



The Economic Value of Southwest Wisconsin Technical College

# **EXECUTIVE SUMMARY**

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OUTHWEST Wisconsin Technical College (Southwest Tech) creates value in many ways. The college plays a key role in helping students

increase their employability and achieve their individual potential. The college draws students to the region, generating new dollars and opportunities for Southwest Wisconsin. Southwest Tech provides students with the education, training, and skills they need to have fulfilling and prosperous careers. Furthermore, Southwest Tech is a place for students to meet new people, increase their self-confidence, and promote their overall health and well-being.

Southwest Tech influences both the lives of its students and the regional economy. The college supports a variety of industries in Southwest Wisconsin, serves regional businesses, and benefits

society as a whole in Wisconsin from an expanded economy and improved quality of life. The benefits created by Southwest Tech even extend to the state and local government through increased tax revenues and public sector savings.

This study measures the economic impacts created by Southwest Tech on the business community and the benefits the college 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 college, for fiscal year (FY) 2017-18. Impacts on the Southwest Wisconsin 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 Wisconsin are reported under the investment analysis.

\* For the purposes of this study, Southwest Wisconsin is defined as Crawford, Grant, Iowa, Lafayette, and Richland Counties

The value of Southwest Tech influences both the lives of its students and the regional economy.

# Economic impact analysis

Southwest Tech promotes economic growth in Southwest Wisconsin through its direct expenditures and the resulting expenditures of students and regional businesses. The college serves as an employer and buyer of goods and services for its day-to-day operations. The college's activities attract students from outside Southwest Wisconsin, whose expenditures benefit regional vendors. In addition, Southwest Tech is a primary source of higher education to Southwest Wisconsin residents and a supplier of trained workers to regional industries, enhancing overall productivity in the regional workforce.

#### **Operations Spending Impact**

Southwest Tech adds economic value to Southwest Wisconsin as an employer of regional residents and a large-scale buyer of goods and services. In FY 2017-18, the college employed 488 full-time and part-time faculty and staff, 86% of whom lived in Southwest Wisconsin. Total payroll at Southwest Tech was \$18.8 million, much of which was spent in the region for groceries, mortgage and rent payments, dining out, and other household expenses. In addition, the college spent \$9.7 million on day-to-day expenses related to facilities, supplies, and professional services.

Southwest Tech's day-to-day operations spending added \$20.1 million in income to the region during the analysis year. This figure represents the college's payroll, the multiplier effects generated by the in-region spending of the college and its employees, and a downward adjustment to account for funding that the college received from regional sources. The \$20.1 million in added income is equivalent to supporting 516 jobs in the region.

### Student Spending Impact



Around 11% of students attending Southwest Tech originated from outside the region in FY 2017-18, and some of these students relocated to Southwest Wisconsin to attend Southwest Tech. These

students may not have come to the region if the college did not exist. In addition, some in-region students, referred to as retained students, would have left Southwest Wisconsin if not for the existence of Southwest Tech. While attending the college, these relocated and retained students spent money on groceries, accommodation, transportation, and other household expenses. This spending generated \$3.5 million in added income for the regional economy in FY 2017-18, which supported 58 jobs in Southwest Wisconsin.

IMPACTS CREATED BY SOUTHWEST TECH IN FY 2017-18









\$159.3 million

- OR -

2,996
JOBS SUPPORTED

#### Alumni Impact



The education and training Southwest Tech provides for regional residents has the greatest impact. Since its establishment, students have studied at Southwest Tech and entered the regional workforce

with greater knowledge and new skills. Today, thousands of former Southwest Tech students are employed in Southwest Wisconsin. As a result of their Southwest Tech educations, the students receive higher earnings and increase the productivity of the businesses that employ them. In FY 2017-18, Southwest Tech alumni generated \$135.7 million in added income for the regional economy, which is equivalent to supporting 2,422 jobs.

#### Total Impact

Southwest Tech added \$159.3 million in income to the Southwest Wisconsin economy during the analysis year, equal to the sum of the operations spending impact, the student spending impact, and the alumni impact. For context, the \$159.3 million impact was equal to approximately 3.0% of the total gross regional product (GRP) of Southwest Wisconsin. This contribution that the college provided on its own is larger than the entire Real Estate & Rental & Leasing industry in the region.

Southwest Tech's total impact can also be expressed in terms of jobs supported. The \$159.3 million impact supported 2,996 regional jobs, using the jobs-to-sales ratios specific to each industry in the region. This means that one out of every 24 jobs in Southwest Wisconsin is supported by the activities of Southwest Tech and its students. In addition, the \$159.3 million, or 2,996 supported jobs, impacted regional industries in different ways. Among non-education industry sectors, Southwest

Tech supported the most jobs in the Health Care & Social Assistance industry sector – supporting 1,142 jobs in FY 2017-18. These are impacts that would not have been generated without the college's presence in Southwest Wisconsin.

TOP INDUSTRIES IMPACTED BY SOUTHWEST TECH (JOBS SUPPORTED)



1,142

Health Care & Social Assistance



288

Government, Non-Education



249

Agriculture, Forestry, Fishing, & Hunting



Other Services (except Public Administration)



Manufacturing

### One out of every 24 jobs in

Southwest Wisconsin is supported by the activities of Southwest Tech 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 Southwest Tech as an investment from the perspectives of students, taxpayers, and society in Wisconsin.

#### Student perspective



In FY 2017-18, Southwest Tech served 7,547 students. In order to attend the college, 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 Southwest Tech's students in FY 2017-18 amounted to a present value of \$23.2 million, equal to \$7.6 million in out-of-pocket expenses (including future principal and interest on student loans) and \$15.6 million in forgone time and money.

