

The Economic Impact of Coastal Carolina University on Horry County

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INTRODUCTION

Background

Coastal Carolina University is a public university located in Horry County, South Carolina. It was created in 1954 as a local junior college for the county and became independent of the University of South Carolina in 1993. Coastal Carolina University celebrated its 50th anniversary in 2004. Currently, the student population at Coastal Carolina University is nearly 7,700 students and growing. Thirty-eight percent of the students attending are considered out-of-state. The four colleges that make up the university include the College of Natural and Applied Sciences, the Thomas W. and Robin W. Edwards College of Humanities and Fine Arts, the E. Craig Wall Sr. College of Business Administration, and the Spadoni College of Education.

The objective of this study is to determine the economic impact of Coastal Carolina University on Horry County. The study examines the inflows, both pecuniary and nonpecuniary, and outflows to Horry County. Inflows include tuition from out-of-county students, grants, revenue from athletics, student spending, and visitor spending (i.e., family visits). Outflows include salaries paid to employees who live outside of Horry County as well as large purchases by Coastal Carolina University from companies outside of Horry County. The survey will estimate a net benefit for pecuniary items and discuss nonpecuniary items will be discussed.

Statement of Scope

The scope of the impact will be considered for Horry County, the county where Coastal Carolina operates. The scope has been limited to Horry County because IMPLAN calculates for the specific county. The scope has also been limited to benefits and costs of an annual school year of eight months. This study looks at the impact of visitors, student spending, tuition, grants, and revenue from athletics on Horry County due to the presence of Coastal Carolina. The research does not focus on the impact of Coastal Carolina University on the entire state of South Carolina. The study also does not include the quantitative effects of the nonpecuniary benefits or the effect on human capital.

Inflows are both pecuniary and nonpecuniary benefits that are brought into the county. Outflows are pecuniary and nonpecuniary costs that leave the county. All inflows are counted only once and not double counted.

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Methodology

The goal of the research was to use primary and secondary data sets to calculate the inflows of money into Coastal Carolina University as well as spending by students and visitors. Once the information was collected IMPLAN will calculate the indirect and induced spending in Horry County.

The use of existing data was used to determine much of the direct spending. Most of the information was easily accessible. Information concerning official visitors was obtained from the admissions office at Coastal Carolina University. Human Resources supplied the percentage of faculty and staff who are residents of Horry County. The number of athletic ticket sales and visitors brought in by sporting events was obtained through athletic departments. We also looked at other comparably sized universities' athletic visitor statistics. Amounts contributed for grants and scholarships and tuition information was collected through the Coastal Carolina University 2005 Annual Report and Fact Book.

Primary data was obtained through a survey administered randomly to Coastal Carolina students. The survey helped obtain information on the spending patterns of Coastal Carolina students and their visitors annually. After finding the needed information from the survey, the inflows and outflows were enumerated.

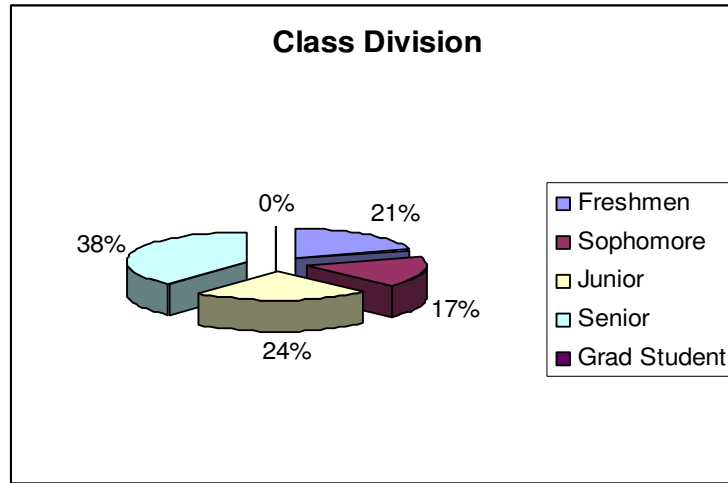
Once the primary and secondary data were collected the direct spending numbers were used to calculate indirect and induced spending using IMPLAN. IMPLAN calculates what each dollar spent would generate in indirect and induced spending. This multiple of that dollar is called the multiplier effect. The program considers the industry that the money flows into, then estimates how that that money will be re-spent locally, and how many times that will happen until all the money leaks out of Horry County. This effect was then applied to the net benefit to estimate the overall impact of the spending generated by Coastal Carolina University.

