

THE ECONOMIC IMPACT OF TOURISM ON THE GRAND STRAND

Executive Summary May 2010

Dr. Donald L. Schunk
Center for Economic and Community Development
E. Craig Wall, Sr. College of Business Administration
Coastal Carolina University

The Grand Strand attracts millions of visitors each year. While these visitors are ultimately drawn to the area because of the Grand Strand's 60 miles of beaches – an attraction that is, for the most part, free to enjoy – the area's visitors spend a significant amount of money staying in the area, eating in the area, shopping in the area, golfing in the area, and enjoying other entertainment and recreation venues. Money spent directly by visitors on the Grand Strand then ripples throughout the local economy, supporting business activity, jobs, and household income in every sector of the Grand Strand's economy. The purpose of this economic impact study is to quantify these effects on the Grand Strand economy.

The key findings of the study include:

- Direct visitor spending on the Grand Strand (Horry and Georgetown Counties combined) totals an estimated \$4.5 billion annually, based on average data from 2006-2008.
- Of this total, visitors spend an estimated \$3.9 billion on sales taxable purchases – about 87% of visitor spending is subject to state and local sales taxes.
- After accounting for various economic multiplier effects, visitor spending supports a total of \$6.5 billion worth of economic activity on the Grand Strand.
- In total, visitor spending supports 75,000 jobs across Horry and Georgetown Counties. While centered in the traditional tourism sectors, these jobs are spread across all sectors of the region's economy. These jobs are accompanied by more than \$1.9 billion of labor income.
- Visitor spending on the Grand Strand directly generates nearly \$278 million in state sales and individual income taxes annually.
- The economic impacts of visitor spending have grown in importance during the recession as spending in leisure and hospitality sectors has experienced a smaller decline than overall spending. The Grand Strand's tourism industry prevented a more pronounced decline in the local economy during the recession of 2008 and 2009.

THE ECONOMIC IMPACT OF TOURISM ON THE GRAND STRAND

MAY 2010

Prepared by

Dr. Donald L. Schunk
Research Economist
Center for Economic and Community Development
E. Craig Wall, Sr. College of Business Administration
Coastal Carolina University

THE ECONOMIC IMPACTS OF VISITOR SPENDING ON THE GRAND STRAND

The Grand Strand attracts millions of visitors each year. While these visitors are ultimately drawn to the area because of the Grand Strand's 60 miles of beaches – an attraction that is, for the most part, free to enjoy – the area's visitors spend a significant amount of money staying in the area, eating in the area, shopping in the area, golfing in the area, and enjoying other entertainment and recreation venues.

Money spent directly by visitors on the Grand Strand then ripples throughout the local economy, supporting business activity, jobs, and household income in every sector of the Grand Strand's economy. The purpose of this report is to detail these economic benefits associated with visitor spending. Following a brief overview of economic impact analysis, this study will provide: an estimate of the volume of direct visitor spending on the Grand Strand, the direct impacts on jobs and household income associated with this spending, the additional multiplier effects on business activity, and the jobs and household income driven by direct visitor spending. The report also provides an overview of the relationship between tourism and local real estate activity.

Economic Impact Methodology

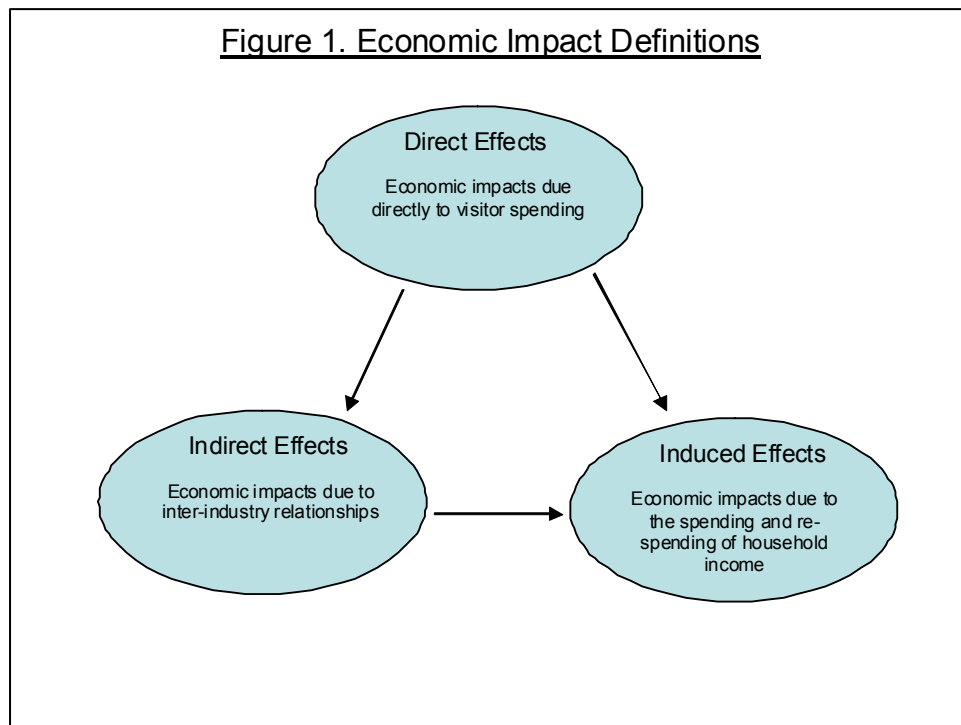
Visitor spending along the Grand Strand generates substantial economic benefits for the local economy. Visitor spending creates a direct demand at businesses operating in the accommodations, food service, retail, and arts, entertainment and recreation sectors. The direct demand for the output of these businesses in turn creates jobs and labor income within these sectors.

