



Project Report

The Economic Impact of
Tourism on the Grand Strand

Grand Strand Tourism Activity
Fiscal Year-end June 30, 2015

Impact Area: Horry and Georgetown Counties, SC

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THE ECONOMIC IMPACT OF TOURISM ON THE GRAND STRAND

EXECUTIVE SUMMARY

Tourism has been the lifeblood of the Grand Strand economy for decades, and it continues to transform the landscape and culture of the region. As the number of visitors grows each year, the full-time population also grows. This growth has served as a significant contributor to the diversification of the economy. More tourists, more people, mean more ideas and more variety. New amenities are developing, and often the evolving preferences for amenities drawing seasonal visitors each year comprise important quality of life factors appealing to residents making the Grand Strand their home.

This study offers evidence to help residents, business owners, and policymakers internalize the changing reality that the Grand Strand, once more known for the stark contrasts of the communities comprising it, is becoming more unified in the minds of tourists and residents alike. As infrastructure expands, once isolated areas are becoming integrated into the overall region, making it easier to seek out the variety of offerings drawing people back and forth from Pawleys Island and Georgetown to Little River and Calabash, taking in all the region has to offer.

Smart growth strategies incorporating the diversity and breadth of the region will continue to support the sustainable development of the communities, their cultures, and their overall economic vitality. This study estimates the impact of tourism on the Grand Strand's economy and the fiscal impact for the region and the state. The key findings include:

- Direct visitor spending on the Grand Strand (Horry and Georgetown Counties combined) totaled an estimated \$4.8 billion in the fiscal year-ending 2015, a growth of thirteen percent in the four years since the previous study was completed.
- The total economic impact of visitor spending is approximately \$7.0 billion, when including multiplier effects from indirect and induced activity tied to visitor spending.
- Visitor spending and its indirect and induced impact support 83,000 jobs in Horry and Georgetown Counties, approximately 53% of total employment across the Grand Strand.
- Nearly 80% of tourism jobs are year-round jobs, according to our analysis of three major tourism sectors and over 68,000 jobs summarized in the Quarterly Census of Employment and Wages.
- Tourism generated \$2.2 billion of income for employees and business owners.
- Visitor spending on the Grand Strand generated a combined \$484.6 million in tax revenue for the state and local governments. Of this total, approximately \$325.8 million was generated for the state from taxes on tourism activities and labor income, and \$158.8 million in tax revenue was generated for the local governments of the Grand Strand.

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General Limiting Conditions

All reasonable effort has been made to ensure that data in this study reflect the most precise, appropriate, and timely information available, and they are assumed to be dependable. This study is based on estimates, assumptions and additional information reviewed and evaluated by the Grant Center for Real Estate and Economic Development. This report is based on information that was available as of April 2016 or as noted in the report, and the Grant Center has not made any other revision of its study effort from the time of such date. The Center makes no guarantee that any of the estimated values or outcomes in this study will in fact be accomplished.

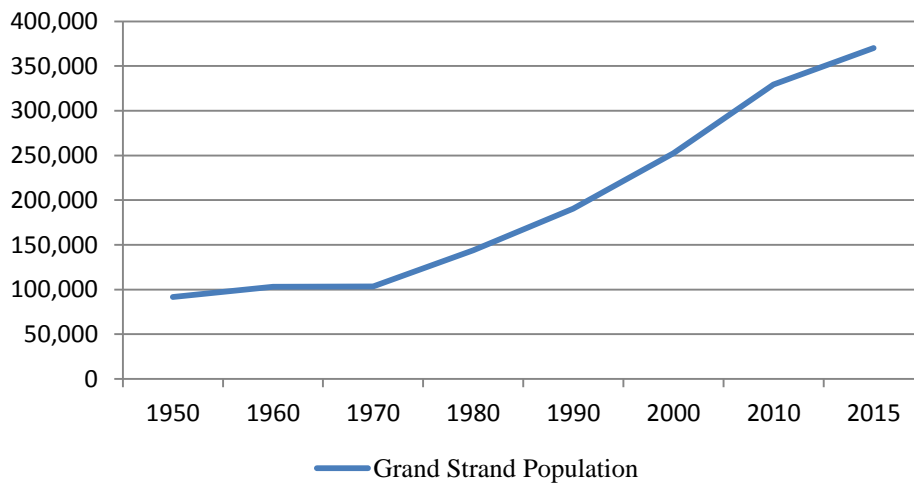
Statement of Scope

The direct scope of the study is tourism activity generated in Horry and Georgetown counties. The economic impact estimates are limited to these two counties. The fiscal impact, through taxes generated, is estimated for these two counties and also the state of South Carolina.

INTRODUCTION

The growth of tourism has helped drive the growth of the region more generally. This growth has served as a significant contributor to the diversification of the economy, as it has fostered the growth of other industries and attracted people seeking opportunities in these new industries. As a region, the Grand Strand has grown over four times in size the last sixty-five years, from a population of just under 92,000 in 1950 to 370,000 in 2015. Another significant development and sign of the growth of the region's economic core is the change since the 2010 Census to the official Myrtle Beach-Conway-North Myrtle Beach, SC-NC Metropolitan Statistical Area (MSA) population definition, which added Brunswick County in North Carolina. As recently as the 1999 census definitions, the MSA only included Horry County.¹ The change means that more people are commuting to Horry County from Brunswick County, enough to consider it economically integrated. Figure one below shows the historical population trend since 1950 for the Grand Strand, just Horry and Georgetown counties. Adding Brunswick County, the Combined Statistical Area (CSA) now includes the MSA counties of Horry and Brunswick and the micropolitan statistical area county of Georgetown. The Combined Statistical Area population was estimated at 488,808 in 2015, compared with 370,000 for the Grand Strand. At the current growth rates, the CSA population should surpass 500,000 in 2016.