SURVEY

Survey Design

In order to quantify some of the benefits of the university, a random survey was administered to Coastal Carolina students. The survey consisted of twelve questions that inquired into students' spending, residency status, opinions, and personal information. Surveys were delivered first-hand to twelve randomly selected classes. In total, 249 students responded. Fifty-two percent of respondents were male, while 48 percent were female. The average age of respondents was 19. The survey was distributed across all class divisions, and all respondents were undergraduate students. All students who were given surveys responded.

FIGURE 1
Class Division of Survey Takers



Survey Results

In the survey, students were asked to identify how much they spent in several categories: housing, food, recreation, transportation, shopping, and other. This information was necessary to identify the annual inflow students contribute on the basis of an annual school year. The results of in-county students are shown in Figure 2, and out-of-county student results are shown in Figure 3. Each category is labeled as per student per month spending.

FIGURE 2
Spending Patterns for Horry County Students

Monthly Spending Patterns: In-County Students

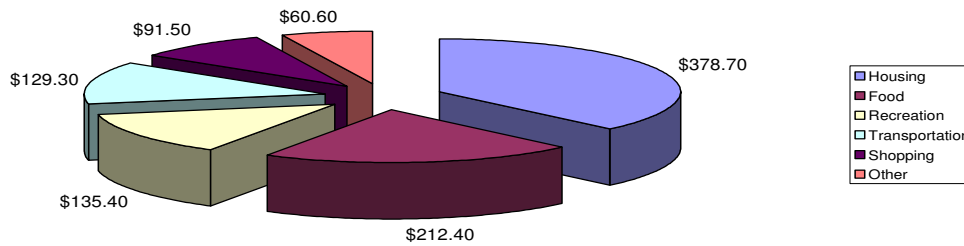
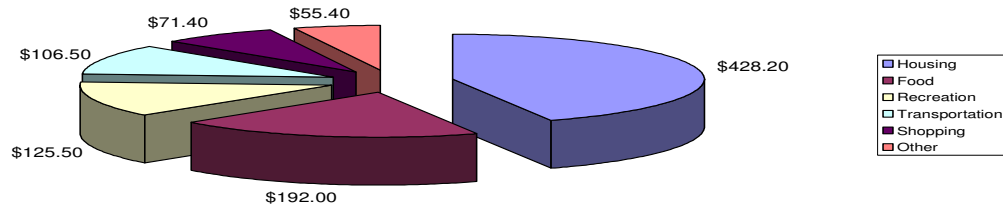


FIGURE 3
Spending by Out-of-County Students

Monthly Spending Patterns: Out-of-County Students



Students were also asked how many times each year their family typically visits them at school and how long their average stay is. The purpose of this question is to find the inflows to the county with visits that are a result of the existence of the University. The results of the average number of visits are 3-4 times per school year (Figure 4). The results of the average length of each visit are 3-4 days per visit (Figure 5).