However, in addition to this activity directly at retail and leisure and hospitality businesses, additional economic benefits will ripple throughout the regional economy due to economic linkages and multiplier effects. In this case, businesses in retail and leisure and hospitality sectors will purchase goods and services as inputs from other local businesses. Additionally, workers at the directly affected businesses spend a portion of their incomes at area businesses, setting off additional ripple effects.

In standard economic impact analyses, three types of economic impacts can be identified: *direct*, *indirect* and *induced* effects. The direct effect of an activity represents the initial change in economic activity. Consider an example of visitor spending at hotels. In this case, the direct effects are the initial changes in the final demand for the services produced by the hotel, and these effects will include the impact on total sales for the hotel, as well as the number of jobs and level of household income generated by the hotel.

The indirect effects refer to all of the additional economic impacts that arise from inter-industry linkages between local firms. For example, as the hotel purchases inputs from other local businesses – and these suppliers in turn purchase inputs from additional businesses – the input-output relationships between different firms and industries generates indirect effects on businesses in virtually every sector of the local economy. In the case of direct spending at hotels, the businesses that feel the largest indirect effects include those operating in the following sectors: real estate, food services, telecommunications, maintenance, management, advertising, utilities, banks, legal services, and many more.

The induced effects represent all of the additional economic benefits that are driven by the local spending of household income. For example, increased activity in the accommodations sector will boost incomes for workers in that sector. Some of this income will be spent locally on, for example, retail trade, health care, entertainment, housing, and so on. As firms in these industries see a boost to their sales, the employees of these firms will also see additional income that can be spent locally. Figure 1 summarizes the relationship between the direct, indirect and induced effects.



The successive rounds of indirect and induced impacts do not go on forever. For example, a portion of an increase in household income will be saved, used to pay taxes, or spent outside the local economy. Money that leaks out of the local area in this way cannot be used to support additional local activity. Therefore, the

indirect and induced impacts become smaller and smaller over time until eventually the additional activity in each round goes to zero. Because of these leakages, it is useful to consider the notion of an economic multiplier.

An economic multiplier can be used to determine what the total impact (direct plus indirect plus induced) will be given a certain value for the direct impact. For example, if \$100 of direct spending within a particular sector ultimately results in a total spending impact of \$150, it can be said that the output multiplier is 1.5 – the \$100 in direct spending times the multiplier of 1.5 equals \$150 in total spending or total output. The value of this multiplier varies from sector to sector and region to region, and is determined largely by the size of the local supplier network. A larger and more developed supplier network within any given area will lead to higher multiplier values as money will be slower to leak out of the local economy.

The above discussion implies that economic impact analysis essentially involves: 1) determining the appropriate levels of direct business activity, and 2) determining and applying the correct values for economic multipliers to estimate the total impact on output, employment, and labor income.

The purpose of this report is to estimate the economic impacts of visitor spending on the Grand Strand. So, the first step will be to estimate the annual level of visitor spending. The steps taken to estimate this spending will be discussed in the next section.

To estimate the indirect and induced effects of the direct visitor spending, a detailed structural model of the local economy was utilized. This model is known as an input-output model. An input-output model contains specific information on economic linkages between different industries. Therefore, the input-output model for the Grand Strand (Horry and Georgetown Counties) is equipped to quantify, for example, the pattern of local input purchases of businesses operating in retail and leisure and hospitality sectors as well as the patterns of local household spending. This model can be used to estimate the full range of indirect and induced impacts described previously. This report utilizes the input-output modeling software *IMPLAN*.

This model can be used in conjunction with the estimates of the direct effects to estimate the economic impacts in terms of three distinct measures as summarized in Figure 2: economic output, employment and labor income. Economic output can be thought of as an aggregate measure of total spending resulting from the initial direct expenditure. It includes all spending by consumers and businesses on both goods and services. It is therefore a broad, all-inclusive measure of the impact on total economic activity. Employment measures the impact on jobs in terms of the total number of positions. Labor income represents total employee compensation, including wages, salaries and benefits.

