



Economic and Fiscal Impact Analysis

Estimated Impact of Golf in Hilton Head Island, 2015 on Beaufort County, South Carolina

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I. Introduction

This study of the economic and fiscal impact of golf in Hilton Head Island in the year 2015 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 golf tourists as well as revenue at golf courses generated by residents of the island playing at local courses. For purposes of this study, golf tourists are defined as visitors to Hilton Head Island who reported engaging in golf as an activity on the visitor profile survey conducted by LRITI.

In addition to greens fees and other revenue generated by local residents, the study examines spending by golf tourists classified into five segments according to their lodging arrangement while visiting the island: villa rental, timeshare, hotel, second homeowners and their non-paying guests, and finally those who visit for the day and do not lodge overnight. The estimated impact from spending by each of these groups is summed in order to indicate the total impact that golf tourists on the island have on Beaufort County, South Carolina.

II. Model and Assumptions

The models generated by Regional Transactions utilized the Regional Economic Models, Inc. (REMI) PI⁺ 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 visitor segment was determined by a survey conducted by LRITI. Respondents reported spending in 23 categories, including lodging, food, transportation, and entertainment. The total number of visitors in each segment is listed in Table 1. A list of spending categories reported in the survey is presented 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 reporting 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 visi-

Table 1 – Number of Golf Visitors by Segment, 2015

Segment	Count
Villa Rental	271,259
Timeshare	176,019
Second Homeowner	305,376
Non-Paying Guests	81,160
Hotel	158,746
Day Trip	6,798
Total Visitors	999,359

tors to the island for each group reported by the Convention and Visitors Bureau for 2015 who reported engaging in golf as an activity during their visit.

Revenue at Hilton Head golf courses generated by local resident activities was estimated using data gathered by the South Carolina Department of Parks, Recreation, and Tourism (SCPRT). Spending by golf tourists estimated from the LRITI survey was subtracted from total golf course revenue estimated from the SCPRT data; the remaining revenue was assumed to be generated by local residents. This revenue was input to the REMI model; for the sake of making estimates appropriately conservative, spending on food and beverage at golf courses from the SCPRT data was input to REMI as displacing existing food service spending, as it is possible

**Table 2 – Survey Results:
Total Golf Tourist Expenditures, All Visitor Segments**

Question	N	Avg. Spend per Person	Total Spend (\$1000s)
Transportation (around the Hilton Head Island area) - Estimated dollar amount spent	395	\$45	\$44,430
Lodging - Estimated dollar amount spent (excluding day visitors and non-paying guests)	343	\$86	\$101,421
Food-dining out - Estimated dollar amount spent	421	\$111	\$68,711
Food-groceries - Estimated dollar amount spent	390	\$37	\$39,132
Beaches - Estimated dollar amount spent	150	\$11	\$5,249
Shopping - Estimated dollar amount spent	389	\$69	\$47,163
Spas - Estimated dollar amount spent	115	\$8	\$8,205
Golf - Estimated dollar amount spent	432	\$40	\$41,576
Biking - Estimated dollar amount spent	238	\$14	\$8,792
Parks - Estimated dollar amount spent	87	\$4	\$3,375
Performance/visual arts - Estimated dollar amount spent	104	\$6	\$6,382
Festivals - Estimated dollar amount spent	83	\$5	\$4,924
Museum/historical tours - Estimated dollar amount spent	118	\$6	\$5,483
Boating/sailing - Estimated dollar amount spent	118	\$23	\$7,888
Nature based activities - Estimated dollar amount spent	109	\$5	\$5,296
Dolphin tours - Estimated dollar amount spent	99	\$16	\$5,613
Tennis - Estimated dollar amount spent	77	\$4	\$3,600
Fishing - Estimated dollar amount spent	101	\$6	\$6,797
Sporting events - Estimated dollar amount spent	78	\$6	\$5,520
Other cultural activities - Estimated dollar amount spent	85	\$5	\$5,452
Other sport activities - Estimated dollar amount spent	87	\$5	\$4,944
Other outdoor activities - Estimated dollar amount spent	122	\$7	\$7,809
Other expenses - Estimated dollar amount spent	198	\$16	\$19,097
Total		\$535	\$456,860

that residents purchasing food at golf courses may have eaten at local restaurants otherwise.

Output from the REMI model is then input to our own fiscal impact model in order to estimate the impact on local government revenue and expenditures.

