



The Economic Value of Texas Woman's University

EXECUTIVE SUMMARY





EXAS Woman's University (Texas Woman's) creates value in many ways. The university plays a key role in helping students increase their employability and achieve their individual potential. The university facilitates new

research developments and draws visitors and students to the state, generating new dollars and opportunities for Texas. Texas Woman's provides students with the education, training, and skills they need to have fulfilling and prosperous careers. Furthermore, Texas Woman's is a place for students to meet new people, increase their self-confidence, and promote their overall health and well-being.

Texas Woman's influences both the lives of its students and the state economy. The university supports a variety of industries in Texas, serves state businesses, and benefits society as a whole in Texas

from an expanded economy and improved quality of life. The benefits created by Texas Woman's even extend to the state government through increased tax revenues and public sector savings.

This study measures the economic impacts created by Texas Woman's on the business community and the benefits 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 employee, student, and financial data, provided by the university, for fiscal year (FY) 2017-18. Impacts on the Texas economy are reported under the economic impact analysis and are measured in terms of added income. The returns on investment to students, taxpayers, and society in Texas are reported under the investment analysis.

The value of Texas Woman's University influences both the lives of its students and the state economy.





Texas Woman's promotes economic growth in Texas through its direct expenditures and the resulting expenditures of visitors, students, and state 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 visitors and students from outside Texas, whose expenditures benefit state vendors. In addition, Texas Woman's is a primary source of higher education to Texas residents and a supplier of trained workers to state industries, enhancing overall productivity in the state workforce.

Operations Spending Impact



Texas Woman's adds economic value to Texas as an employer of state residents and a large-scale buyer of goods and services. In FY 2017-18, the university employed 2,161 full-time and part-time faculty

and staff (not including research employees), 100% of whom lived in Texas. Total payroll at Texas Woman's was \$124.5 million (excluding payroll from research employees), much of which was spent in the state for groceries, mortgage and rent payments, dining out, and other household expenses. In addition, the university spent \$63.6 million on day-to-day expenses related to facilities, supplies, and professional services (excluding research expenditures).

The day-to-day operations spending of Texas Woman's added \$144.4 million in income to the state during the analysis year. This figure represents the university's payroll, the multiplier effects generated by the in-state spending of

IMPACTS CREATED BY TEXAS WOMAN'S IN FY 2017-18















- OR -

29,112
JOBS SUPPORTED

the university and its employees, and a downward adjustment to account for funding that the university received from state sources. The \$144.4 million in added income is equivalent to supporting 2,400 jobs in the state.

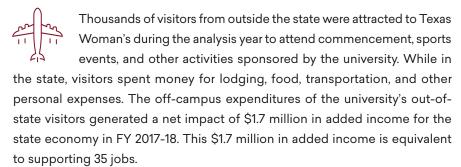
Research Spending Impact

Research activities impact the economy by employing people and requiring the purchase of equipment and other supplies and services. In FY 2017-18, Texas Woman's spent \$1.8 million on payroll to support research activities. This, along with \$3 million in other research spending, created a net total of \$4.6 million in added income for the state economy. This added income is equivalent to supporting 61 jobs.

Construction Spending Impact

Texas Woman's commissioned contractors to build or renovate its facilities in FY 2017-18. The quick infusion of income and jobs that occurred in the state economy as a result of this construction spending is considered short-term due to the one-time nature of such projects. Nonetheless, the university's construction spending had a substantial impact on the state economy in FY 2017-18, equal to \$27.4 million in added income and equivalent to supporting 372 jobs.

Visitor Spending Impact



Student Spending Impact

Around 4% of students attending Texas Woman's originated from outside the state in FY 2017-18, and all of these students relocated to Texas to attend Texas Woman's. These students may not have come to the state if the university did not exist. In addition, some in-state students, referred to as retained students, would have left Texas if not for the existence of Texas Woman's. While attending the university, these relocated and retained students spent money on groceries, accommodation, transportation, and other household expenses. This spending generated \$28.4 million in added income for the state economy in FY 2017-18, which supported 512 jobs in Texas.

Alumni Impact



The education and training Texas Woman's provides for state residents has the greatest impact. Since its establishment, students have studied at Texas Woman's and entered the state workforce with

greater knowledge and new skills. Using Emsi's Alumni Outcomes data, many of the university's alumni are employed in the state workforce in healthcare, technical, management, and education occupations, with the top occupations being nurses and postsecondary and elementary teachers. As a result of their Texas Woman's education, the students receive higher earnings and increase the productivity of the businesses that employ them. In FY 2017-18, Texas Woman's alumni generated \$1.6 billion in added income for the state economy, which is equivalent to supporting 25,731 jobs.