Figure 2. Economic Impact Metrics

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

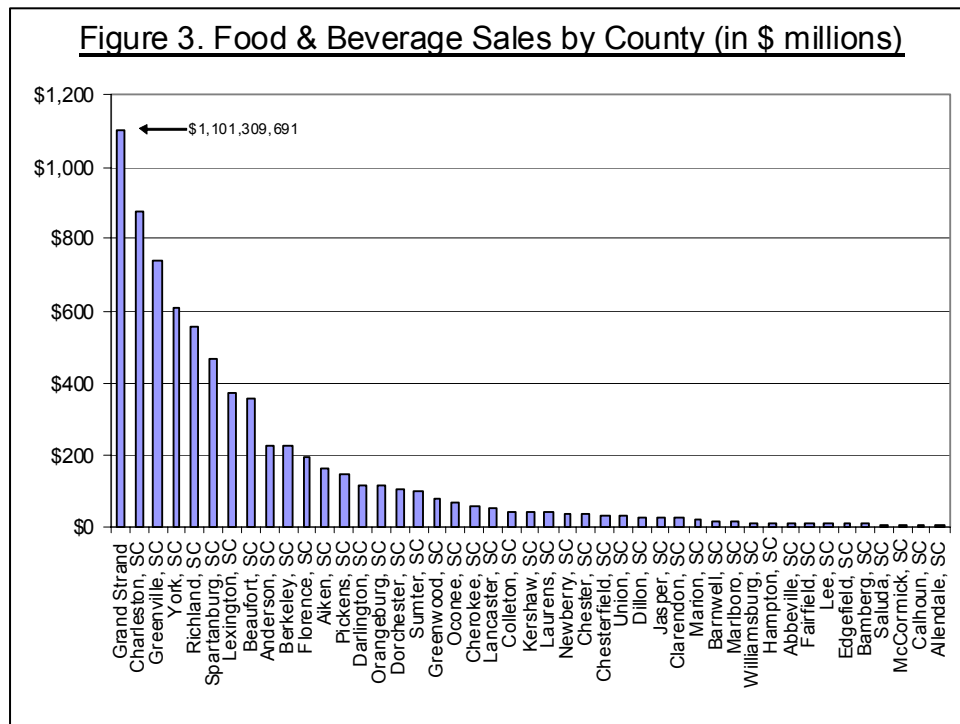
Estimating Direct Visitor Spending on the Grand Strand

The basis for estimating the annual direct level of Grand Strand visitor spending in this report are retail sales data provided by the South Carolina Department of Revenue (SCDOR). SCDOR tracks gross and net taxable sales by sector and by county. For example, SCDOR reports provide data on total gross retail sales for restaurants in Horry County on an annual basis. For this analysis, averages of retail sales data for 2006 to 2008 were used.

Specific sectors were selected from the SCDOR reports that correspond to sectors likely to be most directly affected by visitor spending. These include: accommodations, food and beverage services, arts, entertainment and recreation, and various specific retail trade sectors (such as grocery stores, gift and souvenir stores, convenience stores, apparel stores, and miscellaneous merchandise stores). Using retail sales data for these sectors, various econometric models were constructed to estimate the portion of total sales within each sector that can appropriately be attributed to visitors as opposed to permanent residents.

To better explain this methodology, one specific sector -- Food and Beverage Services -- will be discussed in detail. Figure 3 provides the county-level distribution of food and beverage services retail sales. On average from 2006 to 2008, the total reported annual level of gross sales at food and beverage

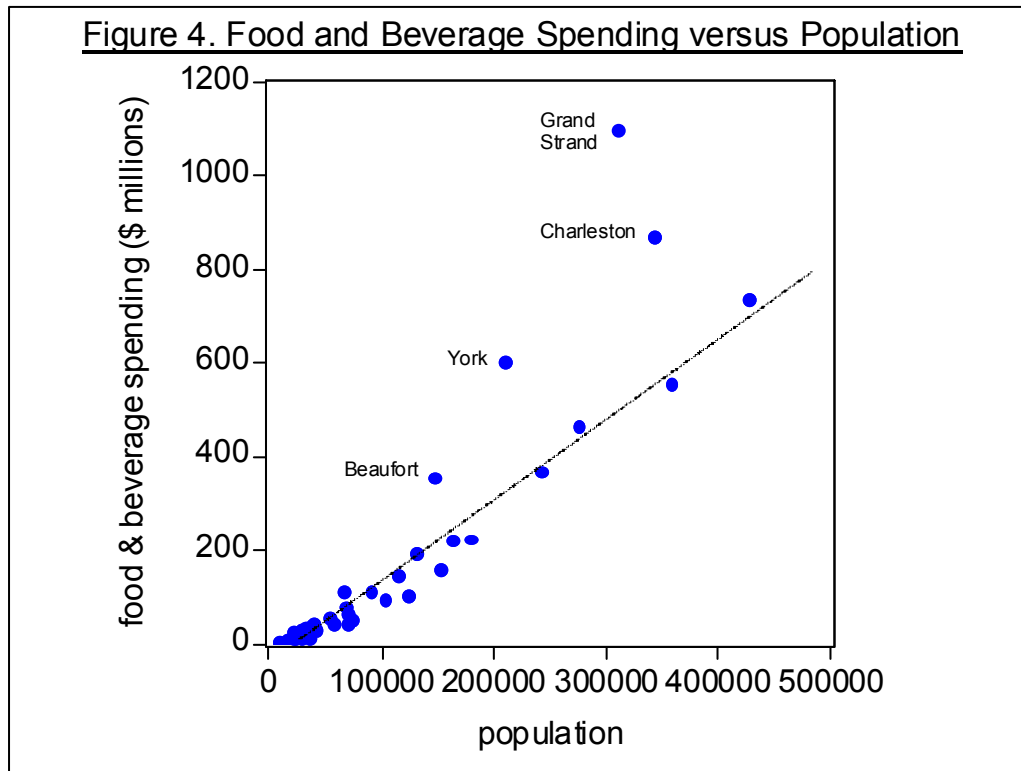
businesses (specifically ‘Eating Places’ and ‘Drinking Places’ from the SCDOR reports) was \$1,101,309,691, or just over \$1.1 billion, on the Grand Strand (Georgetown and Horry Counties combined). While visitor spending certainly accounts for what is likely a substantial portion of this spending, clearly the spending of full-time permanent residents is also included in this total. Therefore, a methodology is required to separate the ‘visitor’ and ‘non-visitor’ portions of food and beverage spending.



