

Hibbs Brief

Hibbs Institute for Business & Economic Research

The University of Texas at Tyler Economic Impact on Texas (5-Year Graduates' Income)

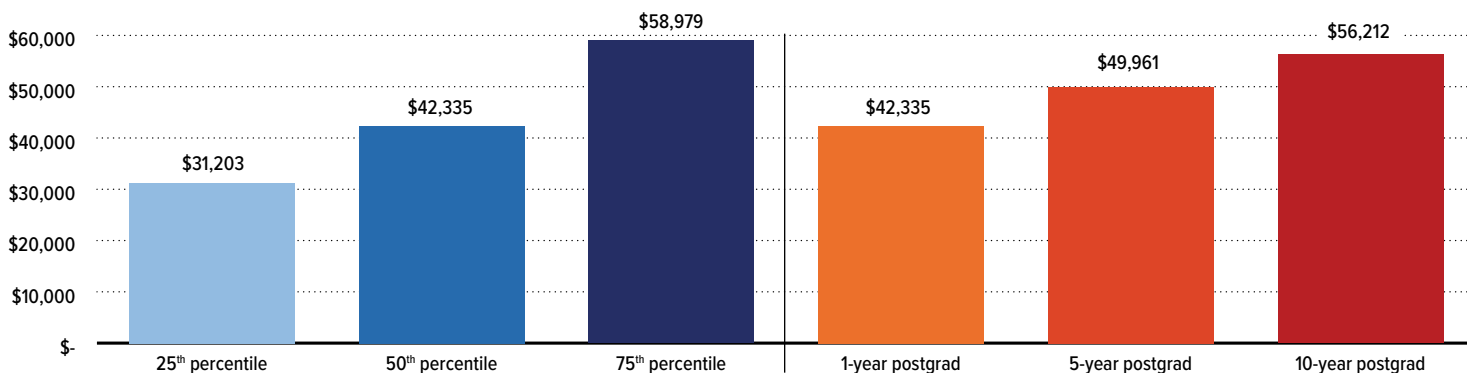
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Happy New Year to all our readers! We, at the *Hibbs Institute*, wish the best to you and your family, both professionally and personally this year. In this issue of the *Hibbs Brief* we discuss the economic impact of University of Texas at Tyler graduates' income. This is one of several economic engines that UT Tyler provides to the city of Tyler, East Texas and the entire state of Texas.

Today, UT Tyler enrolls nearly 10,000 students in more than 80 bachelor's, master's and doctoral degree programs. With an increasing number of graduates of any of our degree programs, UT Tyler significantly contributes not only to the region's academic and professional development, but also to the state of Texas. These graduates (after a nice familiar celebration) are hired by a company or an organization and earn a salary. That salary, once spent, creates a ripple effect and generates additional jobs associated with the products and services that the recent graduates demand (dwelling, clothing, restaurants, bars, general merchandise, etc.).

Salaries among professionals typically vary by their degrees (major), particularly among young professionals and recent graduates. The U.S. Census Bureau recently released a new interactive database,¹ the Post-Secondary Employment Outcome Explorer (PSEO), where users are able to choose among several options, such as state, university or degree, to find out annual earnings estimates.² The database also allows users to graph annual earnings for the degree level, percentile earnings (25th, 50th or 75th) and number of postgraduate years (one year, five years or 10 years). **Figure 1** depicts UT Tyler's estimated annual earnings for baccalaureates (average of all instructional programs) with 25th, 50th and 75th percentile levels of income and after one, five and 10 years from graduation.

Figure 1. Estimated Annual Earnings of Degree Holders (Baccalaureate Degrees, All Instructional Programs) by Percentile (Blue) and Years Postgraduate (Orange)



Note: 2016 Dollars.

Source: U.S. Census; Post-Secondary Employment Outcomes Explorer (PSEO).