Total Impact

Texas Woman's added \$1.8 billion in income to the Texas economy during the analysis year, equal to the sum of the operations, research, and construction spending impacts, the visitor and student spending impacts, and the alumni impact.

The university's total impact can also be expressed in terms of jobs supported. The \$1.8 billion impact supported 29,112 state jobs, using the jobs-to-sales ratios specific to each industry in the state. In addition, the \$1.8 billion, or 29,112 supported jobs, impacted state industries in different ways. Among non-education industry sectors, Texas Woman's supported the most jobs in the Health Care & Social Assistance industry sector – supporting over 6,000 jobs in FY 2017-18. These are impacts that would not have been generated without the university's presence in Texas.

TOP INDUSTRIES IMPACTED BY TEXAS WOMAN'S (JOBS SUPPORTED)



6,140

Health Care & Social Assistance



4,565

Retail Trade



1,892

Accommodation & Food Services



Administrative & Waste Services



Other Services (except Public Administration)

Over 29,000 jobs are supported by the activities of Texas Woman's and its students.

Investment analysis

An investment analysis evaluates the costs associated with a proposed venture against its expected benefits. If the benefits outweigh the costs, then the investment is financially worthwhile. The analysis presented here considers Texas Woman's as an investment from the perspectives of students, taxpayers, and society in Texas.

Student Perspective



In FY 2017-18, Texas Woman's served 17,820 degree-seeking students. 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 college. The total investment made by the university's students in FY 2017-18 amounted to a present value of \$268.1 million, equal to \$89.2 million in out-of-pocket expenses (including future principal and interest on student loans) and \$178.9 million in forgone time and money.

In return for their investment, the university's students will receive a stream of higher future earnings that will continue to grow throughout their working lives. For example, the average Texas Woman's bachelor's degree graduate from FY 2017-18 will see an increase in earnings of \$27,900 each year compared to a person with a high school diploma or equivalent working in Texas.² Over a working lifetime, the benefits of the bachelor's degree over a high school diploma will amount to an undiscounted value of \$1.1 million in higher earnings per graduate. Altogether, FY 2017-18 students will receive \$1.2 billion in

STUDENTS SEE A HIGH RATE OF RETURN FOR THEIR INVESTMENT IN TEXAS WOMAN'S



17.3%

Average Annual Rate of Return for Texas Woman's Students



10.1%

Stock market 30-year average annual return

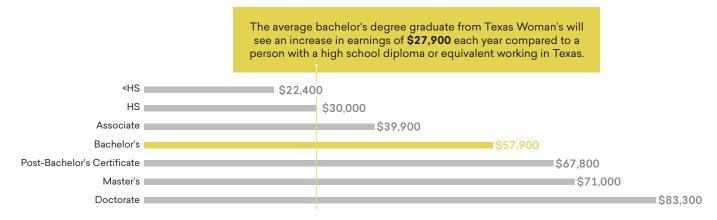


0.8%

Interest earned on savings account (National Rate Cap)

Source: Forbes' S&P 500, 1987-2016. FDIC.gov, 7-2016.

- Note that this is an annual enrollment.
- 2 Earnings data was calculated using complete Emsi earnings data supported by Texas Woman's Alumni Outcomes



Source: Emsi complete employment data.

higher future earnings over their working lives, as a result of their education and training at Texas Woman's.

The students' benefit-cost ratio is 4.4. In other words, for every dollar students invest in Texas Woman's, in the form of out-of-pocket expenses and forgone time and money, they will receive a cumulative value of \$4.40 in higher future earnings. Annually, the students' investment in Texas Woman's has an average annual internal rate of return of 17.3%, which is impressive compared to the U.S. stock market's 30-year average rate of return of 10.1%.

Taxpayer Perspective



Texas Woman's generates more in tax revenue than it takes. These benefits to taxpayers consist primarily of taxes that the state government will collect from the added revenue created in the state. As

Texas Woman's students will earn more, they will make higher tax payments throughout their working lives. Students' employers will also make higher tax payments as they increase their output and purchases of goods and services. By the end of the FY 2017-18 students' working lives, the state government will have collected a present value of \$345.5 million in added taxes.