Briefly, the methodology developed to estimate the visitor portion of food and beverage services sales is as follows: 1) using data from each of the 46 counties in South Carolina, estimate what the level of food and beverage service spending *would be* on the Grand Strand in the absence of visitors, and based on permanent population size and average household income, then 2) compare this hypothetical level of spending with actual observed spending with the difference being attributed to visitors.

As another way to look at the issue, consider Figure 4. This figure provides a scatter plot of county-level food and beverage service sales against county-level population. While this distribution appears to follow roughly a straight line, notice that there are four apparent *outliers*: the Grand Strand, Charleston County, York County and Beaufort County. Each of these four areas lie *above* what could be considered a straight line drawn through the remaining counties. That is, it appears that the level of food and beverage services sales in these areas *relative to population* is greater than what could be expected. For the Grand Strand,

Charleston County and Beaufort County, this difference is due to visitor spending in the form of tourist spending. In York County, the difference is likely due to visitor spending in the form of Charlotte-area residents living in North Carolina but dining on the South Carolina side of the border.



Loosely, we could measure the vertical distance between actual spending on the Grand Strand and predicted spending on the Grand Strand according to where the Grand Strand would fall on the straight line. This difference could be taken as the portion of food and beverage spending that is not due to the permanent population, i.e., that is due to visitors.

However, there are other factors that also affect county-level food and beverage spending besides just population. For example, the level of household income is also likely to be an important determinant of county-level food and beverage spending. As such, while Figure 4 provides a useful and simple way to visualize the methodology, a more complicated model has actually been used to estimate the portion of total food and beverage spending that can be traced to visitors. This more complicated model also accounts for difference in median household income across counties.

Based on this model, it is estimated that of the more than \$1.1 billion spent annually at food and beverage service businesses along the Grand Strand, about

\$780 million can be attributed to visitor spending, with the remaining \$321 million due to the permanent population. That is, an estimated 71 percent of all food and beverage business revenues along the Grand Strand come directly from visitors.

This same methodology was applied to retail sales for each sector. The results indicate that an estimated \$4.5 billion annually in retail sales along the Grand Strand can be directly attributed to visitors. Total retail sales in Horry and Georgetown Counties averaged \$10.4 billion between 2006 and 2008. Therefore, visitor spending directly accounts for 43 percent of all retail sales along the Grand Strand. The breakdown by major sector of the \$4.5 billion in visitor spending is given in Table 5.

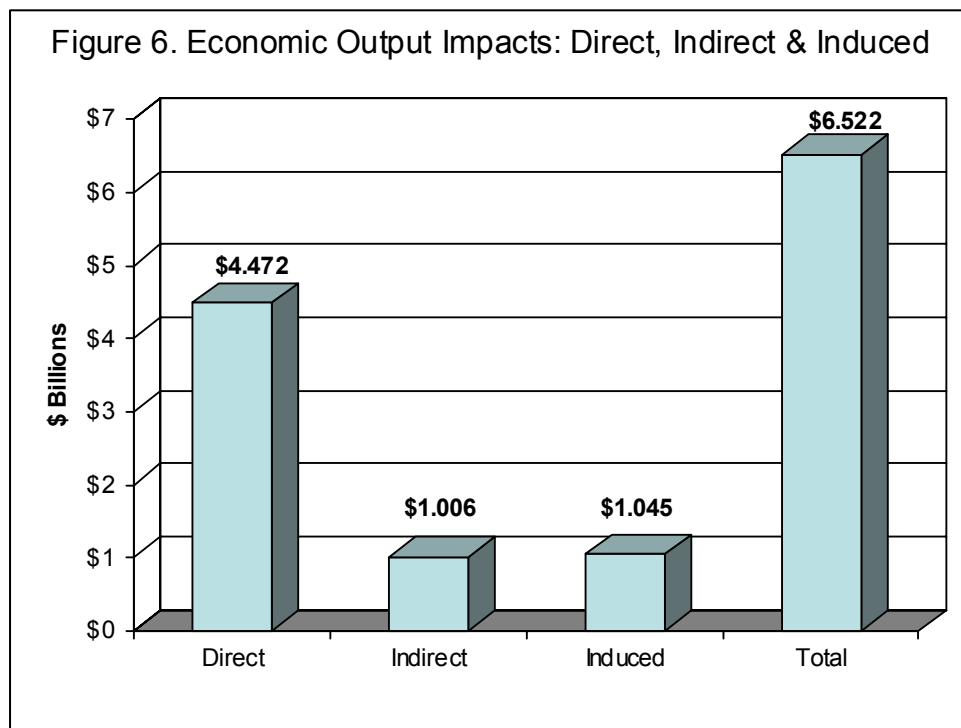
Figure 5. Estimated Visitor Spending by Sector Group
in \$ Millions