We have estimated the economic impact of the income earned by UT Tyler graduates on the state of Texas during the last five years. Since the state income tax is exempted in Texas, the tax payment every year may be about one-third less than the one in other states. This would greatly relieve the tax pressure when recent graduates begin to work. Perhaps this is one reason why the majority of UT Tyler graduates are hired within the state of Texas, at least during their early years after graduating. According to the PSEO, 86% of UT Tyler graduates found a job in Texas during their first year in the labor market.³

We used annual earnings by degree (50th percentile and one-year postgraduates)⁴ and multiplied them by the number of graduates⁵ of each bachelor's and master's program⁶ from UT Tyler to estimate the total potential earnings in a given year. We did this calculation for the last five academic years (2014-2015 through 2018-2019). The resulting sum of the total potential earnings during those five academic years was \$1.36 billion (Table 1).

This total for potential earnings during five academic years (\$1.36 billion) was used to estimate the income ripple effect in the state of Texas. The resulting economic benefits are substantial. The combined earnings impact of UT Tyler graduates of bachelor's and master's programs (five years from 2015 to 2019) totals \$1.8 billion additional output to the state of Texas. In terms of job generation, the economic impact on the state of Texas is also relevant. In 2019, the year with the largest impact, graduates would support 4,481 jobs in Texas. Please note that jobs cannot be added along the studied timeframe as they may or may not be the same people employed in a different year.

Finally, let us remark that this exercise estimates the economic impacts of graduates of bachelor's and master's programs during only five years. Such estimates, although substantial, are only a portion of UT Tyler's economic contribution to Texas. UT Tyler has several more elements that stimulate the local and regional economies not discussed in this brief. Yet, we can observe that UT Tyler constitutes a significant economic driver to Tyler, East Texas and the overall state.

Table 1. Number of Graduates, Earnings and Estimated Impact on Texas (2015-2019)

Year	Number of Graduates (Bachelor's and Master's)	Estimated Earnings* (added by end of 2019)	Economic Impact on Texas	
			Additional Jobs**	Additional Output(\$)
2015	1,894	\$46,068,697	397	\$61,106,468
2016	2,228	\$147,033,723	1,269	\$195,028,555
2017	2,428	\$261,726,975	2,258	\$347,160,044
2018	2,771	\$387,055,239	3,339	\$513,398,031
2019	2,863	\$519,351,475	4,481	\$688,878,480
Total	12,184	\$1,361,236,109	-	\$1,805,571,578

Notes: 2019 Dollars.

* Each year's estimated earnings correspond to the added academic year generations starting in May (2014-2015 generation earnings correspond to 2015 estimates; 2014-2015, plus 2015-2016 generation earnings correspond to 2016; 2014-2015, plus 2015-2016, plus 2016-2017 generation earnings correspond to 2017, etc.).

** Jobs cannot be added along the studied timeframe as they may or may not be the same people employed in a different year.

Source: The number of graduates were obtained from the Office of Information Analysis at UT Tyler; the estimated earnings were obtained from the U.S. Census Bureau; the economic impacts were estimated by the *Hibbs Institute* using IMPLAN model V.3.

¹ The *Hibbs Institute* is grateful to Dr. Colleen Swain for pointing out the recent release of this useful U.S. Census database.

² Post-Secondary Employment Outcomes Explorer (PSEO). U.S. Census Bureau. <https://lehd.ces.census.gov/>

³ IDEM.

⁴ In the *Hibbs Institute*, we would rather underestimate than overestimate our numbers. We used the 50th percentile and the one-year postgraduate estimates to conduct all our calculations, although we understand that some of the graduates in their early years have increased their annual earnings. Also, as students typically graduate in May, only six months (0.5 of annual earnings) are used to calculate total potential earnings per year.

⁵ We obtained the number of graduates per academic year by department and degree from the Office of Information Analysis at UT Tyler. The University of Texas at Tyler Fact Book. https://webfocus.uttyler.edu/ibi_apps/bip/portal/Fact_Book

⁶ We only included bachelor's and master's degree programs in our estimates. Annual earnings on certificate programs are not available and doctoral programs may follow a different hiring dynamic, which may lead doctoral graduates to work in a different state (to Texas).

