total output multiplier for tourist spending was estimated from the model estimates. The output multiplier is the ratio of total economic impact to direct spending. The estimated output multiplier for total tourist spending for Beaufort County for all destinations is **1.40**; this means that every dollar spent by tourists in Beaufort County increases output in the county economy by a total of \$1.40.

This multiplier is greater than the 1.18 multiplier estimated from visitor spending in 2015. This difference is postulated to partially be the result of an observed increase in personal income in several of the region's feeder markets between 2014 and 2015 (the most recent years for which BEA data are currently available). This is likely the cause not only of an overall increase in direct spending by tourists in 2016, but also of a shift in spending observed specifically among visitors in Hilton Head Island toward industry sectors that yield greater local economic impacts (i.e. have larger multipliers). While spending in all sectors generate local economic benefits, some sectors generate greater local impacts than others due to a number of factors, including amount of labor employed and wage rate and the intensity with which they utilize local suppliers. Most notable differences in reported visitor spending in Hilton Head Island in 2016 are significant increases in spending on golf, shopping, and dining out as compared to that reported in 2015.

In addition, the Shannon Weaver Index, a measure of economic diversity within an economy, indicates a substantial increase in diversity in Beaufort County over the past several years. As reported by IMPLAN, the index for Beaufort County increased from 0.61966 in 2010 to 0.66367 in 2015, or an increase of seven percent. An index value closer to one indicates

greater economic diversity. This indicates that businesses representing a greater number of industry sectors exists in the county in 2015 than did in 2010. This is expected to positively affect the multiplier for all three destinations year over year because the presence of more businesses in more industry sectors allows the county's economy to "capture" a larger portion of the indirect and induced effects resulting from tourism that otherwise may have "leaked" out of the county into other regions.

Total economic impact (output) on Beaufort County from tourist spending was approximately **\$1.53 billion** in 2016. Tourist spending generated a positive impact on net revenues (i.e., net of the impact on expenditures) to local governments in Beaufort County of approximately **\$15 million**, *not* including revenues generated by state and local ATAX and local hospitality taxes.

### IV. Conclusion

As visitors to Beaufort County bring their income with them to spend during their visit, they create a net inflow of funds to the region that generates income to local businesses and households. In this way, tourism is a true export industry. The **17,208** jobs that comprise the estimated total employment impact generated by tourists in Beaufort County in 2016 represent **16.5 percent** of all jobs in the county.<sup>1</sup>

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<sup>1</sup> Total employment in Beaufort County, South Carolina was 104,008 according to the Bureau of Economic Analysis (BEA), Table CA4, in 2015, the most recent year for which data are currently available.

## Appendix

Table A-1 – Estimated County Visitor Spending Impact by Destination Beaufort County (2016)		
Segment	Concept	Estimate
Beaufort (city)	Employment	629
	Total Compensation (\$1000s)	\$20,569
	Output (\$1000s)	\$56,784
	Net Local Government Revenue (\$1000s)	\$498
Bluffton	Employment	583
	Total Compensation (\$1000s)	\$19,405
	Output (\$1000s)	\$52,696
	Net Local Government Revenue (\$1000s)	\$265
Hilton Head Island	Employment	16,223
	Total Compensation (\$1000s)	\$518,522
	Output (\$1000s)	\$1,443,672
	Net Local Government Revenue (\$1000s)	\$14,244
<b>Total County Visitor Impact</b>	<b>Employment</b>	<b>17,208</b>
	<b>Total Compensation (\$1000s)</b>	<b>\$551,793</b>
	<b>Output (\$1000s)</b>	<b>\$1,533,574</b>
	<b>Net Local Government Revenue (\$1000s)*</b>	<b>\$15,007</b>
* Excluding ATAX, HTAX, and Recreation Fee.		

Table A-2 – Estimated Gross Local Governments Revenue Impact, All Visitors, Beaufort County (2016)		
Revenue Type	Description	(\$1000s)
Charges	Air Transportation	\$512.4
Federal Intergovernmental	Air Transportation	\$165.4
Tax	Alcoholic Bev Sales	\$4.3
Charges	All Other	\$194.3
Federal Intergovernmental	All Other	\$36.9
State Intergovernmental	All Other	\$128.2
Tax	Amusements Lic	\$0.3
Intergovernmental to State	Correctional Institutions	\$0.4
Tax	Death and Gift	\$0.1
Tax	Documentary and Stock Transfer	\$8.9
Misc	Donations from Private Sources	\$19.6
Employee Retirement	Earnings on Investments (calculated)	\$4.6
Federal Intergovernmental	Education	\$2.1
State Intergovernmental	Education	\$2,893.2
Revenue	Electric Utilities	\$1,811.6
Federal Intergovernmental	Electric Utilities	\$1.8
Intergovernmental to State	Electric Utilities	\$1.4
Intergovernmental to State	Elementary-Secondary Ed	\$7.5
Charges	Elementary-Secondary Ed - Other	\$100.8
Charges	Elementary-Secondary Sch Lunch	\$59.1
Charges	Elem-Sec Ed Tuition and Transporation	\$7.3
Misc	Fines and Forfeits	\$71.5
Employee Retirement	From Other Governments	\$0.1
Revenue	Gas Utilities	\$714.9
Intergovernmental to State	General - Other	\$5.3
Federal Intergovernmental	General Local Gov Support	\$5.8
State Intergovernmental	General Local Gov Support	\$168.5
Misc	General Rev, NEC	\$322.7
Tax	General Sales/Gross Rcpts	\$1,040.2
Intergovernmental to State	Health - Other	\$118.6