Major Sector	Estimated Visitor Spending
Food and Beverage Services	\$780
Grocery Stores	\$60
Arts, Entertainment & Recreation	\$703
Retail Stores	\$1,123
Accommodations	\$962
All Other Sectors	\$842
TOTAL	\$4,472

The Economic Impacts of Direct Visitor Spending

Visitors to the Grand Strand spend an estimated \$4.5 billion annually. These expenditures represent the direct level of local business revenue attributable to visitors. However, this spending does much more than simply support revenue at businesses directly tied to tourism. This direct boost to local economic activity will then lead to additional increases in local economic output due to the indirect and induced effects as described earlier.

Figure 6 provides the direct, indirect, and induced impacts on local economic activity stemming from visitor spending on the Grand Strand. Specifically, there is a direct injection of \$4.472 billion in visitor spending.



As the businesses operating in retail trade and leisure and hospitality sectors on the front line of visitor spending produce goods and services to meet visitor demand, they in turn require various kinds of inputs purchased from other local businesses. Of course, businesses will have to look outside of the local economy for some portion of their input purchases. For example, retailers will purchase goods from wholesalers located outside of the region. Restaurants may purchase some of their supplies and food items from outside of the Grand Strand area, and so on.

After accounting for these out-of-area input purchases, local businesses throughout the economy see a total of \$1.006 billion in total sales due to the

purchases of supplies by those retailers and leisure and hospitality businesses that deal directly with visitors. Next, the spending of household income by employees of both the direct and indirectly affected businesses result in a total of \$1.045 billion in local sales as indicated by the induced effects.

In total, the \$4.472 in direct visitor spending leads to an overall local economic output impact of \$6.522 billion annually. This total represents the volume of spending at local businesses, and therefore the volume of local business revenues, that can be attributed to visitors on the Grand Strand. While the direct visitor spending accounts for about 43 percent of all retail sales on the Grand Strand, these economic impact results indicate that roughly 63 percent of all retail sales in the area can be traced to the tourism industry.

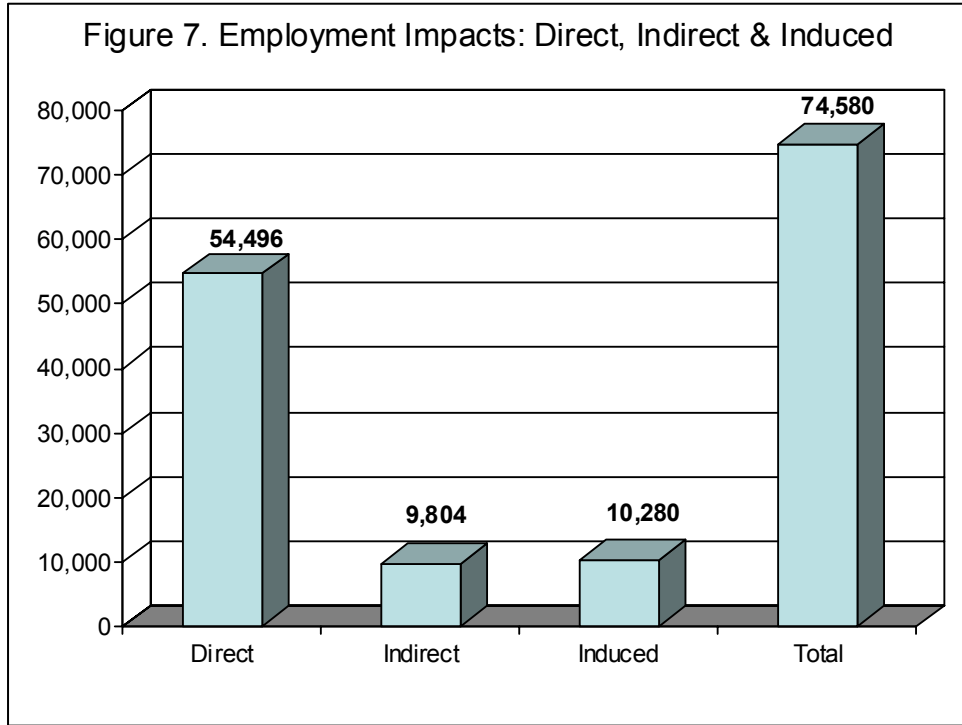
These figures imply an economic output multiplier of roughly 1.46 along the Grand Strand. That is, every dollar spent directly by visitors in the area ultimately results in \$1.46 worth of total spending.