Fig. 1. Grand Strand Population (1950 - 2015)



Source: U.S. Census Bureau

The growth of tourism is observed with historical data. Retail sales data provide a general picture. Retail spending increased almost three-fold from 1993 through 2014, the last year of consistent data for comparisons through time.² Visitor spending is a sub-component of retail sales and is estimated using

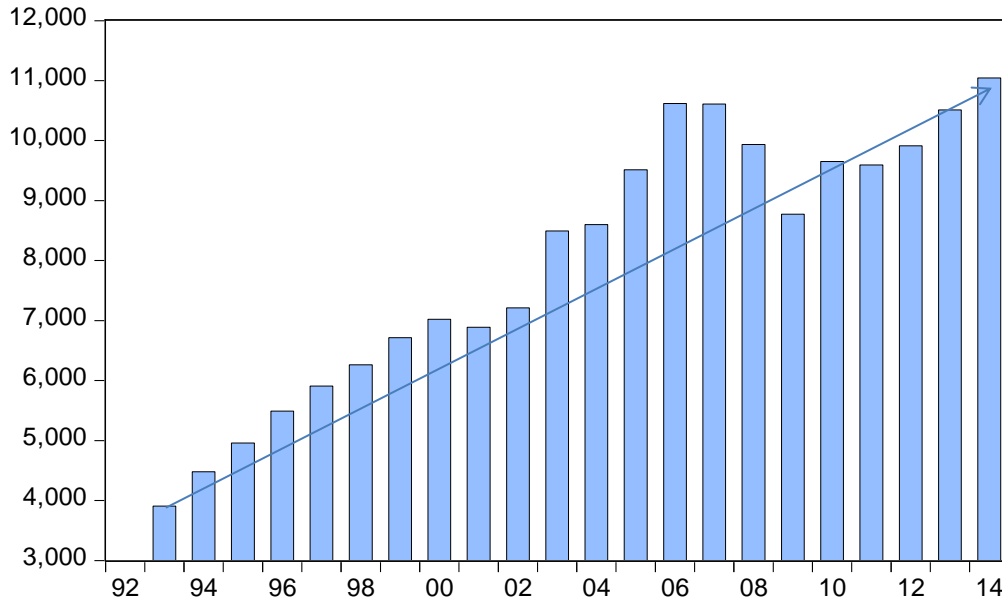
¹ See OMB Bulletin No. 15-01. An earlier version of this paper incorrectly reported Georgetown County as a member county of the newly defined MSA.

² South Carolina's Department of Revenue implemented a new reporting methodology in September of 2015 and analysis of monthly sales reports by county show significant changes in reporting as early as July of 2015. The Grant Center is working to verify the effect of changes to correlate recent reports with previous reporting.

techniques developed in Schunk (2010)³. We use visitor spending as the basis for our tourism impact analysis. Included in visitor spending are accommodations expenditures, food and beverage expenditures, spending on amusements, parks, golf courses, and other usual expenditures such as clothing and fuel. Figure 2 shows the growth in annual retail sales for the Grand Strand.

Figure 2. Gross Retail Sales Annually

Grand Strand Annual Retail Sales (1993-2014)



Source: South Carolina Department of Revenue

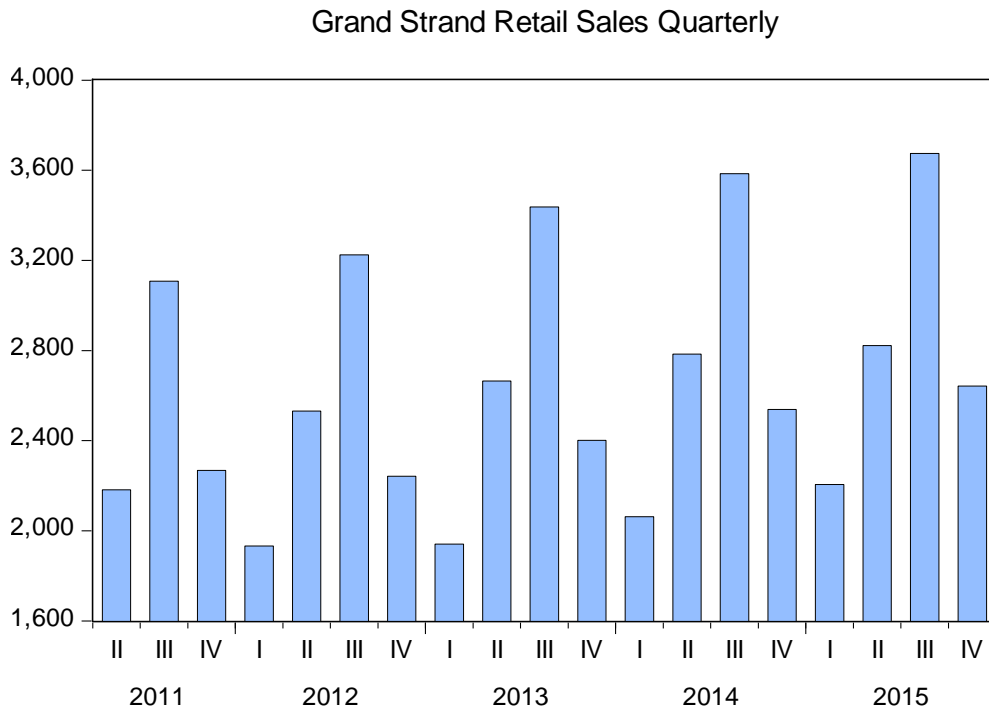
This study quantifies the economic impact of money spent directly by visitors to the Grand Strand as it ripples throughout the local economy. The tourism businesses purchase services and supplies from many large and small businesses throughout the region, and income earned by employees in the tourism industry and its service providers is spent throughout the overall economy in seemingly unrelated sectors. This economic activity supports many jobs outside of the tourism industry and is an important source of tax revenue for the public services the region provides. This report details these economic benefits and demonstrates the connection between the tourism activity and economic activity overall. Section 2 discusses important dynamic trends in key economic indicators related to tourism. Section 3 presents the findings of the economic impact analysis. Section 4 discusses the tax impact for the local economy and the state, and Section 5 concludes.

