Post-Secondary Employment Outcomes

Using National Jobs Data to Measure Graduate Impacts

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Senior Economist, LEHD
U.S. Census Bureau

Any opinions and conclusions expressed herein are those of the author(s) and do not necessarily represent the views of the U.S. Census Bureau. All results have been approved for disclosure.
A joint pilot project between university systems, state longitudinal data systems, and the Census Bureau, the Post-Secondary Employment Outcomes (PSEO) are experimental tabulations providing national earnings statistics for graduates of post-secondary institutions.

Goal:

- Provide students and parents better data on the return on investment of and employment destinations for post-secondary degrees
Meeting a Data Need

There is a great deal of interest in making the economic returns to higher education more transparent.

- Institutions want to know how their graduates are doing after they leave campus
- Students want to know how much a degree could increase their earning potential, and whether or not borrowing for college is a sound investment.
- Policy makers/economic/workforce development specialists want to better understand the role of higher education in regional economic development.
Comparison with other initiatives

**College Scorecard:**
- Obama administration initiative to promote transparency in returns to college
- Data on earnings by institution, for enrollees who received financial aid
- *Shortcomings:* No program level data, not broken out by whether student graduated with a degree

**State-level initiatives**
- Lots of state higher education boards and university systems have partnered with their workforce agencies to match UI data to university records
- Publically available data from these projects vary, but many release institution or program level data
- *Shortcomings:* Earnings captured only for graduates that remain in the state, no universal methodology makes comparing earnings across programs difficult
PSEO Output Tables

- **Graduate Earnings Table**
  - 25th, 50th, and 75th percentiles of annual earnings for college and university graduates
  - By degree level, degree major, and post-secondary institution
  - One year, five years, and 10 years after graduation

- **Employment Flows Table**
  - Employment by industry sector and Census Division of the country
  - By degree level, degree major, and post-secondary institution
  - One year, five years, and 10 years after graduation
Post-Secondary Employment Outcomes (PSEO)
Can compare short run vs long run returns to degree

Initial Earnings and Earnings Growth 10 Years After Degree:
University of Texas at Austin Graduates

Source: U.S. Census Bureau, Post-Secondary Employment Outcomes (PSEO) data for the 2001-2003 graduate cohort of University of Texas at Austin. Select majors. Earnings are in 2016 dollars.
Post-Secondary Employment Outcomes (PSEO)
Can compare similar degrees across institutions

Earnings Outcomes for Different Types of Nursing Degrees for Graduates from Selected Institutions in Colorado

University of Texas, Austin
University of Colorado - Boulder
University of Michigan – Ann Arbor
Currently partnering with Census for the PSEO pilot are:

- The University of Texas System
- Colorado Department of Higher Education (all public two- and four-year institutions in Colorado)
- University of Michigan, Ann Arbor; University of Wisconsin, Madison.

Currently in talks to expand pilot to public four-year institutions and community colleges in seven states, with a longer queue after that.
Next Steps

- Incorporate W2 and 1099 data to improve earnings data coverage
- Expand number of participating institutions
- Data visualization tool for the Employment Flows tables
Outcomes Resulting from The University of Texas System and the United States Census Bureau Partnership

David R. Troutman, Ph.D., Associate Vice Chancellor
University of Texas System
Office of Institutional Research and Analysis
Higher Education Environment

- Value of a degree
- Return on investment (ROI)
- Rising cost of education
  - Student debt

**Sources:** FADS and Pew Research Center analysis of Federal Reserve Board’s 2016 Survey of Household Economics and Decisionmaking. *First-time students who entered in academic years 2002-2015*
UT System’s Partnership with the U.S. Census Bureau
UT System’s Solution –

The University of Texas System

SEEK U.T.®
What Is seekUT?

• seekUT is a free, online consumer tool developed with the input of students for students
  – Shows a 10-year data span of earnings in the context of average loan debt, by program
  – Offers the ability to compare earnings and debt by various programs side-by-side
  – Goes beyond the median to show percentiles
  – Indicates the percent of students who continue their education beyond baccalaureate degree
How much do UT graduates earn nationally, and how much do they owe in student loans? How much do earnings vary for UT graduates with the same major?