How could the Grand Strand achieve an even greater impact from visitor spending? The value of the spending multiplier depends in large part on the depth of the local supplier network feeding into the businesses at the leading edge of providing goods and services to visitors. One approach to maximizing the impact of tourism would be to focus efforts on developing a deeper local supply chain. For example, if hotels, restaurants and retailers had local access to more of their necessary supplies, then the direct visitor spending would stay in the local economy longer. This would lead to more rounds of spending triggering: higher revenues for local businesses, higher levels of employment, and greater levels of household income.

This is a critical point. *There are several possible paths towards enhancing the local impact of tourism.* Clearly, any efforts that boost either the number of visitors or the average spending by visitors will lead to larger direct effects and therefore larger indirect and induced effects as well. However, even without growth in the number of visitors or average visitor spending, tourism can play a larger role in the economy through an expansion of supplier networks. In this case, the direct effects of visitor spending would not be any larger themselves, but the indirect and induced effects would be greater, allowing the same level of visitor spending to have a larger and more widespread impact on the local economy.

Next, consider what would happen to the local economy if efforts succeeded at both growing the volume of direct visitor spending *and* enhancing the depth of the local supply chain for tourism-related businesses. In this case, direct visitor spending would be larger, and this greater level of spending would work its way through an even larger economic multiplier. In this way, the local tourism industry has the potential to be a catalyst for significant revenue, job and income growth for the Grand Strand economy.

Turning next to the employment impacts, all of the increases in the demand for goods and services (total economic output) described above will in part be met by labor. Figure 7 provides the direct, indirect, and induced levels of employment supported by visitor spending on the Grand Strand.



Visitor spending of roughly \$4.5 billion has the direct effect of supporting 54,496 jobs throughout Horry and Georgetown Counties. These direct jobs are concentrated in retail trade, accommodations, restaurants and bars, and arts, entertainment and recreation businesses. On average from 2006 to 2008, there were a total of roughly 140 thousand jobs in Horry and Georgetown Counties combined. The 54,496 jobs directly supported by visitor spending represent about 39 percent of total employment on the Grand Strand.

The local firms affected by the indirect effects will rely in part on labor to meet the \$1.006 billion in demand for their output. The corresponding indirect effect on employment is 9,804. Meanwhile, another 10,280 jobs on the Grand Strand are supported by the induced effects of household spending.

Therefore, visitor spending on the Grand Strand supports a grand total of 74,580 jobs spread across the local economy. This represents about 53 percent of all jobs in the two-county region.

It is important to recognize the spread of jobs across sectors. Visitor spending does not simply benefit businesses and employees on the front line of the tourism sector. The economic output effects ripple throughout the local economy, and in turn so do the employment and labor income effects.

Figure 8 provides a sector-level breakdown of the total employment impacts. These employment impacts include all of the direct, indirect, and induced effects on jobs. The sectors that see the largest employment impacts are those most heavily directly affected by visitor spending: accommodations and food services, retail trade, and arts, entertainment and recreation. Other sectors that see a relatively large number of jobs supported by visitor spending include: administrative and waste services, real estate and rental, health care and social services, other services, and professional services.

Figure 8. Total Employment Impacts by Major Sector

Sector	Total Employment Impact
Agriculture, Forestry, Fishing & Hunting	202
Mining	63
Utilities	97
Construction	386
Manufacturing	454
Wholesale Trade	551
Retail Trade	25,067
Transportation & Warehousing	561
Information	711
Finance & Insurance	799
Real Estate & Rental	2,270
Professional Services	1,714
Management of Companies	292
Administrative & Waste Services	2,294
Educational Services	153
Health Care & Social Services	1,761
Arts, Entertainment & Recreation	6,927
Accommodations & Food Services	28,066
Other Services	1,752
Government	460
TOTAL	74,580

The final set of metrics to consider are the labor income impacts. These impacts represent the level of labor income accompanying the employment impacts just presented. The direct, indirect, and induced labor income impacts are given in Figure 9.

The direct effect on labor income amounts to \$1.283 billion annually. This represents the total level of income accruing to workers whose jobs are directly supported by visitor spending. The inter-industry indirect effects support another \$327 million annually in labor income. Finally, the household spending-driven

induced effects are responsible for another \$325 million in annual labor income. Overall, visitor spending on the Grand Strand is responsible for an annual total of \$1.935 billion in local labor income.