FIGURE 4
Average Number of Family Visits per School Year

Average Number of Family Visits per School Year

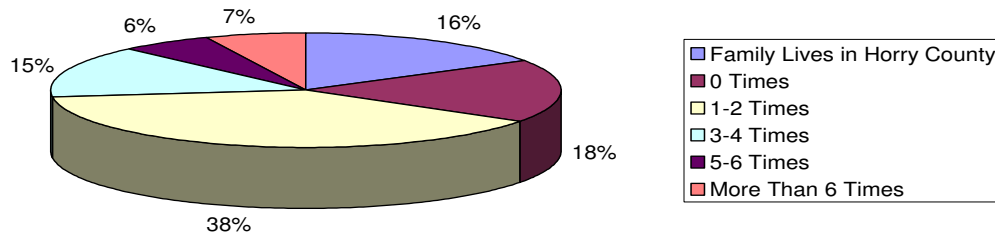
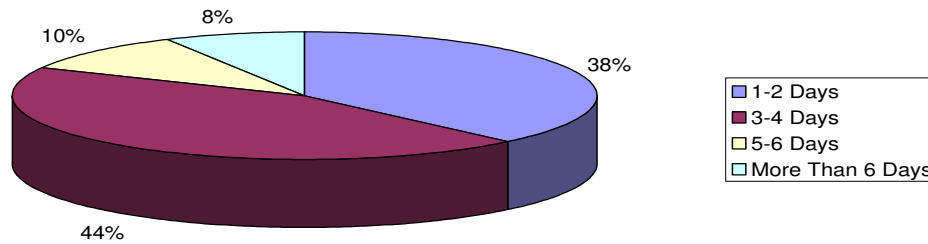


FIGURE 5
Average Length of Family Visit

Average Length of Family Visit

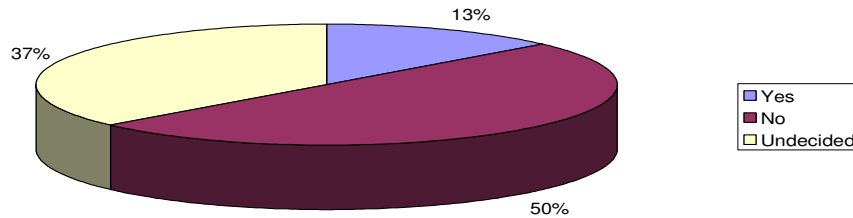


The impact of these survey results will be discussed in the following pecuniary benefits section. Some of the other survey questions were designed to find out about the students' decisions. One question asked if students from Horry County would have gone to a university outside of the county if Coastal were not here. This question was designed to find the number of students who stayed in Horry County because Coastal Carolina exists. The results were that 90 percent said they would have gone to a university outside of the county while ten percent would not have gone to any university.

Another question was designed to find out whether students planned to work in Horry County after graduation. This question was designed to find the number of educated workers who would remain in Horry County. The results were that 13 percent planned to stay in the county, 37 percent were undecided and 50 percent planned to leave the county. The results are shown below in Figure 6.

FIGURE 6
Post Graduation Plans

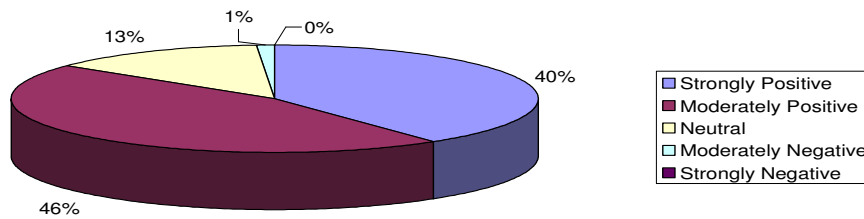
Do You Plan On Working in Horry County After Graduation?



Students' were also asked about their opinions of the university and its impact on the university. Eighty-six percent of current Coastal Carolina University students stated their opinion as either positive or strongly positive. Only one percent of the respondents felt Coastal Carolina University had a negative impact on Horry County. This indicates that students recognized the strong economic impact that Coastal Carolina University has on Horry County. The results are shown below in Figure 7.

FIGURE 7
Overall Impression of Coastal Carolina University

Student's Overall Opinion of Coastal Carolina University's Impact on Horry County