The numbers reported in the following include direct, indirect, and induced 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 services produced within the county per year.
- *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

For golf tourist impacts alone, impact estimates for each visitor segment are presented in the Appendix. The total output multiplier for golf tourist spending was estimated from the model estimates. The output multiplier is the ratio of total economic impact to direct spending for each segment. The estimated output multiplier for golf tourist spending for Beaufort County by all five segments is **1.29**; this means that every dollar spent by golf tourists in Hilton Head increases output in the Beaufort County economy by a total of \$1.29.

The size of the multiplier is due to several factors, including the number of vendors and suppliers in the county to generate indirect impacts. Additionally, the specific spending mix undertaken by golf visitors

will generate a different multiplier than that generated by overall visitor spending, which was reported in an earlier report.

Total economic impact (output) on Beaufort County from golf tourist spending was approximately **\$588.8 million** in 2015. 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 **\$5.3 million**, not including revenues generated by state and local ATAX and local hospitality taxes.

The economic impact from local resident golf activity is reported in the Appendix. The local portion of golf revenue is estimated to have generated an additional **\$10.9 million** in the county in 2015 and an additional **\$83,800** in net local government revenue.

The total economic impact of Hilton Head Island Golf, including both local residents and golf tourists, is approximately **\$599.7 million**, with an estimated net impact on local government finances of **\$5.4 million**.

IV. Conclusion

Spending by visitors to the island generate income to local businesses and households. Because tourist spending is undertaken by individuals who live outside of the county, it is a true export industry and therefore represents a net inflow of funds to the region.

The **7,087** jobs that comprise the estimated total employment impact generated by golf tourists in 2015 represent **6.8 percent** of all jobs in Beaufort County. These jobs constitute **55.6 percent** of the previously estimated 12,740 jobs generated in Beaufort County by Hilton Head Island tourism in total in 2015.¹ Given this impact, golf tourism is clearly a major driver in the Beaufort County economy. Including local resident golf activity, the total employment impact was approximately **7,223** jobs, or **6.9 percent** of Beaufort County employment in 2015.

¹ Total employment in Beaufort County, South Carolina was 104,108 according to the Bureau of Economic Analysis (BEA), Table CA4, in 2015.

Appendix

Table A-1 – Estimated Golf Visitor Spending Impact by Segment Beaufort County (2015)		
Segment	Concept	Estimate
Villa Rental	Employment	2,414
	Total Compensation (\$1000s)	\$72,272
	Output (\$1000s)	\$208,890
	Net Local Government Revenue (\$1000s)	\$2,012
Timeshare	Employment	997
	Total Compensation (\$1000s)	\$28,852
	Output (\$1000s)	\$82,206
	Net Local Government Revenue (\$1000s)	\$688
Second Homeowner + Non-Paying Guests	Employment	1,855
	Total Compensation (\$1000s)	\$53,199
	Output (\$1000s)	\$149,349
	Net Local Government Revenue (\$1000s)	\$1,161
Hotel	Employment	1,759
	Total Compensation (\$1000s)	\$46,467
	Output (\$1000s)	\$142,181
	Net Local Government Revenue (\$1000s)	\$1,312
Day Trip	Employment	66
	Total Compensation (\$1000s)	\$2,095
	Output (\$1000s)	\$6,076
	Net Local Government Revenue (\$1000s)	\$49

Table A-1 (continued) – Estimated Golf Visitor Spending Impact by Segment Beaufort County (2015)		
	Concept	Estimate
Total Golf Visitor Impact	Employment	7,087
	Total Compensation (\$1000s)	\$203,738
	Output (\$1000s)	\$588,767
	Net Local Government Revenue (\$1000s)*	\$5,340
* Excluding revenue from accommodations tax and hospitality and recreation taxes.		

Table A-2 – Estimated Resident Golf Activity Impact and Total Impact Beaufort County (2015)		
Segment	Concept	Estimate
Resident Golf Impact	Employment	136
	Total Compensation (\$1000s)	\$4,278
	Output (\$1000s)	\$10,905
	Net Local Government Revenue (\$1000s)	\$84
Total Golf Impact	Employment	7,223
	Total Compensation (\$1000s)	\$208,065
	Output (\$1000s)	\$599,672
	Net Local Government Revenue (\$1000s)	\$5,424

