Analysis of the Economic Impact and Benefits of Education

THE ECONOMIC VALUE OF FLAGLER COLLEGE TO THE NORTHEAST FLORIDA ECONOMY

February 2018
Executive summary

Flagler College creates value in a variety of ways. The college improves higher education delivery throughout the region and helps students increase their employability and potential. The college also draws visitors to the region, generating new dollars and opportunities for Northeast Florida.

The value of Flagler College influences both the lives of students and the regional economy. The college serves a range of industries in Northeast Florida, supports regional businesses, and benefits society as a whole in Florida from an expanded economy and improved quality of life. The benefits created by Flagler College extend as far as the state government through increased tax revenues and public sector savings.

This study investigates the economic impacts created by Flagler College on the business community and the benefits that the college generates for students, taxpayers, and society.

The following two analyses are presented:

- economic impact analysis
- benefits analysis

All results reflect student and financial data for Fiscal Year (FY) 2016-17. Impacts on the regional business community are reported under the economic impact analysis. Results are measured in terms of added income. The return on investment to students and society and the benefits to taxpayers are reported under the benefits analysis. Both analyses are described more fully in the following sections.
Economic impact analysis

Flagler College promotes economic growth in Northeast Florida through its direct expenditures and resulting expenditures of students, visitors, and regional businesses. The college serves as an employer and buyer of goods and services. The college’s reputation and activities attract students and visitors from outside Northeast Florida, whose expenditures benefit regional vendors. In addition, Flagler College is a primary source of education to Northeast Florida residents and a supplier of trained workers to the regional industries, increasing overall productivity in the regional workforce.

**OPERATIONS SPENDING IMPACT**

Flagler College is an important employer in Northeast Florida. In FY 2016-17, the college employed 538 full-time and part-time faculty and staff and all of them lived in Northeast Florida. Total payroll at Flagler College was $28.2 million, much of which was spent in the region for groceries, dining out, clothing, and other household expenses.

Flagler College is itself a large-scale buyer of goods and services. In FY 2016-17, the college spent $27.3 million to cover its expenses for facilities, professional services, and supplies.

Flagler College added $42.4 million in income to the region during the analysis year as a result of its day-to-day operations. This figure represents the college’s payroll, the multiplier effects generated by the spending of the college and its employees, and a downward adjustment to account for funding that the college received from regional sources. The $42.4 million in added income is equivalent to supporting 751 jobs.

**CONSTRUCTION SPENDING IMPACT**

Flagler College commissioned contractors to build or renovate a number of facilities during the analysis year. The quick infusion of income and jobs that occurred in the regional economy as a result of this construction spending is only considered short-term due to the one-time nature of construction projects. Nonetheless, the construction spending had a substantial impact on the regional economy in FY 2016-17, equal to $10.4 million in added income for Northeast Florida, which is equivalent to supporting 162 jobs.

**TABLE 1: Impacts created by Flagler College in FY 2016-17**

<table>
<thead>
<tr>
<th>added income</th>
<th>jobs</th>
</tr>
</thead>
<tbody>
<tr>
<td>$42.4 million</td>
<td>751</td>
</tr>
<tr>
<td>Operations spending impact</td>
<td></td>
</tr>
<tr>
<td>$10.4 million</td>
<td>162</td>
</tr>
<tr>
<td>Construction spending impact</td>
<td></td>
</tr>
<tr>
<td>$19.5 million</td>
<td>439</td>
</tr>
<tr>
<td>Student spending impact</td>
<td></td>
</tr>
<tr>
<td>$5.4 million</td>
<td>129</td>
</tr>
<tr>
<td>Visitor spending impact</td>
<td></td>
</tr>
<tr>
<td>$68.6 million</td>
<td>1,171</td>
</tr>
<tr>
<td>Alumni impact</td>
<td></td>
</tr>
<tr>
<td>$146.3 million</td>
<td>2,653</td>
</tr>
<tr>
<td>Total impact</td>
<td></td>
</tr>
</tbody>
</table>
STUDENT SPENDING IMPACT

Around 80% of students attending Flagler College originated from outside the region in FY 2016-17, and all of these students relocated to Northeast Florida to attend Flagler College. These students would not have come to the region if the college did not exist. In addition, a number of in-region students would have left the area for other educational opportunities if not for the existence of Flagler College. While attending the college, these relocated and retained students spent $42.1 million to purchase groceries, rent accommodation, pay for transportation, and so on. A significant portion of these expenditures occurred in the region, generating $19.5 million in added income in the regional economy during the analysis year, which is equivalent to supporting 439 jobs.