³ Schunk (2010). The Economic Impact of Tourism on the Grand Strand. BB&T Center for Economic and Community Development. Coastal Carolina University.

2. DYNAMIC TRENDS IN TOURISM

An understanding of tourism’s impact on the Grand Strand economy begins with an understanding of the seasonality of business activity in the Grand Strand relative to that of the larger state economy. Figure 3 shows quarterly retail sales volume in millions of dollars for the Grand Strand.⁴ Note the extreme height of each third quarter bar relative to the adjacent quarter bars for each year. For example, in 2014 the third quarter retail sales volume was 22.3 percent greater than the volume for the second quarter of 2014. Compare this with the difference at the state level. Figure 4 shows quarterly retail sales for South Carolina. The difference from the second quarter to the third quarter for 2014 is only 2.9 percent for the state compared with 22.3 percent for the Grand Strand. This is true even compared with a state known for the importance of tourism, clearly driven by the main tourist regions of Myrtle Beach, Hilton Head, Beaufort, and Charleston. If we were to compare quarterly volume with the United States, we would note an even starker contrast with that of the Grand Strand.⁵

Figure 3. Gross Retail Sales Quarterly for the Grand Strand

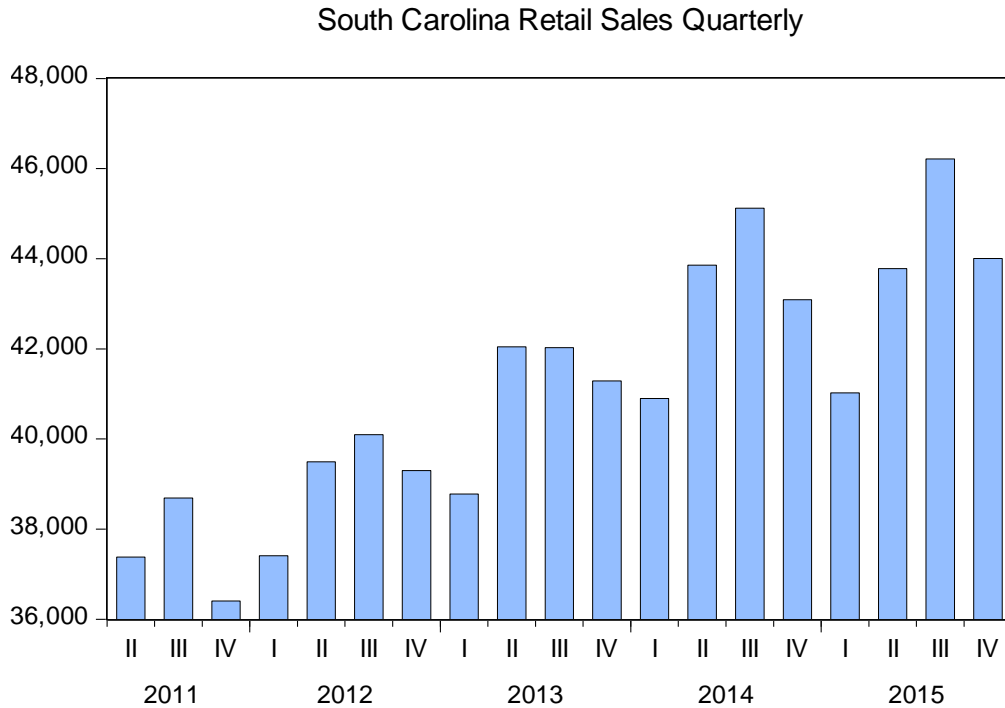


Source: SCDOR

⁴ Quarters for summer tourism areas are offset one month compared with calendar year quarters to reflect the concentration of activity in June, July, and August, which comprise the third quarter. The region’s first quarter includes December, January, and February and generally marks the lowest activity of the year. For comparison, the same quarterly methodology is used for South Carolina.

⁵ We do not show a direct comparison with the United States because retail sales data for the U.S. is difficult to obtain without seasonal correction. It is not informative to compare seasonally adjusted data with non-adjusted data. The data we show for the Grand Strand and for South Carolina have not been adjusted for seasonality; the data shows the actual business activity for each period.

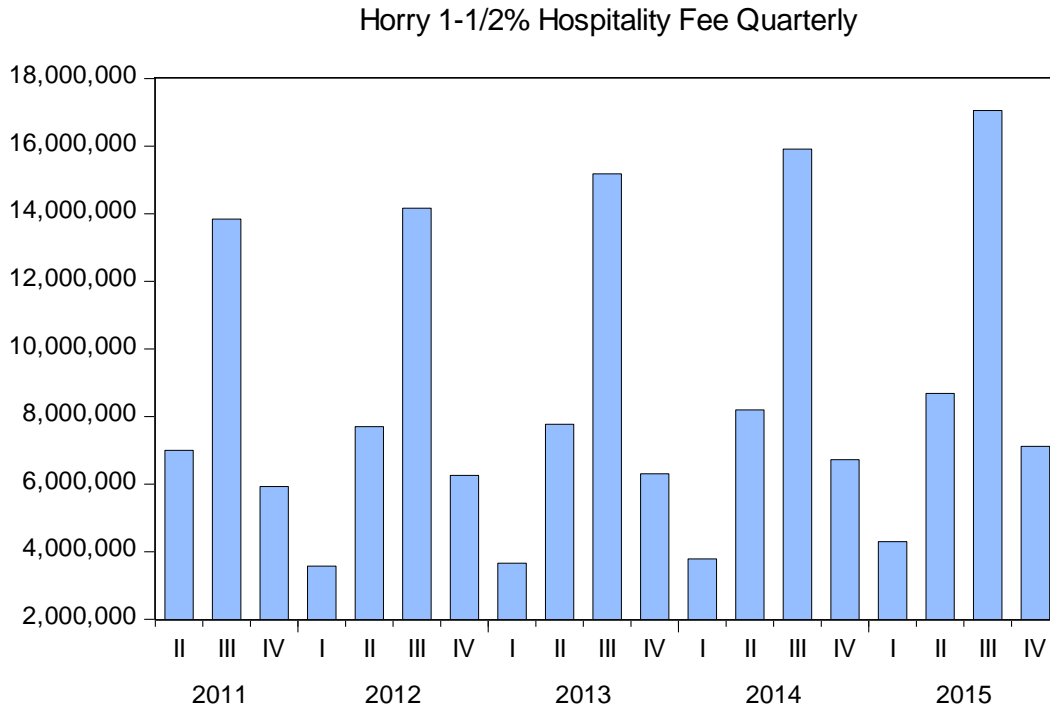
Figure 4. Gross Retail Sales Quarterly for South Carolina



