





# The Economic Value of Oregon's Community Colleges

# **EXECUTIVE SUMMARY**





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**REGON'S** Community Colleges create value in many ways. The colleges play a key role in helping students increase their employability and achieve their individual potential. The colleges draw students to the state, gener-

ating new dollars and opportunities for Oregon. The colleges provide students with the education, training, and skills they need to have fulfilling and prosperous careers. Furthermore, the colleges are places for students to meet new people, increase their self-confidence, and promote their overall health and well-being.

Oregon's Community Colleges influence both the lives of students and the state economy. The colleges support a variety of industries in Oregon, serve state busiOregon's Community Colleges influence both the **lives of students** and the **state economy**.

nesses, and benefit society as a whole in Oregon from an expanded economy and improved quality of life. The benefits created by Oregon's Community Colleges even extend to the state and local government through increased tax revenues and public sector savings.

This study measures the economic impacts created by Oregon's Community Colleges on the business community and the benefits the colleges generate in return for the investments made by their 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 colleges, for fiscal year (FY) 2018-19. Impacts on the Oregon 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 Oregon are reported under the investment analysis.



Oregon's Community Colleges promote economic growth in Oregon through their direct expenditures and the resulting expenditures of students and state businesses. The colleges serve as employers and buyers of goods and services for their day-to-day and construction operations. The colleges' activities attract students from outside Oregon, whose expenditures benefit state vendors. In addition, the colleges are primary sources of higher education to Oregon residents and suppliers of trained workers to state industries, enhancing overall productivity in the state workforce.

# **Operations spending impact**

Oregon's Community Colleges add economic value to Oregon as employers of state residents and large-scale buyers of goods and services. In FY 2018-19, the colleges employed 13,427 full-time and part-time faculty and staff, 95% of whom lived in Oregon. Total payroll at Oregon's Community Colleges was \$756.3 million, much of which was spent in the state for groceries, mortgage and rent payments, dining out, and other household expenses. In addition, the colleges spent \$325.9 million on day-today expenses related to facilities, supplies, and professional services.

The colleges' day-to-day operations spending added \$812.3 million in income to the state during the analysis year. This figure represents the colleges' payroll, the multiplier effects generated by the in-state spending of the colleges and their employees, and a downward adjustment to account for funding that the colleges received from state sources. The \$812.3 million in added income is equivalent to supporting 13,824 jobs in the state.

# Construction spending impact



Oregon's Community Colleges invest in construction each year to maintain facilities, create additional capacities, and meet growing educational demands. While the amount varies from year to year,

these quick infusions of income and jobs have a substantial impact on the state economy. In FY 2018-19, the colleges' construction spending generated \$37.8 million in added income, which is equivalent to supporting 455 jobs.

# Student spending impact



Around 5% of students attending one of Oregon's Community Colleges originated from outside the state in FY 2018-19, and some of these students relocated to Oregon to attend the colleges. These IMPACTS CREATED BY OREGON'S COMMUNITY COLLEGES IN FY 2018-19













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135,523 JOBS SUPPORTED students may not have come to the state if the colleges did not exist. In addition, some in-state students, referred to as retained students, would have left Oregon if not for the existence of Oregon's Community Colleges. While attending the colleges, these relocated and retained students spent money on groceries, accommodation, transportation, and other household expenses. This spending generated \$203.4 million in added income for the state economy in FY 2018-19, which supported 4,547 jobs in Oregon.

## Alumni impact

The education and training the colleges provide for state residents has the greatest impact. Since the colleges were established, students have studied at Oregon's Community Colleges and entered

the state workforce with greater knowledge and new skills. Today, hundreds of thousands of former students are employed in Oregon. As a result of their educations obtained at an Oregon Community College, the students receive higher earnings and increase the productivity of the businesses that employ them. In FY 2018-19, alumni of Oregon's Community Colleges generated \$9 billion in added income for the state economy, which is equivalent to supporting 116,697 jobs.

# Total impact

Oregon's Community Colleges added \$10 billion in income to the Oregon economy during the analysis year, equal to the sum of operations and construction spending impacts, the student spending impact, and the alumni impact.

For context, the \$10 billion impact was equal to approximately 4.1% of the total gross state product (GSP) of Oregon. This contribution that the colleges provided on their own was larger than the Real Estate & Rental & Leasing industry in the state.

The total impact of Oregon's Community Colleges can also be expressed in terms of jobs supported. The \$10 billion impact supported 135,523 state jobs, using the jobs-to-sales ratios specific to

each industry in the state. This means that one out of every 19 jobs in Oregon is supported by the activities of the colleges and their students. In addition, the \$10 billion, or 135,523 supported jobs, stemmed from different industry sectors. Among non-education industry sectors, the colleges' spending and alumni in the Retail Trade industry sector supported 21,405 jobs in FY 2018-19. These are impacts that would not have been generated without the colleges' presence in Oregon.

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#### IMPACT BY INDUSTRY OF OREGON'S COMMUNITY COLLEGES (JOBS SUPPORTED)





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 Oregon's Community Colleges as an investment from the perspectives of students, taxpayers, and society in Oregon.

## Student perspective

In FY 2018-19, Oregon's Community Colleges served 156,417 credit and 110,251 non-credit students. In order to attend the colleges, 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 students of Oregon's Community Colleges in FY 2018-19 amounted to a present value of \$854.3 million, equal to \$300.5 million in out-of-pocket expenses (including future principal and interest on student loans) and \$553.9 million in forgone time and money.