VISITOR SPENDING IMPACT

Thousands of visitors from outside the regional were attracted to Flagler College during the analysis year to attend commencement, sports events, and other activities sponsored by the college. While in the region, visitors spent money for lodging, food, transportation, and other personal expenses. The off-campus expenditures of the college’s out-of-region visitors generated a net impact of $5.4 million in added income for the regional economy in FY 2016-17. This $5.4 million in added income is equivalent to supporting 129 jobs.
ALUMNI IMPACT

The education and training Flagler College provides for regional residents results in the greatest impact. As shown in Figure 1, since the college was established, students have studied at Flagler College and entered the regional workforce with new skills. Today, thousands of former students are employed in Northeast Florida.

During the analysis year, past and present students of Flagler College generated $68.6 million in added income for the region. This figure represents the higher earnings that students earned during the year, the increased output of the businesses that employed the students, and the multiplier effects that occurred as students and their employers spent money at other businesses. This $68.6 million in added income is equivalent to supporting 1,171 jobs.

TOTAL IMPACT

The overall impact of Flagler College on the local business community during the analysis year amounted to $146.3 million in added income, equal to the sum of the operations spending impact, construction spending impact, the student spending impact, the visitor spending impact, and the alumni impact. The $146.3 million in added income was equal to approximately 0.2% of the GRP of Northeast Florida.

The total impact is also expressed in terms of the jobs supported by the added income; they are calculated by jobs-to-sales ratios specific to each industry. Overall, the $146.3 million impact supports 2,653 jobs.

A portion of the total $146.3 million is broken out into an industry-by-industry impact ordered by added income. Table 2 outlines the top industries impacted by Flagler College. Because industries have different jobs-to-sales ratios, the associated jobs supported by Flagler College’s impact differ by industry. Nonetheless, these are impacts that would not have been generated without the college’s presence.
Benefits analysis

The benefits generated by Flagler College affect the lives of many people. Students benefit the most from the higher earnings and improved quality of life that they enjoy as a result of the education and training they receive from the college. Benefits extend as far as state and local government, in the form of added tax revenues and a reduced dependency on publicly-funded services. Finally, benefits accrue to other members of society, as students expand the state economy and generate a wide variety of savings.

STUDENT PERSPECTIVE

In FY 2016-17, Flagler College served 2,507 credit students and 1,456 non-credit students. In order to attend the college, students paid for tuition, fees, books, and supplies. They also took out loans and incurred interest on those loans. Additionally, students gave up money that they would have otherwise earned had they been working instead of attending the college. The total investment made by Flagler College’s students in FY 2016-17 amounted to $66.9 million, equal to $40.4 million in out-of-pocket expenses (including student loan costs) plus $26.5 million in forgone time and money.

In return for their investment, Flagler College’s students will receive a stream of higher future wages that will continue to grow through their working lives. As shown in Figure 2, mean earnings levels at the midpoint of the average-aged worker’s career increase as people achieve higher levels of education. For example, the average bachelor’s degree completer from Flagler College will annually earn $26,100 more than someone with a high school diploma or equivalent working in Florida. Over a working lifetime, this increase in earnings amounts to an undiscounted value of approximately $1,200,600 in higher earnings.

The present value of the higher future wages that Flagler College’s students will receive over their working careers is $213.7 million. Dividing this value by the $66.9 million in student costs yields a benefit-cost ratio of 3.2. In other words, for every $1 students invest in Flagler College in the form of out-of-pocket expenses and forgone time and money, they receive a cumulative of $3.20 in higher future wages. The average annual rate of return for students is 11.9%. This is an impressive return, especially when compared to the 10-year average 10.1% return to the U.S. stock market (Figure 3).

Source: Emsi complete employment data.
TAXPAYER PERSPECTIVE

Flagler College received very little state and local taxpayer funding, yet taxpayers still receive a significant amount of benefits from Flagler College. Benefits to taxpayers consist primarily of taxes that the state government will collect from the added revenue created in the state. As Flagler College students earn more, they will make higher tax payments. Employers will also make higher tax payments as they increase their output and purchase more supplies and services. By the end of the FY 2016-17 students’ working careers, the state government will have collected a present value of $61 million in added taxes.

Benefits to taxpayers consist of the savings generated by the improved lifestyles of students and the proportionally reduced government expenditures. Education is statistically correlated with a variety of lifestyle changes that generate taxpayer savings across three main categories: 1) health, 2) crime, and 3) unemployment. Improved health habits lower the students’ demand for national health care services. Students are also less likely to commit crimes, so the demand for law enforcement and criminal justice services is reduced (study references are available in the main report). Students are also more employable, so the demand for welfare and unemployment benefits, such as earnings assistance and welfare benefits, is reduced. For a list of study references to these statistical benefits, please contact the college for a copy of the main report. All of these benefits will generate a present value of $20.9 million in savings to state taxpayers. Total benefits to taxpayers equal a present value of $81.9 million, equal to the sum of the added taxes and public sector savings.

