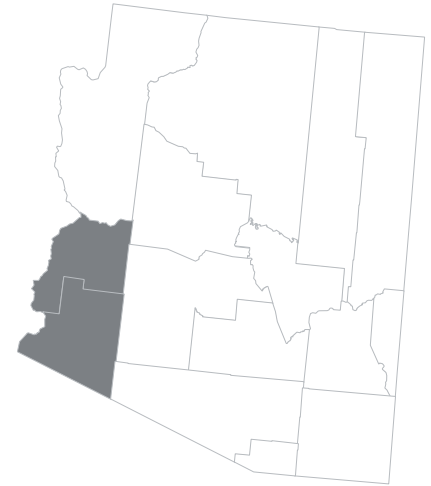




The Economic Value of Arizona Western College

EXECUTIVE SUMMARY



THE YUMA-LA PAZ DISTRICT

ARIZONA Western College (AWC) 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 the Yuma-La Paz District.¹ AWC provides students with the education, training, and skills they need to have fulfilling and prosperous careers. Furthermore, AWC is a place for students to meet new people, increase their self-confidence, and promote their overall health and well-being.

AWC influences both the lives of its students and the regional economy. The college supports a variety of industries in the Yuma-La Paz District, serves regional businesses, and benefits society as a whole in Arizona from an expanded economy and improved quality of life. The benefits created by AWC even extend to the state and local government through increased tax revenues and public sector savings.

This study measures the economic impacts created by AWC 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 Yuma-La Paz District 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 Arizona are reported under the investment analysis.

* For the purposes of this analysis, the Yuma-La Paz District is comprised of Yuma and La Paz Counties.

*AWC influences both
the **lives of its students** and
the **regional economy**.*



Economic impact analysis

AWC promotes economic growth in the Yuma-La Paz District 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 the Yuma-La Paz District, whose expenditures benefit regional vendors. In addition, AWC is a primary source of higher education to the Yuma-La Paz District residents and a supplier of trained workers to regional industries, enhancing overall productivity in the regional workforce.

Operations spending impact



AWC adds economic value to the Yuma-La Paz District as an employer of regional residents and a large-scale buyer of goods and services. In FY 2017-18, the college employed 1,225 full-time and part-time faculty and staff, 97% of whom lived in the Yuma-La Paz District. Total payroll at AWC was \$33.6 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 \$24.5 million on day-to-day expenses related to facilities, supplies, and professional services.

AWC's day-to-day operations spending added \$36.7 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 \$36.7 million in added income is equivalent to supporting 1,258 jobs in the region.

Student spending impact



Around 12% of students attending AWC originated from outside the region in FY 2017-18, and some of these students relocated to the Yuma-La Paz District to attend AWC. 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 the Yuma-La Paz District if not for the existence of AWC. While attending the college, these relocated and retained students spent money on groceries, accommodation, transportation, and other household expenses. This spending generated \$12.5 million in added income for the regional economy in FY 2017-18, which supported 265 jobs in the Yuma-La Paz District.

IMPACTS CREATED
BY AWC IN FY 2017-18



\$36.7 million
Operations Spending Impact



\$12.5 million
Student Spending Impact



\$237.5 million
Alumni Impact



\$286.6 million
TOTAL IMPACT

- OR -

5,349
JOBS SUPPORTED

Alumni impact



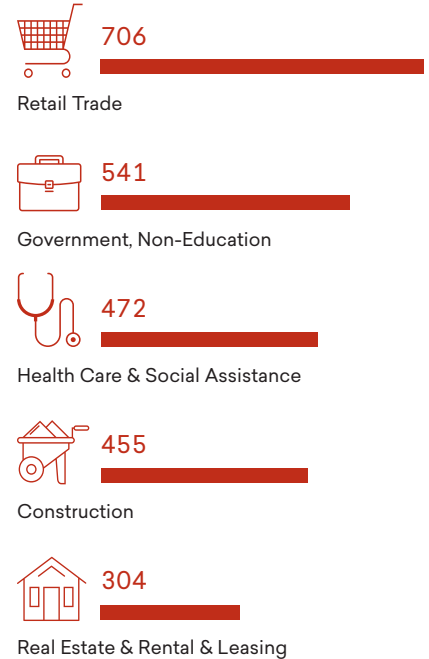
The education and training AWC provides for regional residents has the greatest impact. Since its establishment, students have studied at AWC and entered the regional workforce with greater knowledge and new skills. Today, thousands of former AWC students are employed in the Yuma-La Paz District. As a result of their AWC educations, the students receive higher earnings and increase the productivity of the businesses that employ them. In FY 2017-18, AWC alumni generated \$237.5 million in added income for the regional economy, which is equivalent to supporting 3,827 jobs.

