

# FACT SHEET

*Demonstrating the Collective Economic Value in Texas Added by Colleges and Universities Represented by Three Statewide Higher Education Associations*

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The colleges and universities represented by three statewide higher education associations (Texas colleges and universities) includes 39 public general academic colleges and universities, 39 independent colleges and universities, and 51 community colleges.\* This study analyzes the collective economic value these institutions create.

Texas colleges and universities improve higher education delivery throughout the state and help students increase their employability and potential. By facilitating new research and drawing students and visitors to Texas, these institutions also generate new dollars and opportunities for the state. The purpose of this analysis is to assess the collective impact of Texas colleges and universities on the state economy and the benefits generated for students, Texas as a whole, and taxpayers.

*Our analysis shows that in FY13, the \$20.9 billion in payroll and operations spending of Texas colleges and universities, together with the spending of their students and visitors as well as the added productivity of former students, created **\$143.9 BILLION** in added state income. This is equal to approximately **11.0%** of the total Gross State Product of Texas, and is equivalent to creating **2,258,077** new jobs.*

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## IMPACT ON THE STATE BUSINESS COMMUNITY

During the FY13 analysis year, Texas colleges and universities spent **\$11.4 BILLION** on payroll and benefits for **213,627** full-time and part-time employees, and spent another **\$9.6 BILLION** on goods and services to carry out their day-to-day operations and research. This initial round of spending creates more spending across other businesses throughout the state economy, resulting in the commonly referred to multiplier effects. We estimate these multiplier effects in this study and report the *additional* economic activity that is created by the initial spending of Texas colleges and universities. Impacts are reported in terms of total income, which is analogous to Gross State Product, and the corresponding number of jobs created.

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\* Note: Although the Lamar Institute of Technology, Lamar State-Orange, and Lamar State-Port Arthur are also considered community colleges, for the purposes of this analysis they are only included under the public general academic colleges and universities. Health science centers associated with the public general academic colleges and universities are not included in this analysis.

## INTELLECTUAL PROPERTY CREATED BY TEXAS COLLEGES AND UNIVERSITIES

	INVENTIONS	PATENT APPLICATIONS	LICENSES
FY10	552	450	92
FY11	526	373	77
FY12	607	422	72
FY13	654	534	71
<b>TOTAL</b>	<b>2,339</b>	<b>1,779</b>	<b>312</b>

*\*\* Note: Our estimated economic impacts are conservative in that we directly take into account the fact that state and local dollars spent on these institutions could have been spent elsewhere in Texas if not directed toward Texas colleges and universities, and thus would have created some economic impacts regardless. We account for these alternative uses of funds directly in our analysis by (i) assuming that if funds were not directed to Texas colleges and universities, they would have been returned to the taxpayer and generate economic impacts through household spending on goods and services, and (ii) subtracting the estimated economic impacts generated by this alternative use of funds from the estimated economic impacts of Texas colleges and universities. Thus, we report a net impact of Texas colleges and universities that is above and beyond what would have occurred had the funds been returned to the taxpayer.*

These economic impacts\*\* break down as follows:

### Operations spending impact

- Payroll and non-pay expenditures to support day-to-day operations (less research) of Texas colleges and universities amounted to **\$10.4 BILLION** and **\$8.4 BILLION**, respectively. The net impact of these institutions' operations spending in Texas during the analysis year was approximately **\$15.7 BILLION** in added state income, which is equivalent to creating **250,364** jobs.

### Research spending impact

- Research activities of Texas colleges and universities impact the state economy by employing people and making purchases for equipment, supplies, and services. They also facilitate new knowledge creation throughout Texas through inventions, patent applications, and licenses. In FY13, Texas colleges and universities spent **\$991.9 MILLION** on payroll to support research activities.
- Research spending of Texas colleges and universities generates **\$2.1 BILLION** in added state income for the Texas economy, which is equivalent to creating **35,811** new jobs.

### Student spending impact

- Around **6%** of graduate and undergraduate students attending Texas colleges and universities originated from outside the state. Some of these students relocated to Texas and spent money on groceries, transportation, rent, and so on at Texas businesses.
- The expenditures of students who relocated to the state during the analysis year added approximately **\$1.5 BILLION** in state income for the Texas economy, which is equivalent to creating **30,876** new jobs.

### Visitor spending impact

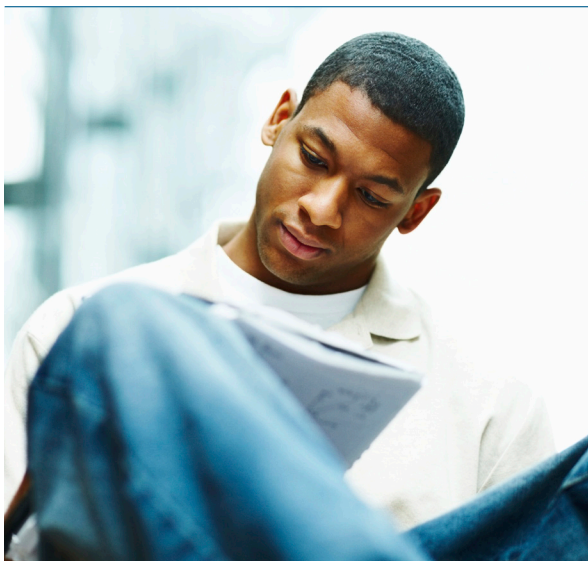
- Out-of-state visitors attracted to Texas for activities at Texas colleges and universities brought new dollars to the economy through their spending at hotels, restaurants, gas stations, and other state businesses.
- Visitor spending added approximately **\$278.2 MILLION** in state income for the Texas economy, which is equivalent to creating **6,157** new jobs.