SOCIAL PERSPECTIVE

Society as a whole within Florida benefits from the presence of Flagler College in two major ways. The first and largest benefit that society receives is an increased state economic base. As discussed in the previous section, the higher student earnings and increased business output occurs across the state. This raises prosperity in Florida and expands the economic base for society as a whole.

Benefits to society also consist of the savings generated by the improved lifestyles of students. Similar to the taxpayer section above, education is statistically correlated with a variety of lifestyle changes that generate social savings. Note that these costs are avoided by the consumers, and are distinct from the costs avoided by taxpayers outlined above. Health savings include avoided medical costs associated with smoking, alcoholism, obesity, drug abuse, and mental disorders. Crime savings include reduced security expenditures and insurance administration, lower victim costs, and reduced criminal justice system expenditures. Unemployment savings include the reduced employer contributions towards unemployment claims. For a list of study references to these statistical benefits, please contact the college for a copy of the main report.
Figure 4 shows the present value of the higher earnings and social savings that will occur in Florida over the working lifetime of the FY 2016-17 student population at Flagler College. Higher earnings amount to a present value of $898.4 million due to the increased lifetime earnings of students and associated increases in business output. Social savings amount to $119.7 million, the sum of health, crime, and unemployment savings in Florida. Altogether, total benefits to society equal $1 billion (in present value terms).

Society invested a present value of $108.4 million for FY 2016-17 Flagler College educations. This includes all expenditures by Flagler College, all student expenditures, and all student opportunity costs. For every dollar of this investment, society as a whole in Florida will receive a cumulative value of $9.40 in benefits, equal to the $1 billion in benefits divided by the $108.4 million in costs. These benefits will occur for as long as Flagler College’s FY 2016-17 students remain employed in the state workforce.

**SUMMARY OF BENEFITS ANALYSIS RESULTS**

Table 4 presents the results of the benefits analysis for all three of Flagler College’s major stakeholder groups—students, taxpayers, and society. As shown, students receive great value for their educational investment. At the same time, even with few taxpayer costs, Flagler College creates significant benefits for taxpayers and society as a whole.

**TABLE 3:** Summary of investment analysis results

<table>
<thead>
<tr>
<th></th>
<th>STUDENT PERSPECTIVE</th>
<th>TAXPAYER PERSPECTIVE</th>
<th>SOCIAL PERSPECTIVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Present value benefits (thousands)</td>
<td>$213,674</td>
<td>$81,858</td>
<td>$1,018,099</td>
</tr>
<tr>
<td>Costs (thousands)</td>
<td>$66,889</td>
<td></td>
<td>$108,418</td>
</tr>
<tr>
<td>Net present value (thousands)</td>
<td>$146,784</td>
<td></td>
<td>$909,681</td>
</tr>
<tr>
<td>Benefit-cost ratio</td>
<td>3.2</td>
<td></td>
<td>9.4</td>
</tr>
<tr>
<td>Rate of return*</td>
<td>11.90%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Because taxpayers experience very little costs associated with Flagler College, measuring a benefit-cost ratio and rate of return is not appropriate for the taxpayer perspective. The rate of return is not reported for the social perspective because the beneficiaries of the investment are not necessarily the same as the original investors.
Conclusion

The results of this study demonstrate that Flagler College creates value from multiple perspectives. The college benefits local businesses by increasing consumer spending in the region and supplying a steady flow of qualified, trained workers into the workforce. It enriches the lives of students by raising their lifetime earnings and helping them achieve their individual potential. It benefits state taxpayers through increased tax receipts across the state and a reduced demand for government-supported social services. Finally, it benefits society as a whole in Florida by creating a more prosperous economy and generating a variety of savings through the improved lifestyles of students.

ABOUT THE STUDY

Data and assumptions used in the study are based on several sources, including the FY 2016-17 academic and financial reports from Flagler College, industry and employment data from the U.S. Bureau of Labor Statistics and U.S. Census Bureau, outputs of Emsi’s Social Accounting Matrix (SAM) model, and a variety of studies and surveys relating education to social behavior. The study applies a conservative methodology and follows standard practice using only the most recognized indicators of investment effectiveness and economic impact. For a full description of the data and approach used in the study, please contact Flagler College for a copy of the technical report.

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