Total impact

AWC added \$286.6 million in income to the Yuma-La Paz District 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 \$286.6 million impact was equal to approximately 3.9% of the total gross regional product (GRP) of the Yuma-La Paz District. This contribution that the college provided on its own was larger than the entire Accommodation & Food Services industry in the region.

AWC's total impact can also be expressed in terms of jobs supported. The \$286.6 million impact supported 5,349 regional jobs, using the jobs-to-sales ratios specific to each industry in the region. This means that one out of every 18 jobs in the Yuma-La Paz District is supported by the activities of AWC and its students. In addition, the \$286.6 million, or 5,349 supported jobs, stemmed from different industry sectors. Among non-education industry sectors, AWC's spending and alumni in the Retail Trade industry sector supported 706 jobs in FY 2017-18. These are impacts that would not have been generated without the college's presence in the Yuma-La Paz District.

AWC IMPACTS BY INDUSTRY (JOBS SUPPORTED)



One out of every 18 jobs in the Yuma-La Paz District is supported by the activities of AWC 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 AWC as an investment from the perspectives of students, taxpayers, and society in Arizona.

Student perspective



In FY 2017-18, AWC served 11,492 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 AWC's students in FY 2017-18 amounted to a present value of \$36.6 million, equal to \$13.6 million in out-of-pocket expenses (including future principal and interest on student loans) and \$23 million in forgone time and money.

In return for their investment, AWC's students will receive a stream of higher future earnings that will continue to grow throughout their working lives. For example, the average AWC associate degree graduate from FY 2017-18 will see annual earnings that are \$7,300 higher than a person with a high school diploma or equivalent working in Arizona. Over a working lifetime, the benefits of the associate degree over a high school diploma will amount to an undiscounted value of \$299.3 thousand in higher earnings per graduate. The present value of the cumulative higher future earnings that AWC's FY 2017-18 students will receive over their working careers is \$248.9 million.

STUDENTS SEE A HIGH RATE OF RETURN FOR THEIR INVESTMENT IN AWC



22.6%

Average annual return for AWC students



9.9%

Stock market 30-year average annual return

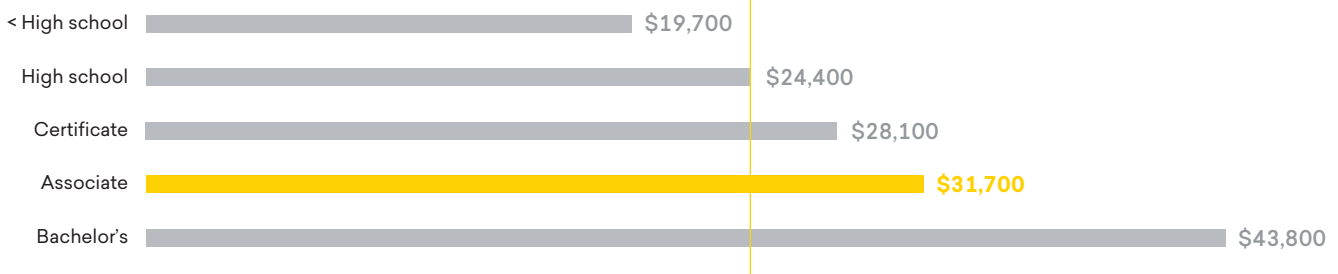


0.8%

Interest earned on savings account (National Rate Cap)

Source: Forbes' S&P 500, 1989-2018. FDIC.gov, 6-2019.

The average associate degree graduate from AWC will see an increase in earnings of **\$7,300** each year compared to a person with a high school diploma or equivalent working in Arizona.



Source: Emsi employment data.

The students' benefit-cost ratio is 6.8. In other words, for every dollar students invest in AWC, in the form of out-of-pocket expenses and forgone time and money, they will receive a cumulative value of \$6.80 in higher future earnings. Annually, the students' investment in AWC has an average annual internal rate of return of 22.6%, which is impressive compared to the U.S. stock market's 30-year average rate of return of 9.9%.