1st-, 5th-, 10th-Year Median Earnings and Median Loan

<table>
<thead>
<tr>
<th>Major</th>
<th>1st-Year Median Earnings</th>
<th>5th-Year Median Earnings</th>
<th>10th-Year Median Earnings</th>
<th>Median Loan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounting And Related Services</td>
<td>$58K</td>
<td>$89K</td>
<td>$124K</td>
<td>$23K</td>
</tr>
<tr>
<td>Biology, General</td>
<td>$35K</td>
<td>$54K</td>
<td>$85K</td>
<td>$25K</td>
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<tr>
<td>Economics</td>
<td>$53K</td>
<td>$72K</td>
<td>$97K</td>
<td>$25K</td>
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</table>

For More Information:
- Accounting And Related Services: [http://www.mccombs.utexas.edu/departments/accounting](http://www.mccombs.utexas.edu/departments/accounting)
- Biology, General: [https://cns.utexas.edu/students/degrees-majors-advising/majors#biology](https://cns.utexas.edu/students/degrees-majors-advising/majors#biology)
- Economics: [https://labe/arts.utexas.edu/economics/](https://labe/arts.utexas.edu/economics/)

Note: If there are not enough data points for selected items, no graph will appear.

Click button to start over ->

About the Data
How much do UT graduates earn nationally, and how much do they owe in student loans? How much do earnings vary for UT graduates with the same major?

1st-, 5th-, 10th-Year Median Earnings and Median Loan

<table>
<thead>
<tr>
<th>Field of Interest</th>
<th>1st-Year Median Earnings</th>
<th>5th-Year Median Earnings</th>
<th>10th-Year Median Earnings</th>
<th>Median Loan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounting And Related Services</td>
<td>$58,460</td>
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<td></td>
<td>$124K</td>
</tr>
<tr>
<td>Business, Management, Marketing, And Related Support Services</td>
<td>$4,872</td>
<td>$7,454</td>
<td>$10,362</td>
<td>$240</td>
</tr>
<tr>
<td>Economics</td>
<td>$89K</td>
<td>$53K</td>
<td>$25K</td>
<td>$7K</td>
</tr>
</tbody>
</table>

Major

- Accounting And Related Services
- Biology, General
  - For More Information: [https://cns.utexas.edu/students/degree-majors-advising/majors#biology](https://cns.utexas.edu/students/degree-majors-advising/majors#biology)
- Economics
  - For More Information: [https://liberalarts.utexas.edu/economics/](https://liberalarts.utexas.edu/economics/)
To get started select field(s) and institution that interests you below. Use the tabs on the right to explore other sections of the report. Use reset buttons to start over.

Note: If there are not enough data points for selected items, no graph will appear.

Step 1) Select Field(s) of Interest
Multiple selections

Step 2) Select Institution
UT Austin

Click button to start over ->

Student Loan Payment as a Percent of Monthly Pre-Tax Salary at 1, 5, and 10 Years After Graduation

- Debt to Income Ratio After 1 Year
- Debt to Income Ratio After 5 years
- Debt to Income Ratio After 10 Years

Recommended Threshold: 10% of Income

Percent of First-Time College Students Who Took Out Loans
To get started select area(s) of interest and institution that interests you below. Use the tabs on the right to explore other sections of the report. Use reset buttons to start over.

Note: If there are not enough data points for selected items, no graph will appear.

**Step 1) Select Area(s) of Interest**

**Step 2) Select Institution**

**UT Austin**

How to read this chart: Horizontal location (along the X-axis) shows first-year median earnings. Vertical location (along the Y-axis) shows fifth-year median earnings. Bubble size is the number of most recent graduates (2018) in that area. Color of bubble represents the degree major.

About the Data
To get started select area(s) of interest in institution that interests you below. Use the tabs on the right to explore other sections of the report. Use reset buttons to start over.