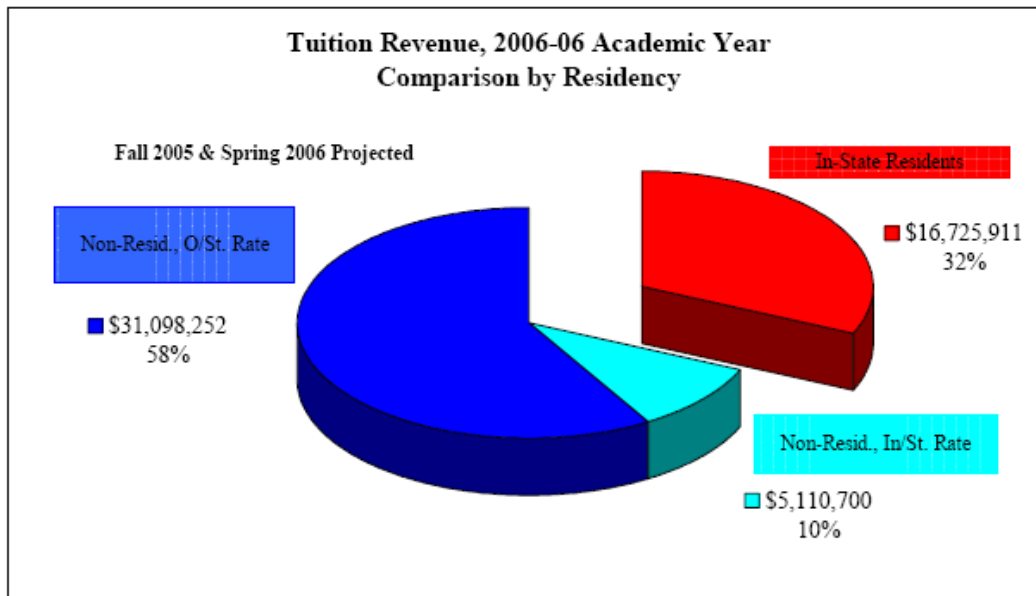


ECONOMIC IMPACT

Pecuniary Benefits

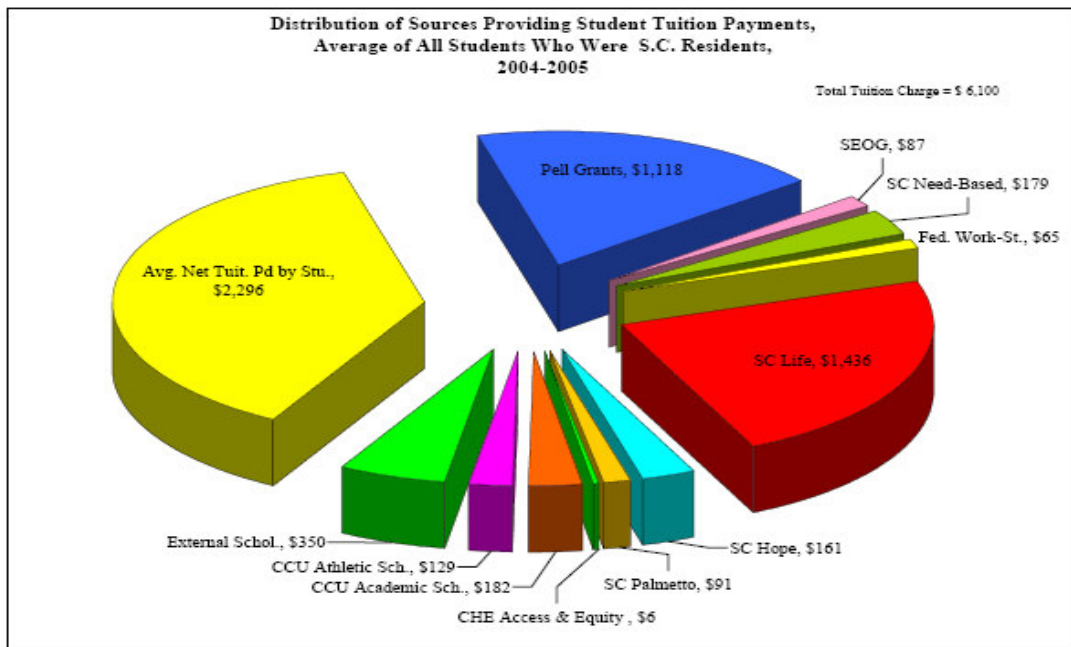
Tuition from out-of-county students is considered a positive financial inflow. In the Fall 2005 and projected Spring 2006 semesters, 1,916 students were from Horry County. The students from Horry County comprise 41.6% of the total in-state residents (Fall 2005 Fact Book). To calculate the total tuition inflow to Horry County, the study subtracts tuition revenue for in-county students from the total tuition revenue for in-state residents. Tuition revenue for in-state residents in the 2005-2006 school year was \$16,725,911. Therefore, 41.6% of this tuition, or \$6,957,979, is deducted from the total tuition revenue of \$52,934,863 to obtain the inflow of tuition to Coastal Carolina for the school year. The total inflow from tuition was \$45,976,885 for the Fall 2005 and projected Spring 2006 semesters (2005 Annual Report). The breakdown of in-state and out-of-state tuition revenue can be seen in Figure 8.