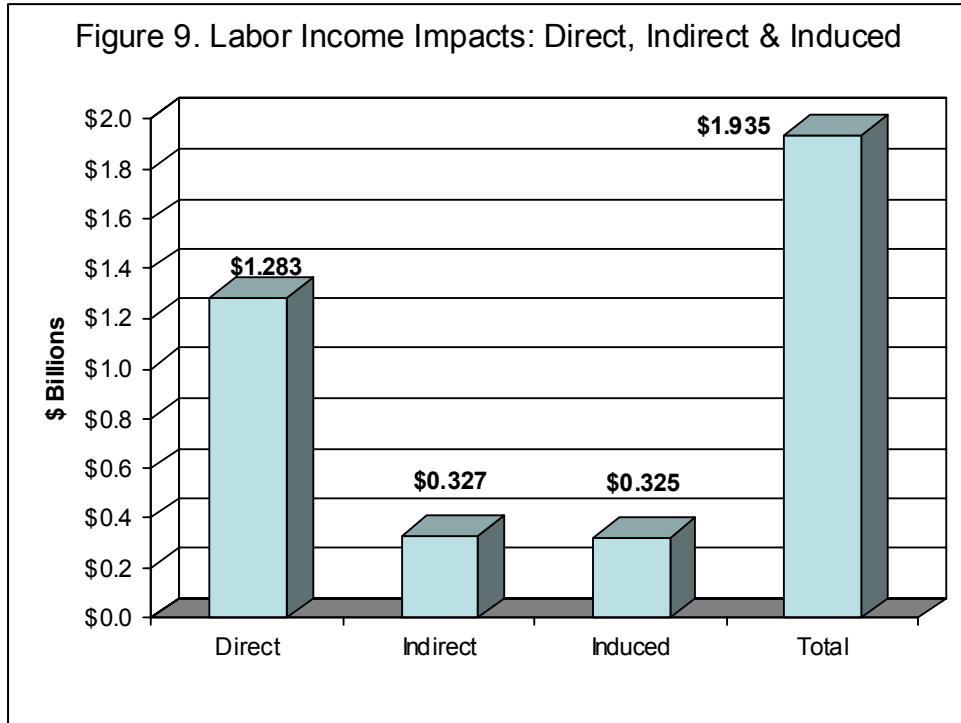
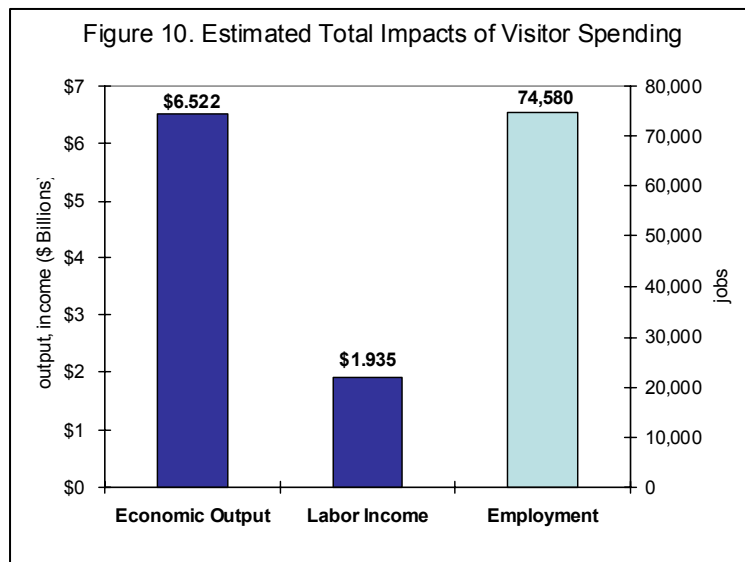


Figure 10 summarizes all of the total impacts described above, and as such provides a single snapshot of the scope of the benefits that visitor spending provides to the Grand Strand economy.