In return for their investment, Southwest Tech's students will receive a stream of higher future earnings that will continue to grow throughout their working lives. For example, the average Southwest Tech associate degree graduate from FY 2017-18 will see an increase in earnings of \$8,400 each year compared to a person with a high school diploma or equivalent working in Wisconsin. Over a working lifetime, the benefits of the associate degree over a high school diploma will amount to an undiscounted value of \$327.6 thousand in higher earnings per graduate. Altogether, Southwest Tech's FY 2017-18 students will receive \$102 million in higher future earnings over their working lives, as a result of their education and training at Southwest Tech.

STUDENTS SEE A HIGH RATE OF RETURN FOR THEIR INVESTMENT IN SOUTHWEST TECH



20.1%

Average annual return for Southwest Tech students



10.1%

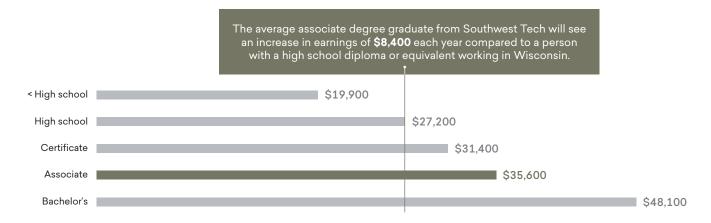
Stock market 30-year average annual return



0.8%

Interest earned on savings account (National Rate Cap)

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



Source: Emsi complete employment data.

The students' benefit-cost ratio is 4.4. In other words, for every dollar students invest in Southwest Tech, 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 Southwest Tech has an average annual internal rate of return of 20.1%, which is impressive compared to the U.S. stock market's 30-year average rate of return of 10.1%.

#### Taxpayer perspective



Southwest Tech generates more in tax revenue than it takes. These benefits to taxpayers consist primarily of taxes that the state and local government will collect from the added revenue created in

the state. As Southwest Tech 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 and local government will have collected a present value of \$34.3 million in added taxes.

Benefits to taxpayers will also consist of savings generated by the improved lifestyles of Southwest Tech students and the corresponding reduced government services. Education is statistically correlated with a variety of lifestyle changes. Students' Southwest Tech educations will generate savings in three

For every dollar of public money invested in Southwest Tech. taxpayers will receive a cumulative value of \$2.00 over the course of the students' working lives.

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. Southwest Tech 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 college for a copy of the main report. Altogether, the present value of the benefits associated with a Southwest Tech education will generate \$2.4 million in savings to state and local taxpayers.

Total taxpayer benefits amount to \$36.7 million, the present value sum of the added taxes and public sector savings. Taxpayer costs are \$18.8 million, equal to the amount of state and local government funding Southwest Tech received in FY 2017-18. These benefits and costs yield a benefit-cost ratio of 2.0. This means that for every dollar of public money invested in Southwest Tech in



#### STUDENT PERSPECTIVE

\$102 million Present value benefits

\$23.2 million Present value costs

\$78.8 million Net present value

Benefit-cost Ratio

Rate of Return

4.4

20.1%



#### TAXPAYER PERSPECTIVE

\$36.7 million Present value benefits

\$18.8 million Present value costs

\$17.9 million Net present value

Benefit-cost Ratio

Rate of Return

2.0

4.9%



#### **SOCIAL PERSPECTIVE**

\$369.9 million Present value benefits

\$50.8 million Present value costs

\$319.1 million Net present value

Benefit-cost Ratio

Rate of Return

7.3

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.

FY 2017-18, taxpayers will receive a cumulative value of \$2.00 over the course of the students' working lives. The average annual internal rate of return for taxpayers is 4.9%, which compares favorably to other long-term investments in the public and private sectors.

#### Social perspective



Society as a whole in Wisconsin benefits from the presence of Southwest Tech 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 Wisconsin.

Benefits to society also consist of the savings generated by the improved lifestyles of Southwest Tech 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 college for a copy of the main report.

Altogether, the social benefits of Southwest Tech equal a present value of \$369.9 million. These benefits include \$363.4 million in added income through students' increased lifetime earnings and increased business output, as well as \$6.5 million in social savings related to health, crime, and income assistance in Wisconsin. People in Wisconsin invested a present value total of \$50.8 million in Southwest Tech in FY 2017-18. The cost includes all the college and student costs.

The benefit-cost ratio for society is 7.3, equal to the \$369.9 million in benefits divided by the \$50.8 million in costs. In other words, for every dollar invested in Southwest Tech, people in Wisconsin will receive a cumulative value of \$7.30 in benefits. The benefits of this investment will occur for as long as Southwest Tech's FY 2017-18 students remain employed in the state workforce.

# Summary of investment analysis results

The results of the analysis demonstrate that Southwest Tech 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 Southwest Tech education. At the same time, taxpayers' investment in Southwest Tech returns more to government budgets than it costs and creates a wide range of social benefits throughout Wisconsin.

# SOCIAL BENEFITS IN WISCONSIN FROM SOUTHWEST TECH



Added income \$363.4 million

# Conclusion

The results of this study demonstrate that Southwest Tech creates value from multiple perspectives. The college benefits regional businesses by increasing consumer spending in the region and supplying a steady flow of qualified, trained workers to the workforce. Southwest Tech enriches the lives of students by raising their lifetime earnings and helping them achieve their individual potential. The college benefits state and local taxpayers through increased tax receipts and a

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reduced demand for government-supported social services. Finally, Southwest Tech benefits society as a whole in Wisconsin 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 Southwest Tech, 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 college for a copy of the main report.



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