Table A-2 (cont.) – Estimated Gross Local Governments Revenue Impact, All Visitors, Beaufort County (2016)		
Revenue Type	Description	(\$1000s)
Federal Intergovernmental	Health and Hospitals	\$112.1
State Intergovernmental	Health and Hospitals	\$13.0
Federal Intergovernmental	Highways	\$37.9
State Intergovernmental	Highways	\$8,628.0
Charges	Hospital Public	\$557.0
Charges	Housing and Community Dev	\$156.8
Federal Intergovernmental	Housing and Community Dev	\$24.2
State Intergovernmental	Housing and Community Dev	\$341.3
Misc	Interest Earnings	\$29.6
Intergovernmental to State	Judicial and Legal Serv	\$0.4
Intergovernmental to State	Libraries	\$0.1
Employee Retirement	Local Empl Contribution	\$4.6
Charges	Misc Commercial Activities	\$288.8
Tax	Motor Vehicle Lic	\$46.6
Federal Intergovernmental	Natural Resources	\$5.4
Charges	Natural Resources - Other	\$1,149.0
Tax	Occupation/Business Lic	\$71.5
Intergovernmental to State	Other Higher Ed	\$36.0
Tax	Other Licenses	\$542.2
Tax	Other Selective Sales	\$53.9
Charges	Parking Facilities	\$27.8
Charges	Parks and Rec	\$3,572.5
Tax	Property	\$396.5
Tax	Public Utilities Sales	\$211.0
Tax	Public Utility Lic	\$18.8
Federal Intergovernmental	Public Welfare	\$9.1
State Intergovernmental	Public Welfare	\$2.0
Intergovernmental to State	Public Welfare	\$25.8
Charges	Regular Highways	\$2.6
Intergovernmental to State	Regular Highways	\$0.1



Table A-2 (cont.) – Estimated Gross Local Governments Revenue Impact, All Visitors, Beaufort County (2016)		
Revenue Type	Description	(\$1000s)
Misc	Rents	\$31.2
Misc	Sale of Property	\$221.4
Charges	Sea and Inland Port Facilities	\$5.9
Charges	Sewerage	\$1,927.0
Federal Intergovernmental	Sewerage	\$95.7
State Intergovernmental	Sewerage	\$30.4
Intergovernmental to State	Sewerage	\$0.1
Charges	Solid Waste Mgt	\$785.6
Misc	Special Assessments	\$15.7
Tax	Tax, NEC	\$565.5
Revenue	Transit Utilities	\$35.9
Federal Intergovernmental	Transit Utilities	\$62.4
State Intergovernmental	Transit Utilities	\$56.2
Revenue	Water Utilities	\$1,805.4
Federal Intergovernmental	Water Utilities	\$36.0
State Intergovernmental	Water Utilities	\$59.7
Intergovernmental to State	Water Utilities	\$0.2
<b>Total</b>		<b>\$30,507.0</b>

Table A-3 – Estimated Gross Local Governments Expenditure Impact, All Visitors, Beaufort County (2016)		
Expenditure Type	Description	(\$1000s)
Current Ops	Air Transportation	\$47.5
Construction	Air Transportation	\$0.0
Other Capital Outlay	Air Transportation	\$1.8
Employee Retirement	Benefit Pmts	\$0.0
Current Ops	Central Staff Serv	\$173.4
Construction	Central Staff Serv	\$0.0
Other Capital Outlay	Central Staff Serv	\$2.8
Current Ops	Correctional Institutions	\$0.0
Construction	Correctional Institutions	\$0.0
Other Capital Outlay	Correctional Institutions	\$0.0
Current Ops	Corrections - Other	\$0.0
Other Capital Outlay	Corrections - Other	\$0.0
Current Ops	Electric Utilities	\$324.4
Construction	Electric Utilities	\$0.0
Other Capital Outlay	Electric Utilities	\$1.8
Interest on Debt	Electric Utilities	\$0.0
Current Ops	Elementary-Secondary Ed	\$4,377.4
Construction	Elementary-Secondary Ed	\$0.0
Other Capital Outlay	Elementary-Secondary Ed	\$222.7
Current Ops	Financial Admin	\$158.1
Construction	Financial Admin	\$0.0
Other Capital Outlay	Financial Admin	\$1.8
Current Ops	Gas Utilities	\$140.4
Construction	Gas Utilities	\$0.0
Other Capital Outlay	Gas Utilities	\$2.4
Interest on Debt	Gas Utilities	\$0.0
Interest on Debt	General	\$0.0
Current Ops	General - Other	\$211.4
Construction	General - Other	\$46.0
Other Capital Outlay	General - Other	\$57.3