FIGURE 8
Tuition by Residency



Another positive inflow for Horry County is grants. These grants are federal, state, and external. The categories for each of these grants can be seen in Figure 8. Federal grants include Pell Grants, Supplemental Educational Opportunity Grants, and Federal Work-Study. External grants include external scholarships and total gift financial aid. All other grants are state grants (from outside of Horry County). Federal grants account for \$3,828,000. State grants account for \$5,104,880. External scholarships account for \$12,517,406 (2005 Annual Report). The total inflow from these grants was \$21,988,832 and can be seen in Figure 9 below.

FIGURE 9
Sources of Revenue of S.C. Residents



Some of the revenue from Coastal Carolina University's intercollegiate athletics is also a net inflow to the county. Total revenue from all CCU sports for the year ending June 2005 was \$6,301,368 (after deducting student activity fees). To calculate the net inflow to the county, all revenues resulting from spending by attendees who live in Horry County was deducted. To figure out the approximate percentage of attendees from outside of the county, several studies from other universities were taken into account and a conservative figure of 37% was used. Therefore, 37% of the total revenue from Coastal Carolina University's sporting events is considered an inflow. This equates to an inflow of \$2,331,506.

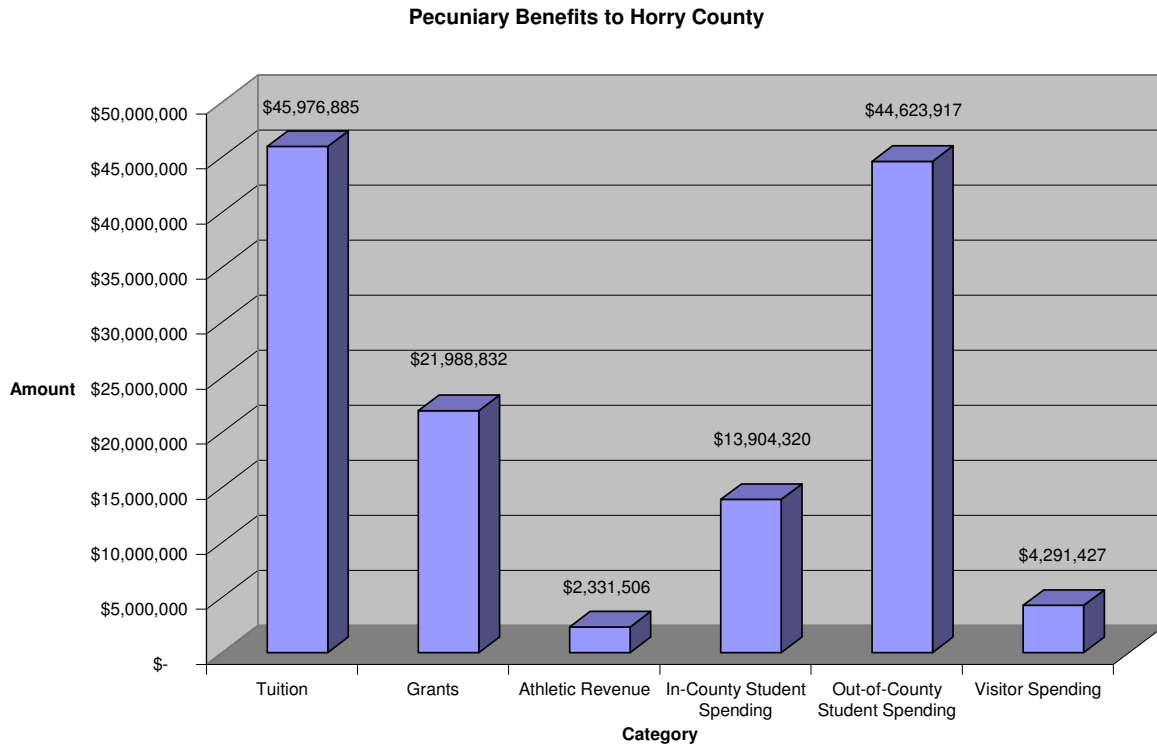
One of the biggest inflows to the county comes from student spending outside of the university while attending Coastal Carolina University. From the survey, information was compiled regarding students' spending on housing (rent, utilities, etc.), food, recreation, transportation (not including car payments or insurance), shopping, and other. The results from the survey can be seen in the student spending graphs, Figures 1 and 2, in the survey section. Spending was differentiated between in-county students, students who are from Horry County, and out-of-county students. All spending by out-of-county students is considered an inflow. The total average monthly spending for out-of-county students, \$979.11, was multiplied by the total number of out-of-county students, 5,697, to get a total of \$5,577,990. This figure is monthly, so multiplying it by eight (the number of months spent at Coastal Carolina University each school year) gives a total annual spending from out-of-county students of \$44,623,917.