Source: SCDOR

Retail sales of course include significant activity that is not related directly to tourism. Another more direct way to view the seasonal nature of tourism is to examine tax revenue received from activities more directly tied to tourism. Horry County's 1-1/2 percent county-wide hospitality fee is assessed on accommodations, prepared foods, beverages, and admissions. The third quarter (June, July, and August) of each year) shows a much more pronounced level of receipts compared with other quarter. For example, in 2014 the third quarter tax receipts totaled \$15.9 million for the county. Compare this with the second quarter of 2014, which shows collections of \$8.2 million. The increase from quarter two to quarter three is 94.2 percent. This cyclical pattern holds throughout recent history. See Figure 5.

Figure 5. Quarterly Tax Revenue from Horry's 1-1/2% Hospitality Fee

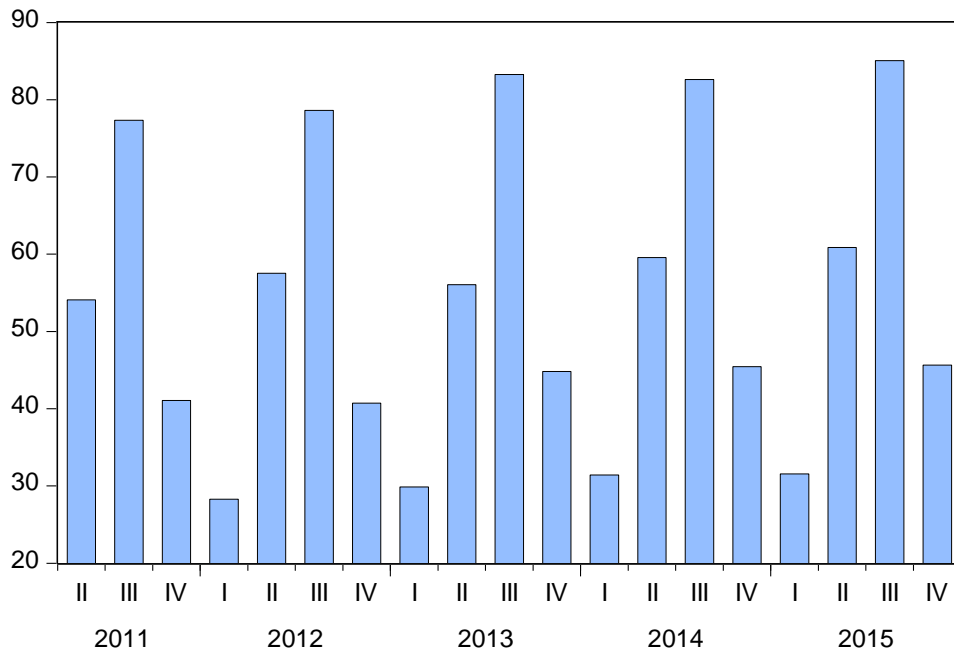


Source: Horry County Government

We include quarterly data summaries from business activity on accommodations as additional support to indicate the strength of tourism in the third quarter. The Clay Brittain Jr. Center for Resort Tourism, housed in the Wall College of Business at Coastal Carolina University, tracks weekly reservation volume and rates and estimates occupancy and average daily rates from a sample of hotel, condotel, and campground properties across the Grand Strand. See Figures 6 and 7 to observe the similar pattern.

Figure 6. Occupancy Rates for the Grand Strand

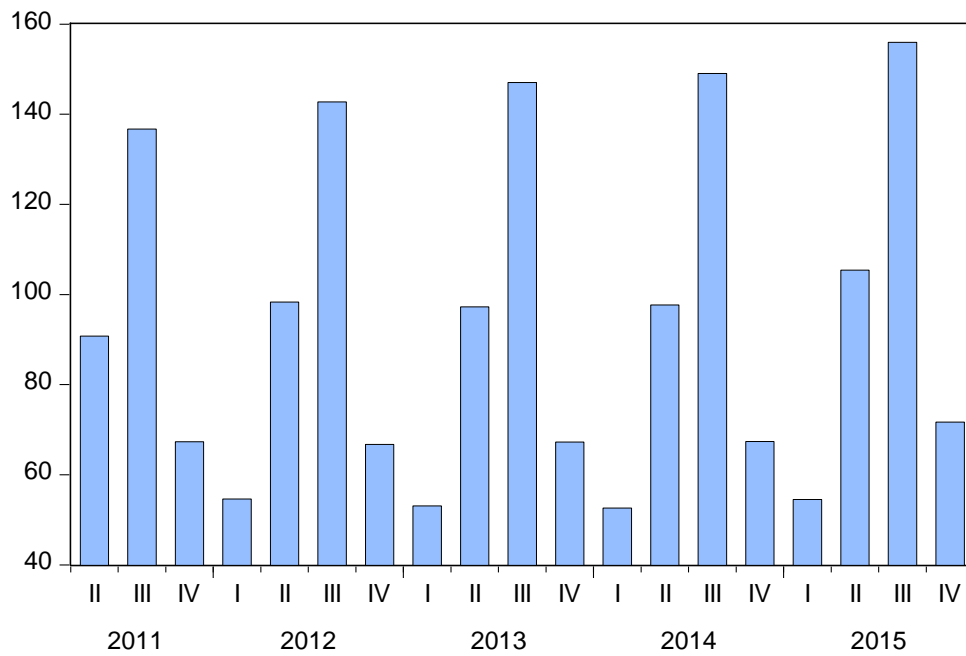
Occupancy Rates for Hotels-Condotel-Campgrounds



