THE ECONOMIC VALUE TO GALVESTON COUNTY OF TEXAS A&M UNIVERSITY’S GALVESTON CAMPUS
IN FISCAL YEAR OF ANALYSIS 2019–2020

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Texas A&M University’s Galveston Campus (Texas A&M at Galveston) creates value in a variety of ways. The university improves higher education delivery throughout the county and helps students increase their employability and potential. The university facilitates new research developments and also draws students and visitors to the county, generating new dollars and opportunities for Galveston County.

Texas A&M at Galveston influences both the lives of students and also the county economy. The university serves a range of industries in Galveston County, supports county businesses, and benefits society as a whole in Texas from an expanded economy and improved quality of life. The benefits created by Texas A&M at Galveston extend as far as the state and local government through increased tax revenues and public sector savings.

This study investigates the economic impacts created by Texas A&M at Galveston on the business community and the benefits that the university generates in return for the investments made by its key stakeholder groups—students, taxpayers, and society. The following two analyses are presented:

- **Economic impact analysis**
- **Investment analysis**

All results reflect student and financial data for Fiscal Year (FY) 2019-20 (September 1, 2019 to August 31, 2020). Texas A&M at Galveston remained open and operational throughout 2020 and addressed the pandemic, by transferring learning, advising, support operations, and many other activities to hybrid, occupancy limited and/or virtual platforms. However, the pandemic led to the movement of many summer academic programs online and cancellation of many on-campus events from March to August 2020. In addition, Texas A&M at Galveston enrollment declined in spring and summer 2020. Each of these substantially impacted areas such as the observed decrease in student spending impact during the fiscal year. Impacts on the county business community are reported under the economic impact analysis. Results are measured in terms of total income. The returns on investment to students, taxpayers, and society in Texas are reported under the investment analysis. Both analyses are described more fully in the following sections. An electronic version of the executive summary and fact sheet are available at: economicimpact.tamu.edu.
ECONOMIC IMPACT ANALYSIS

Texas A&M at Galveston promotes economic growth in Galveston County through its direct expenditures and resulting expenditures of students, visitors, and county businesses. The university serves as an employer and buyer of goods and services for its day-to-day and research operations. The university’s reputation and activities attract students and visitors from outside Galveston County, whose expenditures benefit county vendors. In addition, Texas A&M at Galveston is a primary source of higher education to Galveston County residents and a supplier of trained workers to county industries, enhancing overall productivity in the county workforce.

OPERATIONS SPENDING IMPACT

Texas A&M at Galveston is an important employer in Galveston County. In FY 2019-20, the university employed 733 full-time and part-time faculty and staff (less research). Of these, 49% lived in Galveston County. Total payroll at Texas A&M at Galveston was $29.4 million, much of which was spent in the county for groceries, dining out, clothing, and other household expenses. In addition, Texas A&M at Galveston is a large-scale buyer of goods and services. In FY 2019-20, the university spent $32.7 million on day-to-day expenses related to facilities, supplies, and professional services (less research).

Texas A&M at Galveston’s added $33.4 million in total income to the county during the analysis year as a result of its day-to-day operations (less research).

This figure represents the university’s payroll, the multiplier effects generated by the in-county spending of the university and its employees, and a downward adjustment to account for funding that the university received from county sources.

RESEARCH SPENDING IMPACT

Research activities impact the economy by employing people and requiring the purchase of equipment and other supplies and services. In FY 2019-20, the university spent $3.3 million on payroll to support research activities. This, along with $4.8 million in other research spending, created a net total of $6.2 million in total income for the county economy.
All credit-bearing students attending Texas A&M at Galveston originated from outside the county in FY 2019-20. Some of these students relocated to Galveston County. These students may not have come to the county if the university did not exist. In addition, some in-county students, referred to as retained students, would have left the county if not for the existence of Texas A&M at Galveston. While attending the university, these relocator and retained students spent money on groceries, rent accommodation, pay for transportation, and so on. A significant portion of these expenditures occurred in the county, generating $7.9 million in total income in the county economy during the analysis year, which supported 205 jobs in Galveston County.