**IMPACTS CREATED BY TEXAS COLLEGES AND UNIVERSITIES IN FY13**

INCOME	JOBS
<b>\$15.7 BILLION</b>	<b>250,364</b>
Operations spending impact	
<b>\$2.1 BILLION</b>	<b>35,811</b>
Research spending impact	
<b>\$1.5 BILLION</b>	<b>30,876</b>
Student spending impact	
<b>\$278.2 MILLION</b>	<b>6,157</b>
Visitor spending impact	
<b>\$124.3 BILLION</b>	<b>1,934,869</b>
Human capital impact	
<b>\$143.9 BILLION</b>	<b>2,258,077</b>
Total impact	

*Human capital impact*

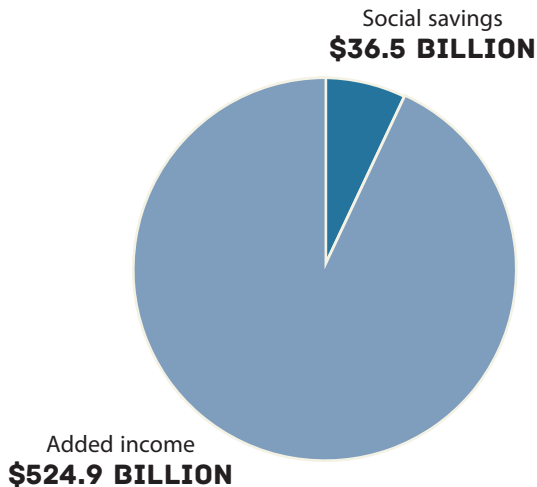
- Over the years, students gained new skills, making them more productive workers, by studying at Texas colleges and universities. Today, hundreds of thousands of these former students are employed in Texas, with an estimated 88% of former students remaining in the state upon exiting these institutions.
- The accumulated contribution of former students of Texas colleges and universities currently employed in the Texas workforce amounted to **\$124.3 BILLION** in added state income to the Texas economy, which is equivalent to creating **1,934,869** new jobs.



## FOR EVERY \$1 SPENT BY...

<b>STUDENTS</b>	<p><b>\$3.50</b></p> <p>Gained in lifetime income for STUDENTS</p>
<b>SOCIETY</b>	<p><b>\$13.20</b></p> <p>Gained in added state income and social savings for SOCIETY</p>
<b>TAXPAYERS</b>	<p><b>\$6.40</b></p> <p>Gained in added taxes and public sector savings for TAXPAYERS</p>

## PRESENT VALUE OF ADDED INCOME AND SOCIAL SAVINGS IN TEXAS



### ABOUT EMSI

Economic Modeling Specialists International turns labor market data into useful information that helps organizations understand the connection between economies, people, and work. Since 2000, EMSI has completed numerous economic impact studies for educational institutions across the US, Canada, the UK, and Australia. It also provides industry-leading labor market data via software and reports to higher education professionals, workforce planners, and regional developers in the U.S. and internationally. For more information, visit [www.economicmodeling.com](http://www.economicmodeling.com).

For a copy of the full report, including a description of the data and methods used, please contact EMSI.

## RETURN ON INVESTMENT TO STUDENTS, SOCIETY, AND TAXPAYERS

### Student perspective

- Students attending Texas colleges and universities during FY13 paid a total of **\$7.9 BILLION** to cover the cost of tuition, fees, books, and supplies. They also forwent **\$20.4 BILLION** in money that they would have earned had they been working instead of learning.
- In return for the money students invest to earn their degrees, they will receive a present value of **\$98 BILLION** in estimated increased earnings over their working lives.
- This translates to a return of **\$3.50** in higher future income for every \$1 that students invest in their education. The average annual return for students is **14.3%**.

### Societal perspective

- Texans will receive a present value of **\$524.9 BILLION** in added state income over the course of the students' working lives. There is also a benefit of **\$36.5 BILLION** in present value social savings related to reduced crime, lower unemployment, and increased health and well-being associated with enrollment in postsecondary education.
- For every dollar spent on educations at Texas colleges and universities during the analysis year, Texans will receive a cumulative value of **\$13.20** in benefits, for as long as the FY13 students of Texas colleges and universities remain active in the state workforce.

### Taxpayer perspective

- In FY13, state and local taxpayers in Texas invested **\$6.4 BILLION** to support the operations of Texas colleges and universities. The net present value of the added tax revenue stemming from the students' higher lifetime incomes and the increased output of businesses amounts to **\$34.9 BILLION** in benefits to taxpayers. Savings to the public sector add another **\$6.2 BILLION** in benefits due to a reduced demand for government-funded services in Texas.
- Dividing benefits to taxpayers by the associated costs yields a **6.4** benefit-cost ratio, i.e., every \$1 in costs returns \$6.40 in benefits. The average annual return on investment for taxpayers is **18.5%**.