Note: If there are not enough data points for selected items, no graph will appear.

**Step 1) Select Area(s) of Interest**

All

**Step 2) Select Institution**

UT Austin

**UT Austin**

How to read this chart: Horizontal location (along the X-axis) shows first-year median earnings. Vertical location (along the Y-axis) shows fifth-year median earnings. Bubble size is the number of most recent graduates (2018) in that area. Color of bubble represents the degree major.

**Median 1st-Year and 5th-Year Earnings Trends by Area of Study and Most Recent Graduates**

- **Area of study**
  - Petroleum Engineering

- **1st-Year Median Earnings**
  - $119,936

- **5th-Year Median Earnings**
  - $182,940

- **Most recent graduating cohort**
  - 88
Follow Your Passion

Here are our alumni who did just that:

16 Women Scientists at UT Health Science Center at San Antonio

Get to know 16 women scientists at the University of Texas Health Science Center at San Antonio (UTHSCSA) and learn what inspired them to follow their passion and pursue a career in science.

Photo Credit: Naomi Vadasz
Read More

Rebecca Thompson

Four Generations of Medicine – It’s in Her DNA

Rebecca Thompson graduated from McGovern Medical School at The University of Texas Health Science Center at Houston (UTHealth) in 2018. The calling came a little later for Rebecca, age 32, who previously pursued a career as an engineer before realizing that medicine was in her blood, too. She followed her passion and continues a four-generation-strong family legacy.

Photo Credit: UTHealth, Manzur Khan
Read More

Jesus Castellano

Don’t Give Up and Stay Humble

Jesus Castellano, who graduated in 2018 with an economics major in the College of Liberal Arts, is the first person in his immediate family to attend and even apply to college. Castellano talks about his transformative experiences at UT Austin, as well as looks ahead to his new position at Google in Ann Arbor, Michigan.

Photo Credit: UT News
Read More
EMPLEYMENT OUTCOMES

UT AUSTIN BACCALAUREATES

CONTINUING THEIR EDUCATION

| % who ever attended any additional school | 49.5% | 49.5% |
| % who received a degree/certificate (all levels) | 24.5% | 24.5% |
| Additional years completed (median) | 1 | 2 |

Note: Data comes from the National Student Clearinghouse.

TOP 3 INDUSTRIES WHERE GRADUATES WERE WORKING AFTER GRADUATION

Graduates found working in Texas from the Texas Workforce Commission (TWC). Industries as defined by the North American Industry Classification System (NAICS, 2-digit). Note: Records do not include employer, so work "in field" cannot be verified. For some majors and industries the connection may be more obvious. More detail about match rates on the next page.

EARNINGS AFTER GRADUATION

Gross wages of graduates found working in Texas for the equivalent of full-time for a full year and not enrolled in school. Adjusted for inflation (2014 dollars).

The University of Texas at UT Austin - Business Administration and Management, General

What kinds of industries do graduates go into and how much are they earning? Most Higher Education institutions either survey their graduates or are simply unable to collect earnings information. In 2014, the University of Texas System reached an agreement with the U.S. Census Bureau to share earnings and industry data. Since 2014, the UT System has disseminated that data through its interactive website, SeekUT https://seekut.tsystems.edu/, which allows any user to explore graduate earnings information. The purpose of this brief is to highlight the employment outcomes from the University of Texas at UT Austin.

EARNINGS AFTER GRADUATION, ADJUSTED FOR INFLATION

MEDIAN LOAN DEBT AND PERCENTAGE OF STUDENTS WHO TAKE OUT LOANS
Important Additional Data Uses
Graduate Migration
FINDINGS

- 60% of all degree recipients at academic institutions and 64% of all degree recipients at health institutions are found working in Texas after one-year.
Percentage of Graduates Found Working In-State, Out-of-State, or Unknown