VISITOR SPENDING IMPACT

Thousands of visitors from outside the county were attracted to Texas A&M at Galveston during the analysis year to attend commencement, sports events, conferences, meetings, and other activities sponsored by the university.\(^1\) These visitors stayed an average of three nights. While in the county, visitors spent money for lodging, food, transportation, and other personal expenses. The off-campus expenditures of the university’s out-of-county visitors generated a net impact of $1.5 million in total income for the county economy in FY 2019-20.

TOTAL TEXAS A&M AT GALVESTON IMPACT ON THE GALVESTON COUNTY ECONOMY

The total economic impact of Texas A&M at Galveston impact on the Galveston County economy amounted to $49.0 million in total income. This stems from the university’s spending on operations, research, and the spending of its students and visitors. This $49.0 million in total income is equivalent to supporting 1,143 jobs.

FORMER STUDENT IMPACT

Since the university was established, students have studied at Texas A&M at Galveston and entered the county workforce with new skills. Today, thousands of former Texas A&M at Galveston students are employed in Galveston County (Figure 1).

\(^1\) Note that many events were cancelled due to COVID-19, decreasing the visitor spending impact.
During the analysis year, past and present students of Texas A&M at Galveston generated $20.1 million in total income for the county. This figure represents the higher wages 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.

**GRAND TOTAL IMPACT ON THE GALVESTON COUNTY ECONOMY**

The overall impact of Texas A&M at Galveston on the county business community during the analysis year amounted to $69.2 million in total income, equal to the sum of the Texas A&M at Galveston impact (includes the operations spending impact, the research spending impact, the student spending impact, and the visitor spending impact) and the former student impact. The $69.2 million in total impact was equal to approximately 0.4% of the GRP of Galveston County.

The total impact is also expressed in terms of the jobs supported by the total income; they are calculated by jobs-to-sales ratios specific to each industry. Overall, the $69.2 million impact supports 1,389 jobs.

A portion of the total $69.2 million is broken out into an industry-by-industry impact ordered by total income. Table 2 outlines the top industries impacted by Texas A&M at Galveston. Because industries have different jobs-to-sales ratios, the associated jobs supported by the Texas A&M at Galveston impact differ by industry. Nonetheless, these are impacts that would not have been generated without the university’s presence.

**TABLE 2: Top industries in the county impacted by Texas A&M University at Galveston**

<table>
<thead>
<tr>
<th>Industry</th>
<th>Total income (thousands)</th>
<th>Jobs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accommodation &amp; Food Services</td>
<td>$4,654.2</td>
<td>148</td>
</tr>
<tr>
<td>Retail Trade</td>
<td>$4,226.4</td>
<td>93</td>
</tr>
<tr>
<td>Professional &amp; Technical Services</td>
<td>$3,104.5</td>
<td>48</td>
</tr>
<tr>
<td>Arts, Entertainment, &amp; Recreation</td>
<td>$1,093.3</td>
<td>43</td>
</tr>
<tr>
<td>Health Care &amp; Social Assistance</td>
<td>$1,927.5</td>
<td>37</td>
</tr>
<tr>
<td>Other Services (except Public Administration)</td>
<td>$3,187.9</td>
<td>35</td>
</tr>
<tr>
<td>All other industries</td>
<td>$54,152.3</td>
<td>1,020</td>
</tr>
<tr>
<td><strong>Total impact</strong></td>
<td><strong>$69,158.2</strong></td>
<td><strong>1,389</strong></td>
</tr>
</tbody>
</table>

*Numbers may not add due to rounding.*
INVESTMENT ANALYSIS

Investment analysis is the process of evaluating total costs and measuring these against total benefits to determine whether or not a proposed venture will be profitable. If benefits outweigh costs, then the investment is worthwhile and considered profitable.

Texas A&M at Galveston received a total of $81.5 million in FY 2019-20. Tuition and fees comprised 23% of total revenue, student aid from government sources comprised another 44%, and all other revenue comprised the remaining 33%. This study considers Texas A&M at Galveston as an investment from the perspectives of those whom provided these revenues—students, taxpayers, and society. The backdrop for the analysis is the entire Texas economy.