Source: Clay Brittain Jr. Center for Resort Tourism

Figure 7. Average Daily Rates for the Grand Strand

Average Daily Rate for Hotels-Condotel-Campgrounds



Source: Clay Brittain Jr. Center for Resort Tourism

Finally, it is informative to examine the effect tourism has on the labor force cycle. Since many industries, including those directly tied to tourism, also support business not directly tied to tourism, and since some proportion of tourism activity is spread throughout the year, we would expect tourism jobs overall to reflect less seasonal fluctuation than the actual business activity. There are several reasons we would expect this. The labor force can increase productivity in the busier season. One can imagine a front-desk staff handling a higher volume of arrivals and departures in the summer compared with the winter, so we would not expect a 1:1 relationship between labor force and activity. Secondly, across all tourism sectors, there is a certain level of non-tourism business enough to warrant a fixed level of staff capable of handling tourism and non-tourism business. Grocery stores for example must be able to accommodate residents as well as tourists. This is not to suggest the labor force does not ramp up supply in the tourist season, only to suggest that a fair proportion of jobs supporting tourism do remain throughout the calendar year.

To check our premise, we examine data from the Quarterly Census of Employment and Workforce. This data is broken down by industry sector. We can examine the quarterly variation for three of the largest tourism sectors: accommodations and food services; arts, entertainment, and recreation; and retail. We include employment for all industries (including non-tourism industries) in total for comparison. We calculate a “volatility” measure for each sector including “total industry”. We make this calculation for Horry and Georgetown counties separately. We find that the labor force in the three tourism sectors has a percentage volatility ranging from 21.3 percent for Georgetown to 22.5 percent for Horry. This percentage represents the change from the quarter of lowest employment to highest employment, controlling for annual growth in all sectors. We conclude from this analysis that approximately 78 percent of tourism jobs are likely year-round jobs. The remaining 22 percent represent the boost in supply needed to service the heightened demand in the busiest period of the tourist season. In the 2014-2015 adjusted-fiscal year, total employment for the two counties averaged 137,497 jobs. The partial-year tourism jobs are estimated to be 12,698 for the two counties combined. We can’t say, however, what percentage of these jobs would be full-time versus part-time because the data reported makes no distinction. See Figure 8 for a summary.

Figure 8. Quarterly Volatility in Grand Strand Labor Force

	2014				2015	Employment Volatility	Tourism Sectors Volatility	Percentage Volatility
	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Quarter 1			
Georgetown								
Total industry	21,557	23,479	22,738	22,424	21,815	1,664	1,402 [▼]	21.3%
Accomm/Food	2,794	3,843	3,670	3,103	2,918	925		
Arts,Ent,Rec	778	1,010	1,022	934	958	52		
Retail	2,929	3,141	2,982	2,957	2,716	425		
Horry								
Total industry	105,943	124,943	121,794	113,037	109,757	15,186	11,296 [▼]	22.5%
Accomm/Food	24,236	33,418	32,036	26,266	25,233	8,185		
Arts,Ent,Rec	4,143	5,553	5,643	4,308	3,801	1,752		
Retail	20,177	22,545	22,856	22,245	21,186	1,359		

Source: Quarterly Census of Employment and Wages

3. ECONOMIC IMPACT OF TOURISM

This study follows the methodology utilized and detailed in Schunk (2010) and the update study of Salvino (2012)⁶. As such, the basis for estimating the direct level of Grand Strand visitor spending is the retail sales data provided by the South Carolina Department of Revenue (SCDOR). Notable changes come from the reporting methodologies the SCDOR has adopted since the 2010 study was completed and again since the 2012 study was completed. Certain detailed figures are not directly comparable, and these will be discussed later in the study. In the 2010 study, averages of retail sales data for the 2006 to 2008 period were used, which also helped control for the recession experienced during the study period. For the current study, cumulative retail sales data from fiscal year-end 2015 is used.

The 2010 study identified specific sectors from the SCDOR reports most directly affected by visitor spending. As in the previous study these include: accommodations, food and beverage services, arts, entertainment and recreation, and various specific retail trade sectors. Examples of other important retail trade sectors include gift and souvenir stores, convenience stores, and apparel stores. The 2010 study also detailed the empirical methodology employed to estimate the portion of total sales within each sector that can appropriately be attributed to visitors as opposed to permanent residents. The models utilized income, population, and retail sales data from each county in South Carolina, and an example of one particular model was discussed in detail in the 2010 study. For a closer look at that methodology, please see the 2010 study.

Visitor spending in the Grand Strand for the fiscal year-ending 2015 reached the highest recorded level on record at \$4.8 billion. The 2012 study showed a drop in visitor spending of \$202 million compared with the period observed for the 2010 study. We observe an increase in visitor spending of \$552 million since the 2012 study period. In terms of visitor spending the Grand Strand has fully recovered from the recession of the late 2000's. Figure 9 details the breakdown of visitor spending activity for the 2014-2015 fiscal year.