Academic Institutions

<table>
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<tr>
<th></th>
<th>Bachelor's</th>
<th>Master's</th>
<th>Doctoral Research</th>
<th>Doctoral Professional</th>
<th>Total (All Degrees)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-year</td>
<td>61%</td>
<td>61%</td>
<td>31%</td>
<td>64%</td>
<td>60%</td>
</tr>
<tr>
<td>5-years</td>
<td>56%</td>
<td>53%</td>
<td>27%</td>
<td>59%</td>
<td>54%</td>
</tr>
<tr>
<td>10-years</td>
<td>58%</td>
<td>45%</td>
<td>24%</td>
<td>47%</td>
<td>54%</td>
</tr>
<tr>
<td></td>
<td>61%</td>
<td>61%</td>
<td>31%</td>
<td>64%</td>
<td>60%</td>
</tr>
<tr>
<td></td>
<td>56%</td>
<td>53%</td>
<td>27%</td>
<td>59%</td>
<td>54%</td>
</tr>
<tr>
<td></td>
<td>58%</td>
<td>45%</td>
<td>24%</td>
<td>47%</td>
<td>54%</td>
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</tbody>
</table>

- In-state
- Out-of-state
- Unknown
Health Institutions

<table>
<thead>
<tr>
<th></th>
<th>Bachelor's</th>
<th>Master's</th>
<th>Doctoral Research</th>
<th>Doctoral Professional</th>
<th>Total (All Degrees)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-year</td>
<td>81%</td>
<td>66%</td>
<td>38%</td>
<td>52%</td>
<td>64%</td>
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<tr>
<td>5-years</td>
<td>11%</td>
<td>22%</td>
<td>25%</td>
<td>48%</td>
<td>31%</td>
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<tr>
<td>10-years</td>
<td>19%</td>
<td>18%</td>
<td>37%</td>
<td>45%</td>
<td>32%</td>
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<tr>
<td></td>
<td>27%</td>
<td>22%</td>
<td>33%</td>
<td>27%</td>
<td>21%</td>
</tr>
</tbody>
</table>

- In-state
- Out-of-state
- Unknown
Where are graduates found working (excluding Texas) by region after one year?
Darkest (most) to lightest (least)
Excludes unclassified graduates
## UT System bachelor’s degree holders who stay in Texas 1, 5 and 10 years after graduation by institutions
(excludes Unclassified students)