For in-county students, one aim of the survey was to find out the percentage of in-county students who would have attended a school outside of Horry County if Coastal Carolina University were not here. Ninety percent responded that they would have gone to school outside of the county if Coastal were not here. There are 1,916 in-county students at Coastal, so this number was multiplied by .9 and then by the average monthly spending for in-county students (\$1,007.91) to get \$1,738,040. Once again, this figure is monthly, so multiplying it by eight gives us the total annual figure of \$13,904,320.

Spending from visitors is also a major inflow to the county. After compiling the survey results, Excel was used to count the frequency of each answer and then calculate the average. The average student’s family visited them at school 1.5 times each school year for an average of 3 days. Based on previous studies, a conservative family size of 2.5 (not including the student), gives us 11.25 visiting days per student per year. This figure is multiplied by the number of students who do not reside in Horry County (5,697) and then multiplied by the average amount of spending per day per person by visitors (\$101.76 Statistical Abstract for the Myrtle Beach Area of South Carolina) to get the total annual visitor spending of \$4,291,427. Visitors’ average spending per day per person is provided by the Myrtle Beach Area Chamber of Commerce Statistical Abstract.

The total effect of all pecuniary benefits can be seen below in Figure 10. The sum of all the pecuniary benefits to Horry County due to Coastal Carolina University’s existence is \$133,116,887 annually. The two largest categories are tuition and out-of-county spending.

FIGURE 10
Pecuniary Benefits



Non-pecuniary Benefits & Costs

The existence of public facilities constructed by Coastal Carolina, although nonpecuniary, has a significant impact on the local community. The university offers a library, meeting rooms, athletic facilities, a theater/recital hall, and dining services. Coastal offers numerous programs to the public including plays, sporting events, musicals, speaking engagements, and the Celebration of Inquiry.

Other nonpecuniary benefits from Coastal Carolina University's existence include improving human capital in the community, enlarging the labor force, providing valuable services to the community, and the volunteering efforts of Coastal's faculty and students.

It is hard to measure the positive effects that these amenities bring to the community, but they are definitely apparent. There are also some pecuniary costs associated with Coastal's existence. Some of these costs include increased traffic congestion, additional public transportation requirements, and increased waste and pollution. There is also an additional strain on the environment, including forests and wetlands.