STUDENT PERSPECTIVE

In FY 2019-20, Texas A&M at Galveston served 1,761 credit-bearing students and 13 non-credit students.2 In order to attend the university, the students paid for tuition, fees, books, and supplies. They also took out loans and will incur interest on those loans. Additionally, students gave up money they would have otherwise earned had they been working instead of attending the university. The total investment made by Texas A&M at Galveston’s students in FY 2019-20 amounted to a present value of $39.8 million, equal to $20.2 million in out-of-pocket expenses (including future principal and interest on student loans) and $19.6 million in forgone time and money.

In return for their investment, Texas A&M at Galveston’s students will receive a stream of higher future wages that will continue to grow throughout their working lives. As shown in Figure 2, earnings levels increase as people achieve higher levels of education. For example, the average Texas A&M at Galveston bachelor’s degree completer from FY 2019-20

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2 Note that a number of programs were discontinued because of COVID-19, affecting the number of non-credit students served.
will see an increase in earnings of $31,700 each year compared to someone with a high school diploma or equivalent working in Texas. Over a working lifetime, the increase in earnings amounts to an undiscounted value of $1.5 million in higher earnings per graduate.

The present value of the cumulative higher future wages that Texas A&M at Galveston’s FY 2019-20 students will receive over their working careers is $149.9 million. Dividing this value by $39.8 million in present value costs yields a benefit-cost ratio of 3.8. In other words, for every dollar students invest in Texas A&M at Galveston, in the form of out-of-pocket expenses and forgone time and money, they will receive a cumulative amount of $3.77 in higher future wages. The average annual internal rate of return for students is 14.6%. This is an impressive return, especially when compared to the 30-year average 9.9% return to the U.S. stock market (Figure 3).

FIGURE 3: Student rate of return

<table>
<thead>
<tr>
<th>Average Annual Return for Texas A&amp;M at Galveston Students</th>
<th>Stock Market 30-year Average Annual Return*</th>
<th>Interest Earned on Savings Account (National Rate Cap)**</th>
</tr>
</thead>
<tbody>
<tr>
<td>14.6%</td>
<td>9.9%</td>
<td>0.8%</td>
</tr>
</tbody>
</table>


in the state. As Texas A&M at Galveston students will earn more, they will spend more resulting in higher tax revenues. Employers will also make higher tax payments as they increase their output and purchase more supplies and services. By the end of the FY 2019-20 students’ working careers, the state and local government will have collected a present value of $27.9 million in added taxes.

Benefits to taxpayers will also consist of the savings generated by the improved lifestyles of Texas A&M at Galveston students and the corresponding 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) income assistance. Improved health habits lower students’ demand for national health care services. Students are also less likely to interact with the criminal justice system, resulting in a reduced demand for law enforcement and victim costs. 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 Texas A&M Public Partnership and Outreach for a copy of the full technical report. All of these benefits will generate a present value of $5.1 million in savings to state and local taxpayers.

Total taxpayer benefits amount to $33 million, equal to the sum of the added taxes and public sector savings. Comparing this to the taxpayer costs of $28 million, equal to the funding that Texas A&M at Galveston received from the state and local government during the analysis year—yields a benefit-cost ratio of 1.2. This means that for every dollar of public money invested in Texas A&M at Galveston, taxpayers will receive a cumulative value of $1.18 over the course of the students’ working lives. The average annual internal rate of return is 2.3%, a solid investment that compares favorably with other long-term investments in both the private and public sectors (Figure 3).

TAXPAYER PERSPECTIVE

Texas A&M at Galveston generates more in tax revenue than it takes. These benefits to taxpayers consist primarily of taxes that the state and local government will collect from the added revenue created

SOCIAL PERSPECTIVE

Society as a whole within Texas benefits from the presence of Texas A&M at Galveston 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 Texas and expands the economic base for society as a whole.

Benefits to society also consist of the savings generated by the improved lifestyles of Texas A&M at Galveston 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, alcohol dependence, obesity, drug abuse, and depression. Savings related to crime include reduced security expenditures and insurance administration, lower victim costs, and reduced expenditures by the criminal justice system. Income assistance savings include reduced welfare and unemployment claims. For a list of study references to these statistical benefits, please contact Texas A&M Public Partnership and Outreach for a copy of the full technical report.