<table>
<thead>
<tr>
<th>Institution</th>
<th>1-year In-State %</th>
<th>In-State</th>
<th>Out-of-State</th>
<th>5-years In-State %</th>
<th>In-State</th>
<th>Out-of-State</th>
<th>10-years In-State %</th>
<th>In-State</th>
<th>Out-of-State</th>
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</thead>
<tbody>
<tr>
<td>UTMB</td>
<td>93.9%</td>
<td>3,949</td>
<td>255</td>
<td>91.9%</td>
<td>2,379</td>
<td>211</td>
<td>89.4%</td>
<td>1,146</td>
<td>136</td>
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<tr>
<td>UTHSCSA</td>
<td>92.0%</td>
<td>4,273</td>
<td>371</td>
<td>89.7%</td>
<td>2,548</td>
<td>294</td>
<td>90.4%</td>
<td>1,220</td>
<td>129</td>
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<td>UTHSCH</td>
<td>92.0%</td>
<td>3,065</td>
<td>268</td>
<td>90.8%</td>
<td>1,483</td>
<td>150</td>
<td>86.8%</td>
<td>526</td>
<td>80</td>
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<tr>
<td>UTRGV</td>
<td>91.2%</td>
<td>22,885</td>
<td>2,207</td>
<td>89.6%</td>
<td>17,004</td>
<td>1,984</td>
<td>87.0%</td>
<td>7,766</td>
<td>1,161</td>
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<td>UTSA</td>
<td>89.8%</td>
<td>34,949</td>
<td>3,952</td>
<td>87.8%</td>
<td>23,868</td>
<td>3,303</td>
<td>87.1%</td>
<td>11,098</td>
<td>1,648</td>
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<td>UTA</td>
<td>88.0%</td>
<td>43,007</td>
<td>5,860</td>
<td>85.4%</td>
<td>25,815</td>
<td>4,430</td>
<td>84.1%</td>
<td>11,857</td>
<td>2,245</td>
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<td>UTD</td>
<td>87.7%</td>
<td>19,916</td>
<td>2,806</td>
<td>81.8%</td>
<td>13,497</td>
<td>3,010</td>
<td>81.5%</td>
<td>5,940</td>
<td>1,350</td>
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<td>UTEP</td>
<td>83.7%</td>
<td>20,946</td>
<td>4,076</td>
<td>81.8%</td>
<td>14,649</td>
<td>3,270</td>
<td>78.3%</td>
<td>6,365</td>
<td>1,767</td>
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<td>UTSWMC</td>
<td>83.6%</td>
<td>499</td>
<td>98</td>
<td>77.8%</td>
<td>466</td>
<td>133</td>
<td>90.3%</td>
<td>297</td>
<td>32</td>
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<td>UTT</td>
<td>83.6%</td>
<td>10,217</td>
<td>2,011</td>
<td>82.1%</td>
<td>6,553</td>
<td>1,426</td>
<td>85.2%</td>
<td>2,927</td>
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<td>UTMDA</td>
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<td>755</td>
<td>149</td>
<td>85.4%</td>
<td>293</td>
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<td>56.6%</td>
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<td>UT-Austin</td>
<td>80.4%</td>
<td>69,327</td>
<td>16,952</td>
<td>74.4%</td>
<td>50,590</td>
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<td>4,766</td>
<td>1,424</td>
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<td>3,194</td>
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<td>78.9%</td>
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<td>Institution</td>
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<td>Highest Region 10-year</td>
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<td>Pacific Division</td>
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Value of Higher Education
At 10 years post-exit, UT graduates earn $45,000 more than high school graduates.
Monitoring Program Performance - National

- For UT System baccalaureate programs
  - 92% have debt-to-income ratio of 10% or less – 1 year after graduation
  - 99% have debt-to-income ratio of 10% or less – 5 years after graduation
Communicating Liberal Arts Degree Value, National

- Median first-year earnings for 2/3 of graduates of UT System non-STEM programs are higher than the national individual median income of $35,380

- Notable median incomes include
  - Music, $50,856
  - Rhetoric and composition, $46,790
  - Romance languages and literature, $42,841
  - Philosophy, $39,729
Intergenerational Income Mobility: Percentage of Students who Earn more than their Parents within Five Years

<table>
<thead>
<tr>
<th>Parental Household Income</th>
<th>Non-Graduates</th>
<th>Graduates</th>
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</thead>
<tbody>
<tr>
<td>Less than $23,487</td>
<td>58.5%</td>
<td>84.9%</td>
</tr>
<tr>
<td>$23,490 - $40,715</td>
<td>25.7%</td>
<td>69.4%</td>
</tr>
<tr>
<td>$40,715 - $65,317</td>
<td>12.5%</td>
<td>46.9%</td>
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<tr>
<td>$65,323 - $106,314</td>
<td>7.1%</td>
<td>23.7%</td>
</tr>
</tbody>
</table>
The image shows a bar graph comparing the household income distribution of completers versus non-completers in different income quintiles. The graph is divided into five quintiles, each represented in a separate bar chart.

- **Quintile 1 ($0-$23,500):**
  - Completer: 17.0%
  - Non-completer: 24.6%

- **Quintile 2 ($23,500-$40,500):**
  - Completer: 18.1%
  - Non-completer: 26.1%

- **Quintile 3 ($40,500-$65,500):**
  - Completer: 20.7%
  - Non-completer: 26.2%

- **Quintile 4 ($65,500-$106,500):**
  - Completer: 23.7%
  - Non-completer: 25.8%

- **Quintile 5 ($106,500+:**
  - Completer: 29.6%
  - Non-completer: 29.6%

The graph indicates that completers tend to have higher incomes in each quintile compared to non-completers.
Questions