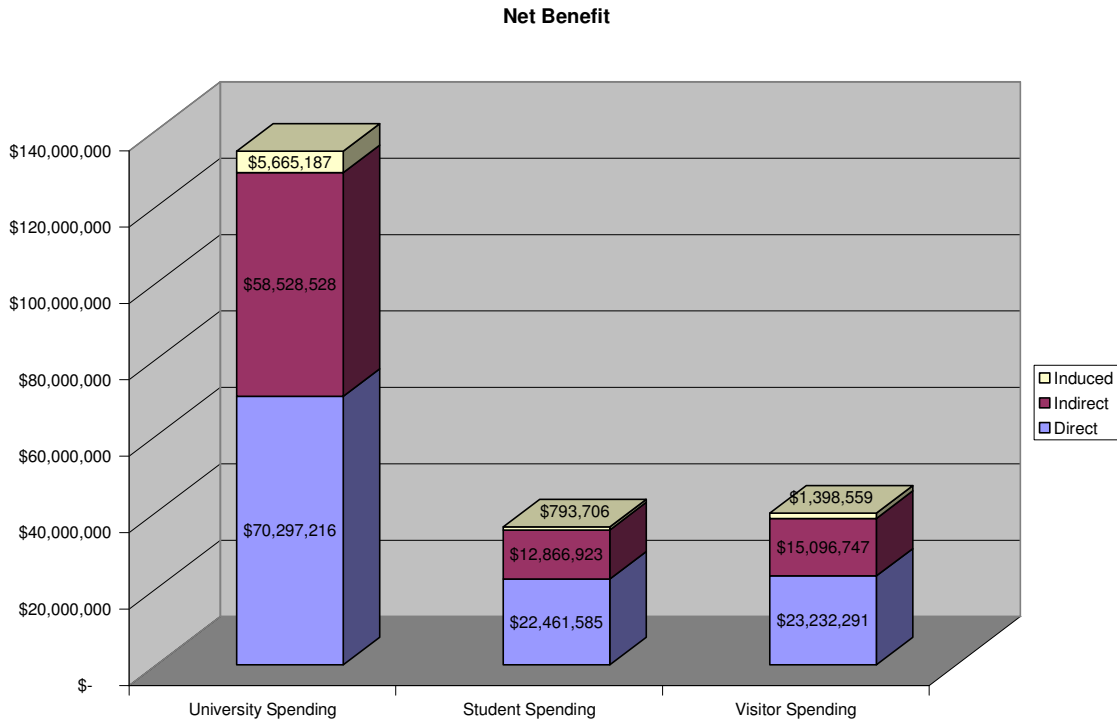
Economic Outflows

An outflow is money leaving Horry County as a result of Coastal Carolina. Salaries paid to Coastal Carolina University employees who live outside of Horry County constitute one of the major outflows. Fifteen percent of Coastal Carolina University employees live outside of Horry County. This amounts to approximately \$6,580,355 annually, or 15% of the total salaries paid to university employees. Coastal Carolina also makes purchases from vendors outside of the county. The university's financials do not offer figures regarding the dollar amount of these purchases.

Net Benefit

After determining the direct spending related to the university, student spending, and visitor spending, IMPLAN was used to calculate the indirect and induced spending that is related to Coastal's existence. Total spending (direct, indirect, and induced) amounts to \$210,340,735, and outflows amount to \$6,580,335. This is a net annual benefit of \$203,760,400. Figure 11, below, shows the direct, indirect, and induced spending generated due to Coastal's existence.

FIGURE 11
Resulting Net Benefits



CONCLUSIONS

Not all the effects of Coastal Carolina University can be quantified. The true value of many intangible effects is determined by personal values. These effects include environmental, social, and cultural changes within the county. Possible negative effects include increased traffic congestion, and the disruption of the environment. Positive effects of the school also include increased employment opportunity, more volunteer services in the community, as well as public facilities that are provided by the University such as the library and athletic facilities.

So as you can see from our study, Coastal Carolina University has a strong positive net economic benefit and proves to be a worthwhile investment for both the state and the county.

RECOMMENDATIONS

This economic impact study could be further expanded by future classes. Additional information could be obtained concerning the inflows and outflows to the county. This information could be used as a basis of comparison with other universities in the state of South Carolina. It could also be used to compare with how much money other industries bring to Horry County.

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