Figure 9. Estimated Visitor Spending by Sector Group in \$ Millions

Major Sector	Visitor Spending (FY'15)
Food and Beverage	\$936
Grocery	\$82
Arts, Ent. & Rec.	\$861
Accommodations	\$1,052
All Other Retail	\$1,889
Total	\$4,822

Source: South Carolina Department of Revenue and author calculations by segment

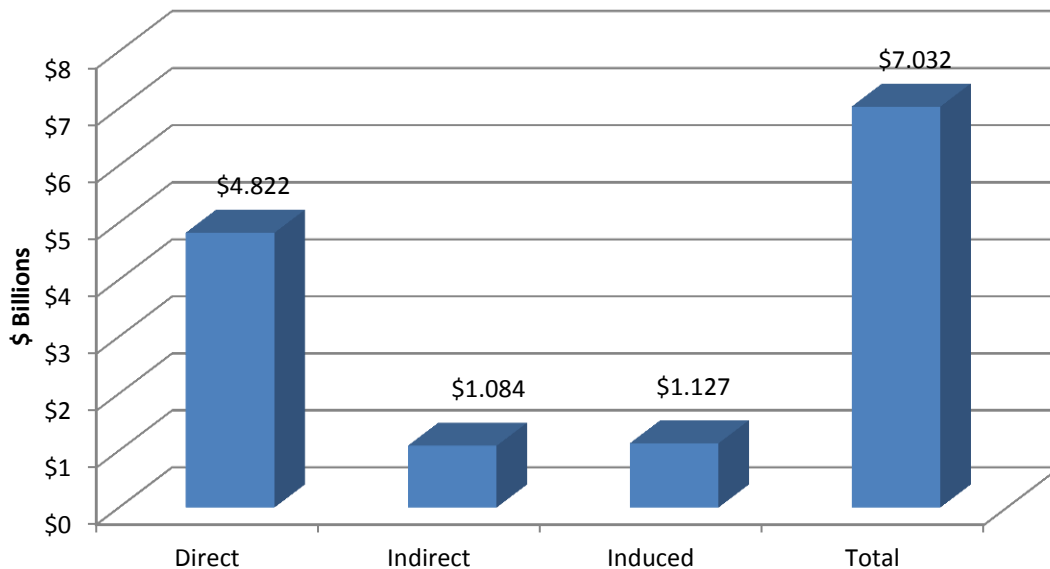
⁶ Salvino (2012). The Economic Impact of Tourism on the Grand Strand. BB&T Center for Economic and Community Development. Coastal Carolina University.

Economic Impacts of Direct Visitor Spending

In the fiscal year of 2014-2015, visitors to the grand strand spent an estimated \$4.8 billion. These expenditures represent the direct level of local business revenue attributable to visitors. The total economic impact resulting from this spending is much greater. As businesses provided these sales and services to visitors, many input goods and services were required to meet these demands. Many of these inputs were provided by local businesses. In input-output methodology, the output expended on these input goods and services strictly in the local economy is referred to as *indirect economic output*. This indirect output represents an additional \$961 million of expenditures in the Grand Strand economy.

In addition to these direct and indirect expenditures, households working in the businesses that provided these goods and services spend a portion of their income in the local economy. This *induced economic output* includes spending by the employees to maintain their own economic affairs. The portion of this spending strictly taking place in Horry and Georgetown Counties has been estimated to be an additional \$1.1 billion. The total of these three levels of economic output: direct, indirect and induced expenditures, comes to \$7.0 billion. This means that every dollar spent directly by visitors creates an additional \$0.46 in the local economy, a multiplier of 1.46. See Figure 10 for a summary of these economic output estimates.

Figure 10. Economic Output Impacts: Direct, Indirect & Induced

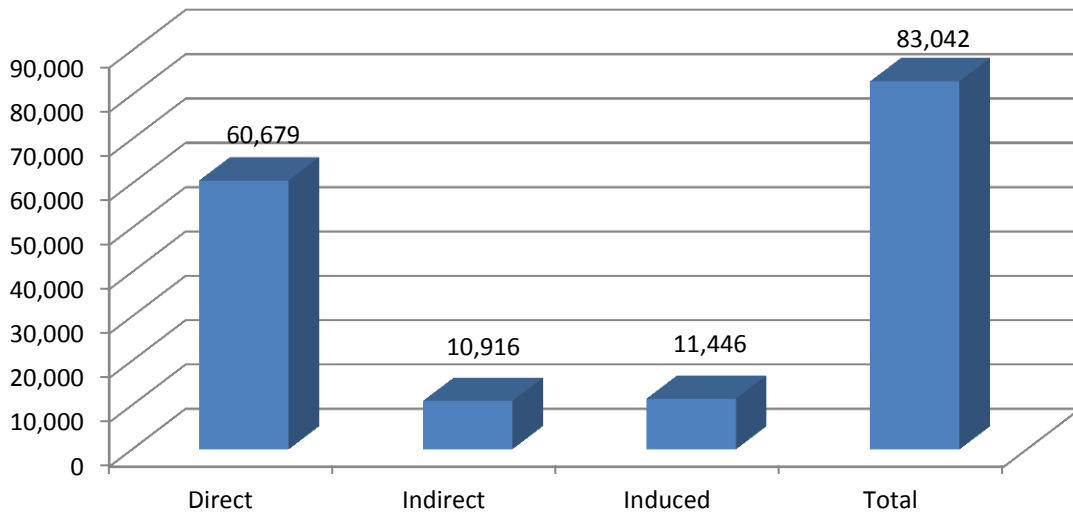


Employment Impacts of Direct Visitor Spending

One of the primary benefits of the economic activity associated with visitor spending is the jobs required to help provide these goods and services. Visitor spending of \$4.8 billion in the Grand Strand economy requires an estimated workforce of 60,679 people ranging from owners of companies to management personnel to cashier clerks and other production personnel. This amounts to thirty-nine percent of all employment in Horry and Georgetown Counties.

The portion of local firm employment needed to provide the input goods and services tied to the indirect expenditures of \$1.1 billion is estimated at 10,916 jobs. This is to say that these jobs in the support sectors would not exist if not for the tourism activity, or at least would have to be filled from some other economic activity that currently does not exist in the region. Finally, a portion of the combined incomes associated with these jobs is also spent in the local economy. This induced, or household, spending supports an additional 11,446 jobs in Horry and Georgetown Counties. In total, tourism accounts for 83,042 jobs in the Grand Strand, or fifty-three percent of total employment, and an increase of 9,513 jobs since the 2012 study. See Figure 11 for a summary of these employment impacts.