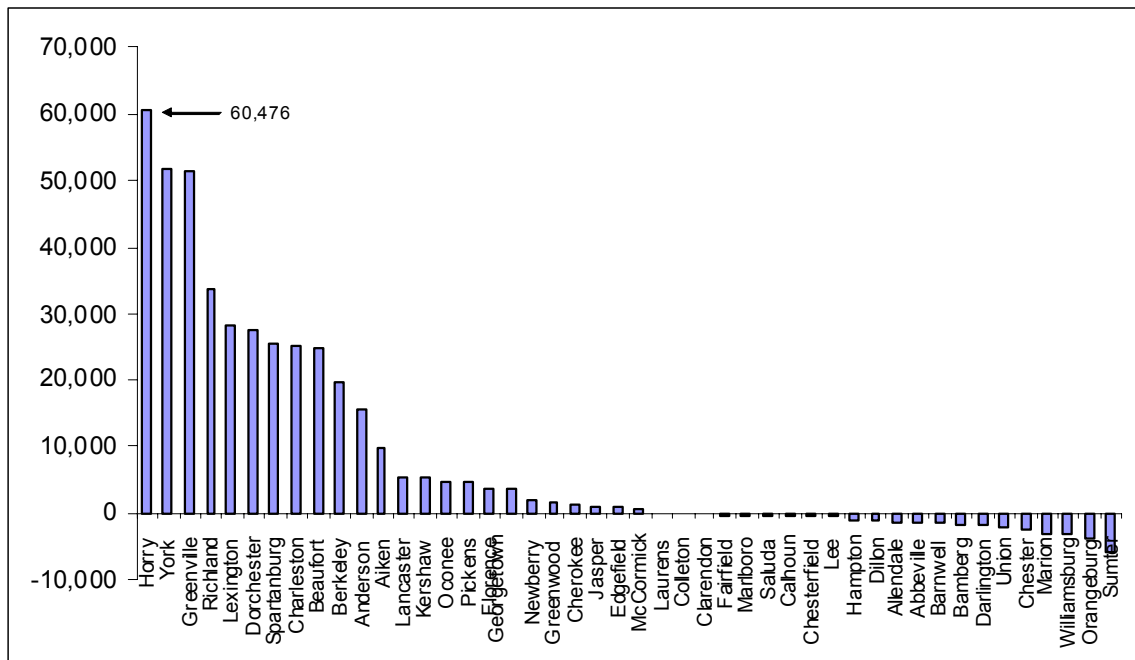
TOURISM AND REAL ESTATE

There is undoubtedly a strong link between tourism and real estate activity. New residents to the Grand Strand are often drawn to the area for the same reasons as tourists, including the climate and natural amenities as well as the tourism infrastructure. That is, the very attributes that make the Grand Strand appealing to tourists also make it attractive to new residents. Relocation to the Grand Strand has a clear impact on development and real estate activity. Additionally, the Grand Strand has also been attractive to 2nd home buyers as well as investors. Again, much of this activity stems from the importance of tourism in the area.

It is very difficult to quantify the precise relationship between tourism and real estate activity. However, there are several assorted pieces of data that can be used as evidence of a strong link.

The first source of evidence lies in net migration data for the Grand Strand relative to other counties in South Carolina. Figure 11 illustrates total net migration by county between 2000 and 2009. Specifically, this graph provides the total net domestic and international migration for each county.

Figure 11. Total Net Migration by County 2000-2009



Between 2000 and 2009, a total of 27 counties in South Carolina experienced positive net migration, while the remaining 19 counties each saw net out-migration.

Of all counties, Horry County posted the largest net in-migration with a total of 60,476 between 2000 and 2009. At an average household size of 2.28 for Horry County, this net migration represents an inflow of more than 26,500 households since 2000. Each of these households represents a potential source of demand for real estate services, whether purchase or rental.

Of course, not all of this increase can be attributed to the relationship between tourism and in-migration. Of the 27 counties experiencing positive net migration, the median rate of net migration was roughly 7 percent (total net migration between 2000 and 2009 as a percentage of county population in 2000). The rate for Horry County was about 31 percent. If Horry County had experienced a level of net migration similar to what other growing counties in South Carolina experienced, then Horry's net migration would have been 13,758.

Therefore, net in-migration to Horry County – over and above what other growing counties experienced – totaled 46,718 between 2000 and 2009. This represents nearly 20,500 households drawn to the area due to the Grand Strand's unusual mix of tourism infrastructure, natural amenities, and generally strong economic conditions.

Overall, between 2000 and 2009, there were a total of just under 121,000 new and existing home and condo closings in Horry County, based on data provided by E.F. Hucks and Associates. It is likely that a significant percentage of these closings were due to Horry County's unusually rapid pace of in-migration since 2000.

Another way to consider the importance of the area's tourism economy for real estate is to look at the current mix of housing units. The American Community Survey from the U.S. Census Bureau provides annually updated data on housing characteristics. On average between 2006 and 2008, there were a total of 166,470 housing units, including homes and condo units. Of these, 108,296 – or 65.1 percent – were occupied by either owners or renters. The remaining 58,174 units – 34.9 percent of all housing units – were vacant at the time of the survey. These vacant units would encompass most rental-type properties along the Grand Strand, as well as 2nd homes. Therefore, this measure of vacancy will correlate closely with the size of the tourism economy on the Grand Strand.

Nationwide, the average rate of vacant housing units between 2006 and 2008 was 12.0 percent, well below the rate for Horry County. Again, this speaks to the large presence of 2nd homes and rental properties along the Grand Strand due to the area's tourism economy. If Horry County had a vacancy rate equal to the

national average of 12.0 percent, then there would have been about 14,768 vacant housing units.

Therefore, there were 43,406 'extra' vacant housing units in Horry County between 2006 and 2008 due to some degree to the local tourism economy. These unoccupied units each require some degree of real estate services. They may be vacation properties actively managed by property managements companies, or they may simply be 2nd homes left vacant for most of the year, but at one point represented a closing transaction.

It is very difficult to quantify the precise relationship between tourism and real estate activity. However, even casual evidence on net migration and housing unit patterns strongly indicate the substantial impact of the tourism economy on local real estate activity.