Texas A&M University (Texas A&M) creates a significant positive impact on the business community and generates a return on investment to its major stakeholder groups—students, taxpayers, and society. Using a two-pronged approach that involves an economic impact analysis and an investment analysis, this study calculates the benefits received by each of these groups. This analysis covers all university components in Texas, including the Galveston Branch Campus, School of Law, and all Health Science Center activities.

Results of the analysis reflect fiscal year (FY) 2019-20 (September 1, 2019 to August 31, 2020). Texas A&M 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. Economic activity from research, such as the Texas A&M Health Sciences Center received significant federal funding related to Operation Warp Speed, which increased the research spending impact in the state and the largest in person instruction effort in the country, returned some student spending to communities where Texas A&M teaches. 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. Each of these substantially impacted areas such as the observed decrease in student spending impact during the fiscal year. An electronic version of the executive summary and fact sheet are available at: economicimpact.tamu.edu.

IMPACT ON THE BUSINESS COMMUNITY

During the analysis year, Texas A&M's spending on operations and research, construction, its entrepreneurial activities, and the spending of its students and visitors added $3.7 billion in income to the Texas economy. When also accounting for former students, the impact sums to a value approximately equal to $9.9 billion in total income to the Texas economy, approximately 0.5% of the state’s total gross state product (GSP). By comparison, this impact from the university is nearly as large as the entire Arts, Entertainment, & Recreation industry. Expressed in terms of jobs, Texas A&M’s impact supported 131,681 jobs. The economic impacts of Texas A&M break down as follows:

OPERATIONS SPENDING IMPACT

- Texas A&M employed 16,235 full-time and part-time faculty and staff in FY 2019-20 (less research). Payroll amounted to $861.4 million, much of which was spent in the state for groceries, clothing, and other household goods and services. The university spent another $568.4 million to support its day-to-day operations (less research).
- The net impact of Texas A&M payroll and expenses (less research) in Texas during the analysis year was approximately $513.3 million in total income. This is equivalent to supporting 10,003 jobs.
RESEARCH SPENDING IMPACT
- Research activities at Texas A&M impact the state economy by employing people and making purchases for equipment, supplies, and services. They also facilitate new knowledge creation in Texas through inventions, patent applications, and licenses. In FY 2019-20, Texas A&M spent $441.8 million on payroll and $689 million on other expenses to support research activities.
- Texas A&M’s research spending generated $1.2 billion in total income for the Texas economy, which is equivalent to supporting 17,769 jobs.

CONSTRUCTION SPENDING IMPACT
- Texas A&M commissioned contractors to build or renovate its facilities, create additional capacities, and meet its growing educational demands, generating a short-term infusion of spending and jobs in the state economy.
- The net impact of Texas A&M’s construction spending in FY 2019-20 was $139.6 million in total income for Texas, which is equivalent to supporting 2,069 jobs.

START-UP AND SPIN-OFF COMPANY IMPACT
- Texas A&M creates an exceptional environment that fosters innovation and entrepreneurship, evidenced by the number of start-up and spin-off companies created by Texas A&M.
- In FY 2019-20, Texas A&M’s start-up and spin-off companies generated $1.4 billion in total income for the Texas economy, which is equivalent to supporting 15,329 jobs.

STUDENT SPENDING IMPACT
- Around 15% of credit-bearing students attending Texas A&M originated from outside the state. Some of these students, called relocator students, moved to Texas. In addition, a number of students would have left the state if not for Texas A&M. These relocator and retained students spent money on groceries, transportation, rent, and so on at state businesses.
- The expenditures of relocator and retained students during the analysis year added approximately $267.4 million in total income to the Texas economy. This is equivalent to supporting 5,556 jobs.

VISITOR SPENDING IMPACT
- Out-of-state visitors attracted to Texas for activities at Texas A&M brought new dollars to the economy through their spending at hotels, restaurants, gas stations, and other state businesses.
- Visitor spending added approximately $151.7 million in total income for the Texas economy, which is equivalent to supporting 3,444 jobs.

TOTAL TEXAS A&M IMPACT
- The total Texas A&M impact on the Texas economy amounted to $3.7 billion in total income, equivalent to supporting 54,170 jobs.