Table A-3 (cont.) – Estimated Gross Local Governments Expenditure Impact, All Visitors, Beaufort County (2016)		
Expenditure Type	Description	(\$1000s)
Current Ops	General Public Bldgs	\$64.0
Construction	General Public Bldgs	\$0.0
Other Capital Outlay	General Public Bldgs	\$18.1
Current Ops	Health - Other	\$109.8
Construction	Health - Other	\$0.0
Other Capital Outlay	Health - Other	\$5.0
Current Ops	Hospitals	\$2,244.5
Construction	Hospitals	\$0.0
Other Capital Outlay	Hospitals	\$95.0
Current Ops	Housing and Community Dev	\$194.3
Construction	Housing and Community Dev	\$25.6
Other Capital Outlay	Housing and Community Dev	\$3.3
Current Ops	Judicial and Legal Serv	\$0.0
Construction	Judicial and Legal Serv	\$0.0
Other Capital Outlay	Judicial and Legal Serv	\$0.0
Current Ops	Libraries	\$75.8
Construction	Libraries	\$0.0
Other Capital Outlay	Libraries	\$1.6
Current Ops	Local Fire Protection	\$268.1
Construction	Local Fire Protection	\$0.0
Other Capital Outlay	Local Fire Protection	\$15.2
Current Ops	Misc Commercial Activities, NEC	\$3.2
Construction	Misc Commercial Activities, NEC	\$0.0
Other Capital Outlay	Misc Commercial Activities, NEC	\$0.1
Current Ops	Natural Resources - Other	\$8.6
Construction	Natural Resources - Other	\$0.0
Other Capital Outlay	Natural Resources - Other	\$4.7
Current Ops	Parking Facilities	\$9.4
Construction	Parking Facilities	\$0.4
Other Capital Outlay	Parking Facilities	\$0.6

Table A-3 (cont.) – Estimated Gross Local Governments Expenditure Impact, All Visitors, Beaufort County (2016)		
Expenditure Type	Description	(\$1000s)
Current Ops	Parks and Rec	\$162.1
Construction	Parks and Rec	\$0.0
Other Capital Outlay	Parks and Rec	\$33.9
Current Ops	Police Protection	\$528.3
Construction	Police Protection	\$0.0
Other Capital Outlay	Police Protection	\$28.1
Current Ops	Protective Inspection and Reg NEC	\$27.8
Construction	Protective Inspection and Reg NEC	\$0.0
Other Capital Outlay	Protective Inspection and Reg NEC	\$1.6
Assistance & Subsidies	Public Welfare - Fed Categorical Assistance Progs	\$0.2
Current Ops	Public Welfare - Other	\$23.9
Construction	Public Welfare - Other	\$0.2
Other Capital Outlay	Public Welfare - Other	\$0.1
Current Ops	Public Welfare - Vendor Pmts for Medical Care	\$0.5
Current Ops	Public Welfare Institutions	\$19.5
Construction	Public Welfare Institutions	\$0.0
Other Capital Outlay	Public Welfare Institutions	\$0.0
Current Ops	Regular Highways	\$141.3
Construction	Regular Highways	\$137.5
Other Capital Outlay	Regular Highways	\$25.6
Current Ops	Sea and Inland Port Facilities	\$4.6
Construction	Sea and Inland Port Facilities	\$0.0
Other Capital Outlay	Sea and Inland Port Facilities	\$0.0
Current Ops	Sewerage	\$282.9
Construction	Sewerage	\$107.5
Other Capital Outlay	Sewerage	\$12.7
Current Ops	Solid Waste Mgt	\$197.8
Construction	Solid Waste Mgt	\$0.0
Other Capital Outlay	Solid Waste Mgt	\$18.8
Salaries and Wages	Total	\$4,455.2

Table A-3 (cont.) – Estimated Gross Local Governments Expenditure Impact, All Visitors, Beaufort County (2016)		
Expenditure Type	Description	(\$1000s)
Current Ops	Transit Utilities	\$48.8
Construction	Transit Utilities	\$0.0
Other Capital Outlay	Transit Utilities	\$5.5
Interest on Debt	Transit Utilities	\$0.0
Current Ops	Water Utilities	\$302.5
Construction	Water Utilities	\$0.0
Other Capital Outlay	Water Utilities	\$22.1
Interest on Debt	Water Utilities	\$0.0
Employee Retirement	Withdrawals	\$0.0
<b>Total</b>		<b>\$15,505.6</b>