Benefits to taxpayers will also consist of savings generated by the improved lifestyles of Texas Woman's students and the corresponding reduced government services. Education is statistically correlated with a variety of lifestyle changes. Students' Texas Woman's educations will generate savings in three main categories: 1) healthcare, 2) crime, and 3) income assistance. Improved health will lower students' demand for national health care services. In addition, students will be less likely to interact with the criminal justice system, resulting in a reduced demand for law enforcement and victim costs. Texas Woman's students will be more employable, so their reduced demand for income assistance such as welfare and unemployment benefits will benefit taxpayers. For a list of study references, contact the university for a copy of the main report. Altogether, the present value of the benefits associated with a Texas Woman's education will generate \$69.8 million in sav-

ings to state taxpayers.

Total taxpayer benefits amount to \$415.3 million, the present value sum of the added taxes and public sector savings. Taxpayer costs are \$85.8 million, equal to the amount of state government funding Texas Woman's received in FY 2017-18. These benefits and costs yield a benefit-cost ratio of 4.8.

For every dollar of public money invested in Texas Woman's, taxpayers will receive a cumulative value of **\$4.80** over the course of the students' working lives.



STUDENT PERSPECTIVE

\$1.2 billion
Present value benefits

\$268.1 million
Present value costs

\$916.3 million Net present value

Benefit-cost Ratio

Rate of Return

4.4

17.3%



TAXPAYER PERSPECTIVE

\$415.3 million
Present value benefits

\$85.8 million
Present value costs

\$329.5 million Net present value

Benefit-cost Ratio

Rate of Return

4.8

11.8%



SOCIAL PERSPECTIVE

\$6 billion
Present value benefits

\$459 million Present value costs

\$5.5 billion Net present value

Benefit-cost Ratio

Rate of Return

13.0

n/a*

* 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. This means that for every dollar of public money invested in Texas Woman's in FY 2017-18, taxpayers will receive a cumulative value of \$4.80 over the course of the students' working lives. The average annual internal rate of return for taxpayers is 11.8%, which compares favorably to other long-term investments in the public and private sectors.

Social Perspective



Society as a whole in Texas benefits from the presence of Texas Woman's University in two major ways. Primarily, society benefits from an increased economic base in the state. This is attributed to

higher student earnings and increased business output, which raise economic prosperity in Texas.

Benefits to society also consist of the savings generated by the improved lifestyles of Texas Woman's students. As discussed in the previous section, education is statistically correlated with a variety of lifestyle changes that generate social savings. Note that these costs are avoided by the consumers but are distinct from the costs avoided by the taxpayers outlined above. Healthcare 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, contact the university for a copy of the main report.

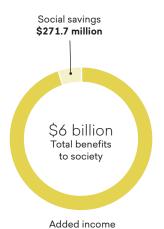
Altogether, the social benefits of Texas Woman's equal a present value of \$6 billion. These benefits include \$5.7 billion in added income through students' increased lifetime earnings and increased business output, as well as \$271.7 million in social savings related to health, crime, and income assistance in Texas. People in Texas invested a present value total of \$459 million in Texas Woman's in FY 2017-18. The cost includes all the university and student costs.

The benefit-cost ratio for society is 13.0, equal to the \$6 billion in benefits divided by the \$459 million in costs. In other words, for every dollar invested in Texas Woman's, people in Texas will receive a cumulative value of \$13.00 in benefits. The benefits of this investment will occur for as long as the university's FY 2017-18 students remain employed in the state workforce.

Summary of Investment Analysis Results

The results of the analysis demonstrate that Texas Woman's is a strong investment for all three major stakeholder groups—students, taxpayers, and society. As shown, students receive a great return for their investments in a Texas Woman's education. At the same time, taxpayers' investment in Texas Woman's returns more to government budgets than it costs and creates a wide range of social benefits throughout Texas.

SOCIAL BENEFITS IN TEXAS FROM TEXAS WOMAN'S



\$5.7 billion

Conclusion

The results of this study demonstrate that Texas Woman's University creates value from multiple perspectives. The university benefits state businesses by increasing consumer spending in the state and supplying a steady flow of qualified, trained workers to the workforce. Texas Woman's enriches the lives of students by raising their lifetime earnings and helping them achieve their individual potential. The university benefits state taxpayers through increased tax receipts and a reduced demand

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for government-supported social services. Finally, Texas Woman's 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 2017-18 academic and financial reports from Texas Woman's, the university's alumni records matched to Emsi's Alumni Outcomes database, 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. 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 the university for a copy of the main report.



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