FIGURE 4: Present value of higher earnings and social savings in Texas

TABLE 3: Summary of investment analysis results

<table>
<thead>
<tr>
<th>STUDENT PERSPECTIVE</th>
<th>TAXPAYER PERSPECTIVE</th>
<th>SOCIAL PERSPECTIVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>$149.9 MILLION</td>
<td>$32.9 MILLION</td>
<td>$455.1 MILLION</td>
</tr>
<tr>
<td>Present value benefits</td>
<td>Present value benefits</td>
<td>Present value benefits</td>
</tr>
<tr>
<td>$39.8 MILLION</td>
<td>$28.0 MILLION</td>
<td>$92.8 MILLION</td>
</tr>
<tr>
<td>Present value costs</td>
<td>Present value costs</td>
<td>Present value costs</td>
</tr>
<tr>
<td>$110.1 MILLION</td>
<td>$4.9 MILLION</td>
<td>$362.3 MILLION</td>
</tr>
<tr>
<td>Net present value</td>
<td>Benefit-cost ratio</td>
<td>Benefit-cost ratio</td>
</tr>
<tr>
<td>3.8</td>
<td>1.2</td>
<td>4.9</td>
</tr>
<tr>
<td>Benefit-cost ratio</td>
<td>Rate of return</td>
<td>Rate of return</td>
</tr>
<tr>
<td>14.6%</td>
<td>2.3%</td>
<td>NA</td>
</tr>
<tr>
<td>Rate of return</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* 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.
Figure 4 shows the present value of the higher earnings and social savings that will occur in Texas over the working lifetime of the FY 2019-20 student population at Texas A&M at Galveston. Higher wages amount to a present value of $441.4 million due to the increased lifetime wages of students and associated increases in business output. Social savings amount to $13.7 million, the sum of health, crime, and unemployment savings in Texas. Altogether, total benefits to society equal $455.1 million (in present value terms).

Society invested a present value of $92.8 million in educations obtained at Texas A&M at Galveston during the analysis year. This includes all expenditures by Texas A&M at Galveston, all student expenditures, and all student opportunity costs. For every dollar of this investment, society as a whole in Texas will receive a cumulative value of $4.90 in benefits, equal to the $455.1 million in benefits divided by the $92.8 million in costs. These benefits will occur for as long as Texas A&M at Galveston’s FY 2019-20 students remain employed in the state workforce.

**SUMMARY OF INVESTMENT ANALYSIS RESULTS**

Table 3 presents the results of the investment analysis for all three of Texas A&M at Galveston’s major stakeholder groups—students, taxpayers, and society. As shown, students receive great return for their educational investment. At the same time, the investment made by state and local taxpayers to the university creates a wide range of benefits to society and returns more to government budgets than it costs.
CONCLUSION

The results of this study demonstrate that Texas A&M at Galveston creates value from multiple perspectives. The university benefits county businesses by increasing consumer spending in the county and supplying a steady flow of qualified, trained workers into the workforce. Texas A&M at Galveston enriches the lives of students by raising their lifetime earnings and helping them achieve their individual potential. The university benefits state and local taxpayers through increased tax receipts across the state and a reduced demand for government-supported social services. Finally, Texas A&M at Galveston benefits society as a whole in Texas 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 2019-20 academic and financial reports from Texas A&M at Galveston, industry and employment data from the U.S. Bureau of Labor Statistics and U.S. Census Bureau, outputs of Emsi’s Multi-Regional Social Accounting Matrix model, and a variety of studies and surveys relating education to social behavior. Emsi’s methodology for this study adheres to the Association of American Universities (AAU) and the Association of Public and Land-grant Universities (APLU) guidelines, published in December 2014. The study applies a conservative methodology and follows standard practice using only the most recognized indicators of economic impact and investment effectiveness. For a full description of the data and approach used in the study, please contact Texas A&M Public Partnership and Outreach (Dr. Suzanne Droleskey) for a copy of the full technical report.

ABOUT EMSI

Emsi is a labor market analytics firm that integrates data from a wide variety of sources to serve professionals in higher education, economic development, workforce development, talent acquisition, and site selection. Emsi is a leading provider of economic impact studies and labor market data to educational institutions in the U.S. and internationally. Since 2000, Emsi has completed over 2,200 economic impact studies for institutions across three countries. For more information about Emsi’s products and services, visit www.economicmodeling.com.