Figure 11. Employment Impacts: Direct, Indirect & Induced

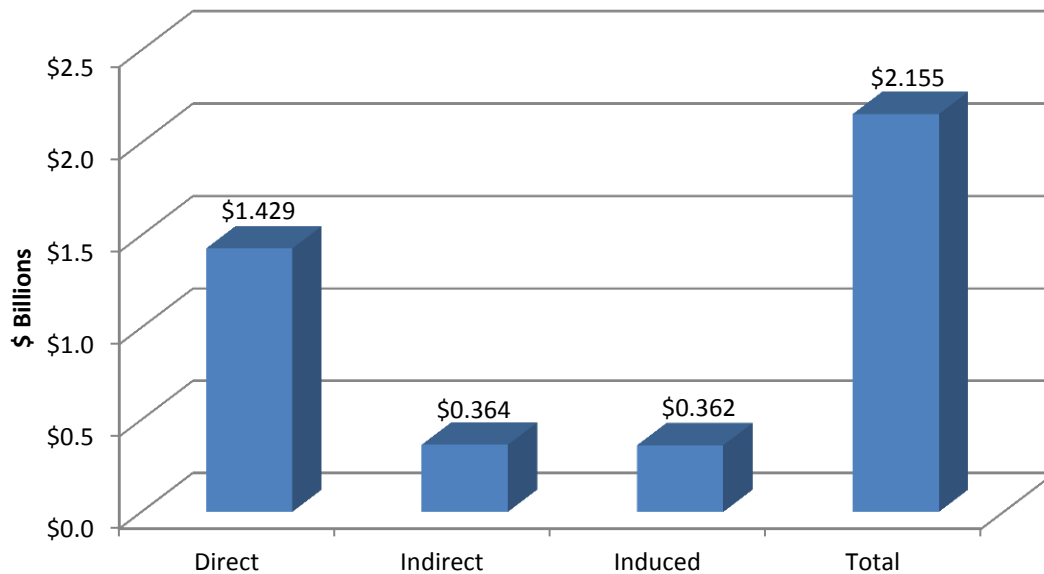


Labor Income Impacts of Direct Visitor Spending

Finally, these direct impacts amount to \$1.429 billion of labor income. This is the income earned by the employees working directly in the tourism jobs. There is an additional \$364 million of labor income earned from the production of inputs goods and services required in support of the tourism output. Lastly, employees in sectors outside of tourism and its supporting industries earn \$362 million as the households spend a portion of their earned income in the local economy. In total, tourism accounted for

\$2.2 billion of income in the Grand Strand economy in the fiscal year 2014-2015. See Figure 12 for a summary of the labor income impacts.

Figure 12. Labor Income Impacts: Direct, Indirect & Induced



4. TAX IMPACT ANALYSIS

Tourism generates significant tax revenue for the state and local government sectors in South Carolina. At the state level, tax revenue is generated from various tourism activities including accommodations, admissions, other retail sales activity and also from income earned in these sectors. For the fiscal year 2014-2015 visitor spending in the Grand Strand generated approximately \$325.8 million in state tax revenue, including \$251 million in retail sales tax revenue for the state and \$74.8 million in income tax revenue.

The local Grand Strand economy received over \$158.8 million in tax revenue from visitor spending, from a mix of taxes on retail sales, local accommodations, prepared foods, beverages, and amusements. The tax revenue is distributed throughout the taxing districts according to the level of activity and the number and proportion of taxes levied. Compared with the 2010-2011 period examined for the 2012 study, there was a drop in tax revenue received for Horry County due to the expiration of the 1% Capital Improvements Tax effective May 1, 2014. See Figure 13 for a summary of tax revenue generated for the state and local government sectors.

Figure 13. State and Local Tax Impact

	FY 2014-2015	FY 2010-2011
State and Local Taxes	\$484.6 Million	\$433.0
State taxes from income	\$74.8	\$44.0
State taxes from visitor spending	\$251.0	\$223.0
Local taxes from visitor spending*	\$158.8	\$166.0

*Horry County's 1% Capital Improvements Tax expired in May of 2014

5. CONCLUSION

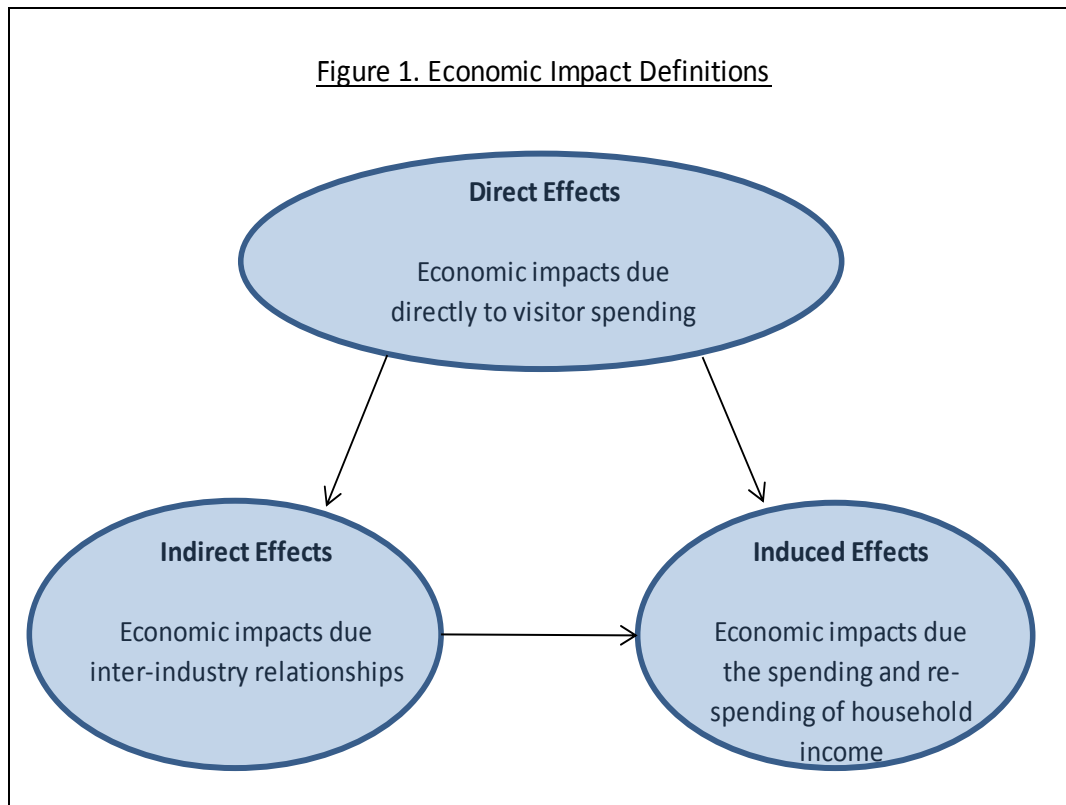
This study has presented estimates of direct visitor spending on the Grand Strand and has quantified its total economic impact in the region. Its total economic impact of \$7.0 billion includes growth in activity of 13 percent over the 2010-2011 fiscal year period analyzed in the previous study. This \$7.0 billion of activity supports over 83,000 jobs in Horry and Georgetown Counties and provides \$2.2 billion of labor income. Tax revenue generated for the state and local governments exceeded \$484 million. Of this, \$325.8 million was generated for state government and \$158.8 million was generated for the local governments of the Grand Strand.