FORMER STUDENT IMPACT
- Over the years, students have studied at Texas A&M and entered or re-entered the workforce with newly-acquired knowledge and skills. Today, tens of thousands of these former students are employed in Texas.

IMPACTS CREATED BY TEXAS A&M AND ITS FORMER STUDENTS IN FY 2019-20

<table>
<thead>
<tr>
<th>Total Income</th>
<th>Jobs</th>
</tr>
</thead>
<tbody>
<tr>
<td>$513.3 million</td>
<td>10,003</td>
</tr>
<tr>
<td>$1.2 billion</td>
<td>17,769</td>
</tr>
<tr>
<td>$139.6 million</td>
<td>2,069</td>
</tr>
<tr>
<td>$1.4 billion</td>
<td>15,329</td>
</tr>
<tr>
<td>$267.4 million</td>
<td>5,556</td>
</tr>
<tr>
<td>$151.7 million</td>
<td>3,444</td>
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<tr>
<td>$3.7 billion</td>
<td>54,170</td>
</tr>
<tr>
<td>$6.2 billion</td>
<td>77,511</td>
</tr>
<tr>
<td>$9.9 billion</td>
<td>131,681</td>
</tr>
</tbody>
</table>

* Texas A&M continuously improves data sources for extant spin-off companies created by former students. A large number of these were added for this report that were previously uncounted.

THE ECONOMIC VALUE TO TEXAS OF TEXAS A&M IN FY 2019-20
• The accumulated contribution of former students currently employed in the Texas workforce amounted to $6.2 billion in total income during the analysis year. This is equivalent to supporting 77,511 jobs.

GRAND TOTAL IMPACT
The overall impact of Texas A&M on the state business community during the analysis year amounted to $9.9 billion in total income, equal to the sum of the total Texas A&M impact and the former student impact. This is equivalent to supporting 131,681 jobs and is equal to approximately 0.5% of the GSP of Texas. By comparison, this contribution the university provides on its own is nearly as large as the entire Arts, Entertainment, & Recreation industry.

RETURN ON INVESTMENT TO STUDENTS, TAXPAYERS, AND SOCIETY

STUDENT PERSPECTIVE
• Texas A&M’s FY 2019-20 students paid a present value of $763.4 million to cover the cost of tuition, fees, books, supplies, and interest on student loans. They also forwent $1.1 billion in money that they would have earned had they been working instead of attending.
• In return for the monies invested in the university, students will receive a present value of $7.1 billion in increased earnings over their working lives. This translates to a return of $3.73 in higher future earnings for every dollar students invest in their education. The students’ average annual rate of return is 14.8%.

STUDENT RATE OF RETURN

<table>
<thead>
<tr>
<th>Average Annual Return for Texas A&amp;M 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>14.8%</td>
<td>9.9%</td>
<td>0.8%</td>
</tr>
</tbody>
</table>


TAXPAYER PERSPECTIVE
• In FY 2019-20, state and local taxpayers in Texas paid $684.9 million to support the operations of Texas A&M. In return, they will benefit from added tax revenue, stemming from students’ higher lifetime earnings and increased business output, amounting to $1.4 billion. A reduced demand for government-funded services in Texas will add another $296.9 million in benefits to taxpayers.
• Dividing benefits to taxpayers by the associated costs yields a 2.4 benefit-cost ratio, i.e., every dollar in costs returns $2.41 in benefits. The average annual return on investment for taxpayers is 7.6%.

SOCIAL PERSPECTIVE
• Society as a whole in Texas will receive a present value of $21.4 billion in added state revenue over the course of students’ working lives. Society will also benefit from $911.4 million in present value social savings related to reduced crime, lower unemployment, and increased health and well-being across the state.
• For every dollar invested in Texas A&M in FY 2019-20, people in Texas will receive $5.58 in return, for as long as Texas A&M’s FY 2019-20 students remain active in the state workforce.

FOR EVERY $1 SPENT BY...

| STUDENTS | $3.73 | Gained in lifetime earnings for STUDENTS |
| TAXPAYERS | $2.41 | Gained in added tax revenue and public sector savings for TAXPAYERS |
| SOCIETY | $5.58 | Gained in added state revenue and social savings for SOCIETY |