Taxpayer perspective



AWC 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 AWC 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 \$53 million in added taxes.

Benefits to taxpayers will also consist of savings generated by the improved lifestyles of AWC students and the corresponding reduced government services. Education is statistically correlated with a variety of lifestyle changes. Students' AWC 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. AWC 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 an AWC education will generate \$6.7 million in savings to state and local taxpayers.

Total taxpayer benefits amount to \$59.7 million, the present value sum of the added taxes and public sector savings. Taxpayer costs are \$38.8 million, equal to the amount of state and local government funding AWC received in FY 2017-18. These benefits and costs yield a benefit-cost ratio of 1.5. This means that for every dollar of public money invested in AWC in FY 2017-18, taxpayers

For every dollar of public money invested in AWC, taxpayers will receive a cumulative value of \$1.50 over the course of the students' working lives.



STUDENT PERSPECTIVE

\$248.9 million
Present value benefits

\$36.6 million
Present value costs

\$212.3 million
Net present value

Benefit-cost ratio	Rate of return
6.8	22.6%



TAXPAYER PERSPECTIVE

\$59.7 million
Present value benefits

\$38.8 million
Present value costs

\$20.9 million
Net present value

Benefit-cost ratio	Rate of return
1.5	3.6%



SOCIAL PERSPECTIVE

\$743.8 million
Present value benefits

\$89.9 million
Present value costs

\$653.9 million
Net present value

Benefit-cost ratio	Rate of return
8.3	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.

will receive a cumulative value of \$150 over the course of the students' working lives. The average annual internal rate of return for taxpayers is 3.6%.

Social perspective



Society as a whole in Arizona benefits from the presence of AWC 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 Arizona.

Benefits to society also consist of the savings generated by the improved lifestyles of AWC 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.

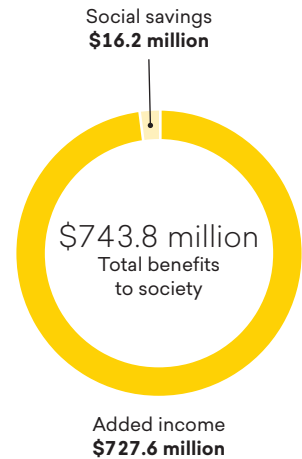
Altogether, the social benefits of AWC equal a present value of \$743.8 million. These benefits include \$727.6 million in added income through students' increased lifetime earnings and increased business output, as well as \$16.2 million in social savings related to health, crime, and income assistance in Arizona. People in Arizona invested a present value total of \$89.9 million in AWC in FY 2017-18. The cost includes all the college and student costs.

The benefit-cost ratio for society is 8.3, equal to the \$743.8 million in benefits divided by the \$89.9 million in costs. In other words, for every dollar invested in AWC, people in Arizona will receive a cumulative value of \$8.30 in benefits. The benefits of this investment will occur for as long as AWC's FY 2017-18 students remain employed in the state workforce.

Summary of investment analysis results

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

SOCIAL BENEFITS IN ARIZONA FROM AWC



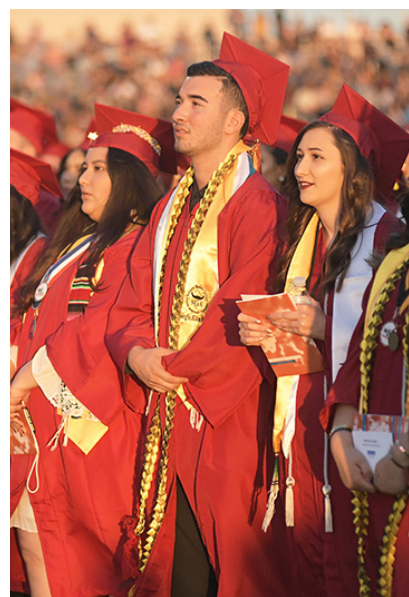
Conclusion

The results of this study demonstrate that AWC 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. AWC 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 reduced demand for government-supported social services. Finally, AWC benefits society as a whole in Arizona 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 AWC, 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.

The results of this study demonstrate that AWC creates value from
multiple perspectives.



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