In return for their investment, the colleges' students will receive a stream of higher future earnings that will continue to grow throughout their working lives. For example, the average associate degree graduate of Oregon's Community Colleges from FY 2018-19 will see annual earnings \$8,100 higher than a person with a high school diploma or equivalent working in Oregon. Over a working lifetime, the benefits of the associate degree over a high school diploma will amount to an undiscounted value of \$307.8 thousand in higher earnings per graduate. The present value of the cumulative higher future earnings that FY 2018-19 students from Oregon's Community Colleges will receive over their working careers is \$3.4 billion.

#### STUDENTS SEE A HIGH RATE OF RETURN FOR THEIR INVESTMENT IN OREGON'S COMMUNITY COLLEGES



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



Source: Emsi employment data.

The students' benefit-cost ratio is 3.9. In other words, for every dollar students invest in an education at Oregon's Community Colleges, in the form of out-ofpocket expenses and forgone time and money, they will receive a cumulative value of \$3.90 in higher future earnings. Annually, the students' investment in Oregon's Community Colleges has an average annual internal rate of return of 18.8%, which is impressive compared to the U.S. stock market's 30-year average rate of return of of 9.9%.

### Taxpayer perspective

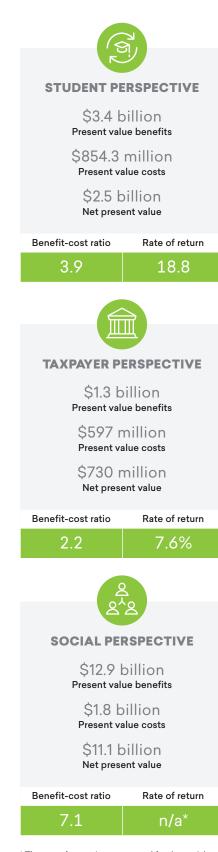
Oregon's Community Colleges generate more in tax revenue than they take. These benefits to taxpayers consist primarily of taxes that the state and local government will collect from the added revenue created in the state. As the colleges' students will earn more, they will make

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 2018-19 students' working lives, the state and local government will have collected a present value of \$1.2 billion in added taxes.

Benefits to taxpayers will also consist of savings generated by the improved lifestyles of students and the corresponding reduced government services. Education is statistically correlated with a variety of lifestyle changes. Educations obtained at Oregon's Community Colleges will generate savings in three main categories: 1) healthcare, 2) crime, and For every dollar of public money invested in Oregon's Community Colleges, taxpayers will receive a cumulative value of \$2.20 over the course of the students' working lives.

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. The colleges' 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 Oregon Community College Association for a copy of the main report. Altogether, the present value of the benefits associated with an education obtained at one of Oregon's Community College will generate \$98.8 million in savings to state and local taxpayers.

Total taxpayer benefits amount to \$1.3 billion, the present value sum of the added taxes and public sector savings. Taxpayer costs are \$597 million, equal to the amount of state and local government funding Oregon's Community Colleges received in FY 2018-19. These benefits and costs yield a benefit-cost



\* 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.

ratio of 2.2. This means that for every dollar of public money invested in Oregon's Community Colleges in FY 2018-19, taxpayers will receive a cumulative value of \$2.20 over the course of the students' working lives. The average annual internal rate of return for taxpayers is 7.6%, which compares favorably to other long-term investments in the public and private sectors.

# Social perspective

Society as a whole in Oregon benefits from the presence of Oregon's Community Colleges 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 Oregon.

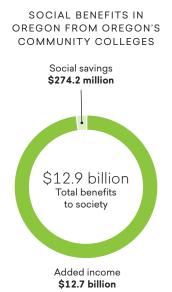
Benefits to society also consist of the savings generated by the improved lifestyles of the colleges' students. As discussed in the previous section, education is statistically correlated with a variety of lifestyle changes that generate social savings. Note that these costs are avoided by the consumers 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 Oregon Community College Association for a copy of the main report.

Altogether, the social benefits of Oregon's Community Colleges equal a present value of \$12.9 billion. These benefits include \$12.7 billion in added income through students' increased lifetime earnings and increased business output, as well as \$274.2 million in social savings related to health, crime, and income assistance in Oregon. People in Oregon invested a present value total of \$1.8 billion in Oregon's Community Colleges in FY 2018-19. The cost includes all the colleges' expenditures and student costs.

The benefit-cost ratio for society is 7.1, equal to the \$12.9 billion in benefits divided by the \$1.8 billion in costs. In other words, for every dollar invested in Oregon's Community Colleges, people in Oregon will receive a cumulative value of \$7.10 in benefits. The benefits of this investment will occur for as long as the colleges' FY 2018-19 students remain employed in the state workforce.

# Summary of investment analysis results

The results of the analysis demonstrate that Oregon's Community Colleges are a strong investment for all three major stakeholder groups—students, taxpayers, and society. As shown, students receive a great return for their educational investment. At the same time, the investment made by state and local taxpayers to the colleges return more to government budgets than it costs and creates a wide range of social benefits throughout Oregon.



# Conclusion

The results of this study demonstrate that Oregon's Community Colleges create value from multiple perspectives. The colleges benefit state businesses by increasing consumer spending in the state and supplying a steady flow of qualified, trained workers to the workforce. Oregon's Community Colleges enrich the lives of students by raising their lifetime earnings and helping them achieve their individual potential. The colleges benefit state and local taxpayers through increased tax receipts and a reduced demand for gov-

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ernment-supported social services. Finally, Oregon's Community Colleges benefit society as a whole in Oregon 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 2018-19 academic and financial reports from Oregon's Community Colleges, 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 Oregon Community College Association for a copy of the main report.



# .ıl<sup>ı</sup> Emsi

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