APPENDIX: INPUT-OUTPUT MODELS

Economic impact analysis relies on the framework of input-output modeling and economic base theory. According to the theory, an exogenous impact on the local economy, such as a pre-determined level of spending from a new project or from an existing project that can be assumed to be exogenous, will generally be larger than the level of direct spending from the project itself, unless the project drives other similar spending out of the region. Due to inter-industry linkages in the economic system, spending from one sector requires inputs from other sectors and income from one sector will be spent in other sectors. The ultimate final impact of such an exogenous impact is thus considered to have a multiplier effect. Economic modeling systems, such as IMPLAN, estimate the total impact in a particular region. An input-output model is a technique for quantifying interactions between industries (sectors) within an economy. A transactions table reflects the value of goods and services exchanged between sectors of the economy. The transactions table quantifies three general economic accounts of a local economy: producing industries, final demand, and value added. Algebraic manipulation of the underlying values of the transactions table allows calculation of the multipliers used to estimate the total impact of a change in one industry on all other industries within the local economy.

Economic Multipliers

Economic multipliers represent quantitative summaries of changes that occur in economic activity due to a one-unit direct change in spending from some proposed or existing activity. As an example, one could model the direct spending from Coastal Carolina University, its students, visitors, and new construction projects as an exogenous shock to the region, or one could model the impact of visitor spending in order to capture the relative economic importance of the tourism industry. The total economic impact is the summation of this direct expenditure and the *indirect* and *induced* expenditures occurring as a result of this direct expenditure. Indirect expenditures include spending by contract service providers that takes place in order for the direct activity to be carried out. As an example, expenditures that a linen service company would make in order to fulfill its obligations for CCU would be considered indirect expenditures, over and above the direct expenditures from CCU. Induced expenditures include spending from the employees of the direct and indirect firms, also referred to as household spending. The rationale for the economic multiplier thus results from the generally larger total impact of all three rounds of spending: direct, indirect, and induced.



Source: Schunk (2010), Figure 1.

Multipliers can be distinguished between three types; Type I, Type II, and Type SAM. Type I multipliers simply analyze the relationship between the direct and indirect impacts. This type is useful because it can be completed quickly by simply dividing the sum of the direct and indirect impacts by the direct impact; however it is not as accurate or as thorough as the other two types. Type I is also useful for its ability to summarize the strength of the regions *leakages*. Leakages must be addressed when performing extensive impact studies because expenditures that are made out of the region being studied cannot be included in the estimation of the economic impact at the local level. A business or industry can only be included in the study if it is indeed functionally integrated with the regional economy. In spite of this, certain adjustments must be made to the raw data inputted into the IMPLAN Program. Type II multipliers include direct and indirect impacts, as well as induced impacts. This type of multipliers is especially helpful for public officials involved in creating certain development policies. By analyzing the relationship between the Type I and Type II multipliers, analysts can capture the effects of household spending and determine patterns in consumer demand. Finally, Type SAM multipliers again capture direct, indirect and induced impacts but further account for such factors as commuting, social security, income taxes, and savings by households, some of which does not make its way into the local economy. This study employs the Type SAM multipliers as reported by IMPLAN.

IMPLAN

IMPLAN is an economic modeling software system, complete with a comprehensive economic database for estimating local economic impacts of many types of projects. IMPLAN's database comprises demographic statistics, industry prices, production ratios, and final demand estimates adjusted for specific regional characteristics and allows the modeler to input and analyze information previously obtained from surveys, budgets, or other sources. The IMPLAN database used for the current study was updated in 2006 for Horry and Georgetown counties. The impact on the final estimates due to changes in prices should be minimal.

The IMPLAN model incorporates estimates of the direct effects in order to compute estimates of the economic impact across three measures of economic activity: economic output, employment, and labor income. Economic output is an aggregate measure of total spending in the economy resulting from the initial direct expenditure. It includes all expenditures on goods and services made by businesses and consumers (direct + indirect + induced expenditures). Employment measures the number of full-time equivalent jobs associated with the economic impact (direct + indirect + induced jobs). Labor income represents total employee compensation, and includes all salary and wage income and benefits. Figure 2 summarizes the three measures.

Figure 2. Economic Impact Metrics

- **Economic Output:** All-inclusive measure of total spending impact in the local economy, also equals total revenues to local businesses.
- **Employment:** Total number of jobs in the local economy associated with the impact.
- **Labor Income:** Represents total employee compensation associated with the impact, including wages, salaries, and benefits

Source: Schunk (2010), Figure 2.