Table A-3 – Estimated Gross Local Governments Revenue from Golf Visitor Spending, All Visitors, Beaufort County (2015)		
Revenue Type	Description	(\$1000s)
Charges	Air Transporation	\$203.3
Federal Intergovernmental	Air Transporation	\$65.6
Tax	Alcoholic Bev Sales	\$1.8
Charges	All Other	\$83.7
Federal Intergovernmental	All Other	\$15.9
State Intergovernmental	All Other	\$55.2
Tax	Amusements Lic	\$0.1
Intergovernmental to State	Correctional Institutions	\$0.1
Tax	Death and Gift	\$0.0
Tax	Documentary and Stock Transfer	\$3.9
Misc	Donations from Private Sources	\$8.4
Employee Retirement	Earnings on Investments (calculated)	\$2.0
Federal Intergovernmental	Education	\$0.9
State Intergovernmental	Education	\$1,245.7
Revenue	Electric Utilities	\$714.1
Federal Intergovernmental	Electric Utilities	\$0.7
Intergovernmental to State	Electric Utilities	\$0.6
Intergovernmental to State	Elementary-Secondary Ed	\$3.3
Charges	Elementary-Secondary Ed - Other	\$43.4
Charges	Elementary-Secondary Sch Lunch	\$25.4
Charges	Elem-Sec Ed Tuition and Transporation	\$3.1
Misc	Fines and Forfeits	\$30.8
Employee Retirement	From Other Governments	\$0.0
Revenue	Gas Utilities	\$281.8
Intergovernmental to State	General - Other	\$2.2
Federal Intergovernmental	General Local Gov Support	\$2.5
State Intergovernmental	General Local Gov Support	\$72.5
Misc	General Rev, NEC	\$139.0
Tax	General Sales/Gross Rcpts	\$416.7
Intergovernmental to State	Health - Other	\$2.1

Table A-3 (cont.) – Estimated Gross Local Governments Revenue from Golf Visitor Spending, All Visitors, Beaufort County (2015)		
Revenue Type	Description	(\$1000s)
Federal Intergovernmental	Health and Hospitals	\$50.4
State Intergovernmental	Health and Hospitals	\$44.6
Federal Intergovernmental	Highways	\$3.0
State Intergovernmental	Highways	\$17.3
Charges	Hospital Public	\$3,672.7
Charges	Housing and Community Dev	\$8.2
Federal Intergovernmental	Housing and Community Dev	\$72.0
State Intergovernmental	Housing and Community Dev	\$5.7
Misc	Interest Earnings	\$157.7
Intergovernmental to State	Judicial and Legal Serv	\$1.7
Intergovernmental to State	Libraries	\$0.0
Employee Retirement	Local Empl Contribution	\$0.0
Charges	Misc Commercial Activities	\$2.1
Tax	Motor Vehicle Lic	\$121.3
Federal Intergovernmental	Natural Resources	\$12.2
Charges	Natural Resources - Other	\$1.5
Tax	Occupation/Business Lic	\$477.2
Intergovernmental to State	Other Higher Ed	\$0.0
Tax	Other Licenses	\$16.7
Tax	Other Selective Sales	\$229.7
Charges	Parking Facilities	\$9.4
Charges	Parks and Rec	\$12.2
Tax	Property	\$1,285.2
Tax	Public Utilities Sales	\$80.9
Tax	Public Utility Lic	\$83.3
Federal Intergovernmental	Public Welfare	\$2.6
State Intergovernmental	Public Welfare	\$4.0
Intergovernmental to State	Public Welfare	\$0.6
Charges	Regular Highways	\$11.9
Intergovernmental to State	Regular Highways	\$0.3

Table A-3 (cont.) – Estimated Gross Local Governments Revenue from Golf Visitor Spending, All Visitors, Beaufort County (2015)		
Revenue Type	Description	(\$1000s)
Misc	Rents	\$12.8
Misc	Sale of Property	\$93.4
Charges	Sea and Inland Port Facilities	\$2.3
Charges	Sewerage	\$759.6
Federal Intergovernmental	Sewerage	\$37.7
State Intergovernmental	Sewerage	\$12.0
Intergovernmental to State	Sewerage	\$0.0
Charges	Solid Waste Mgt	\$332.1
Misc	Special Assessments	\$6.8
Tax	Tax, NEC	\$222.8
Revenue	Transit Utilities	\$14.2
Federal Intergovernmental	Transit Utilities	\$24.6
State Intergovernmental	Transit Utilities	\$22.1
Revenue	Water Utilities	\$711.7
Federal Intergovernmental	Water Utilities	\$14.2
State Intergovernmental	Water Utilities	\$23.6
Intergovernmental to State	Water Utilities	\$0.1
Total		\$12,099.5