



California
Community
Colleges

EXECUTIVE SUMMARY

JANUARY 2022



The Economic Value of the California Community College System



THE CALIFORNIA COMMUNITY COLLEGE SYSTEM* creates 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, generating new dollars and opportunities for California. 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.

California's Community Colleges influence both the lives of students and the state economy. The colleges support a variety of industries in California, serve state businesses, and benefit society as a whole in California from an expanded economy and improved quality of life. Additionally, the benefits created by California's Community Colleges extend to the state and local government through increased tax revenues and public sector savings.

This study measures the economic impacts created by California'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 Foundation for California Community Colleges, for fiscal year (FY) 2018-19. Impacts on the California 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 California are reported under the investment analysis.



California's Community Colleges influence both the **lives of students** and the **state economy**.

* The California Community College System consists of the 116 public community colleges in California.



California's Community Colleges promote economic growth in California 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 California, whose expenditures benefit state vendors. In addition, the colleges are primary sources of higher education to California residents and suppliers of trained workers to state industries, enhancing overall productivity in the state workforce.

Operations spending impact



California's Community Colleges add economic value to California as employers of state residents and large-scale buyers of goods and services. In FY 2018-19, the colleges employed 91,328 full-time and part-time faculty and staff, nearly 100% of whom lived in California. Total payroll at California's Community Colleges was \$8.5 billion, 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 \$4.2 billion on day-to-day expenses related to facilities, supplies, and professional services.

California's Community Colleges' day-to-day operations spending added \$11 billion 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 \$11 billion in added income is equivalent to supporting 99,470 jobs in the state.

Construction spending impact



California'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, California's Community Colleges' construction spending generated \$13.6 million in added income, which is equivalent to supporting 165 jobs.

IMPACTS CREATED BY CALIFORNIA'S COMMUNITY COLLEGES IN FY 2018-19



Operations spending impact

\$11 billion



Construction spending impact

\$13.6 million



Student spending impact

\$8.2 billion



Alumni impact

\$109 billion



TOTAL ECONOMIC IMPACT

\$128.2 billion

OR

Jobs supported

1,487,125

Student spending impact



Around 6% of students attending California's Community Colleges originated from outside the state in FY 2018-19, and some of these students relocated to California to attend the colleges. These 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 California if not for the existence of California'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 \$8.2 billion in added income for the state economy in FY 2018-19, which supported 135,021 jobs in California.

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 California's Community Colleges and entered the state workforce with greater knowledge and new skills. Today, hundreds of thousands of former California Community College students are employed in the state. As a result of their education from California's Community Colleges, the students receive higher earnings and increase the productivity of the businesses that employ them. In FY 2018-19, California's Community Colleges alumni generated \$109 billion in added income for the state economy, which is equivalent to supporting 1.3 million jobs.

Total impact

California's Community Colleges added \$128.2 billion in income to the California 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 \$128.2 billion impact was equal to approximately 4.2% of the total gross state product (GSP) of California. This contribution that the colleges provided on their own was larger than the entire Construction industry in the state.

California's Community Colleges' total impact can also be expressed in terms of jobs supported. The \$128.2 billion impact supported 1.5 million state jobs, using the jobs-to-sales ratios specific to each industry in the state. This means that one out of every 16 jobs in California is supported by the activities of the colleges and their students. In addition, the \$128.2 billion, or 1.5 million supported jobs, stemmed from different industry sectors. Among non-education industry sectors, California's Community Colleges' spending and alumni in the Health Care & Social Assistance industry sector supported 206,900 jobs in FY 2018-19. If the colleges did not exist, these impacts would not have been generated in California.

CALIFORNIA'S COMMUNITY COLLEGES IMPACT BY INDUSTRY (JOBS SUPPORTED)



One out of every 16 jobs in California is supported by the activities of the colleges and their students.



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

Student perspective



In FY 2018-19, California’s Community Colleges served 2.1 million credit and 250,587 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 California Community College students in FY 2018-19 amounted to a present value of \$10.9 billion, equal to \$2.6 billion in out-of-pocket expenses (including future principal and interest on student loans) and \$8.3 billion in forgone time and money.

In return for their investment, California’s Community Colleges’ students will receive a stream of higher future earnings that will continue to grow throughout their working lives. For example, the average California Community College associate degree graduate from FY 2018-19 will see annual earnings \$11,100 higher than a person with a high school diploma or equivalent working in California. Over a working lifetime, the benefits of the associate degree over a high

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



Average annual return for students at California's Community Colleges
19.6%



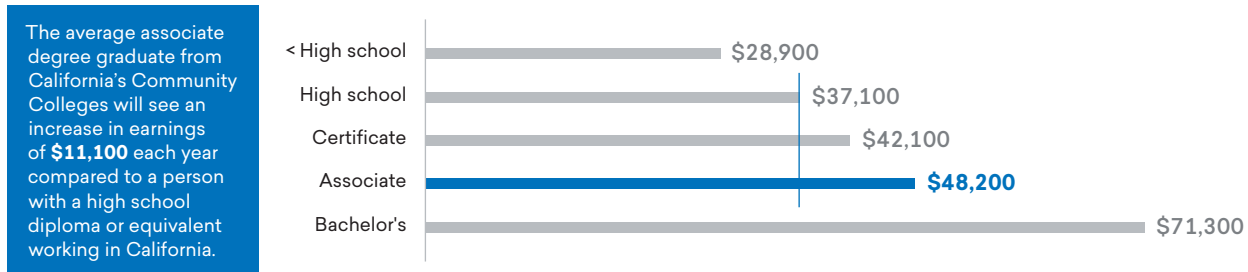
Stock market 30-year average annual return
10.6%



Interest earned on savings account (National Rate Cap)
0.8%

Source: Forbes' S&P 500, 1991-2020. FDIC.gov, 6-2021.

school diploma will amount to an undiscounted value of \$432.9 thousand in higher earnings per graduate. The present value of the cumulative higher future earnings that California's Community Colleges' FY 2018-19 students will receive over their working careers is \$54.4 billion.



The average associate degree graduate from California's Community Colleges will see an increase in earnings of **\$11,100** each year compared to a person with a high school diploma or equivalent working in California.

Source: Emsi Burning Glass employment data.

The students' benefit-cost ratio is 5.0. In other words, for every dollar students invest in an education at California's Community Colleges in the form of out-of-pocket expenses and forgone time and money, they will receive a cumulative value of \$5.00 in higher future earnings. Annually, the students' investment in California's Community Colleges has an average annual internal rate of return of 19.6%, which is impressive compared to the U.S. stock market's 30-year average rate of return of 10.6%.

Taxpayer perspective



California'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 California Community College students 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 \$19.4 billion in added taxes.

Benefits to taxpayers will also consist of savings generated by the improved lifestyles of California's Community Colleges' students and the corresponding reduced government services. Education is statistically correlated with a variety of lifestyle changes. The educations that California's Community Colleges' students receive will generate savings in three main categories: 1) healthcare, 2) justice system, and 3) income assistance. Improved health will lower students' demand for national health care services. In addition, costs related to the justice system will decrease. California's Community Colleges' students will be more employable, so their reduced demand for income assistance such as welfare and unemployment benefits will benefit

For every dollar of public money invested in California's Community Colleges, taxpayers will receive a cumulative value of **\$2.10** over the course of the students' working lives.

taxpayers. For a list of study references, contact the Foundation for California Community Colleges for a copy of the main report. Altogether, the present value of the benefits associated with a California's Community Colleges' education will generate \$2.1 billion in savings to state and local taxpayers.

Total taxpayer benefits amount to \$21.5 billion, the present value sum of the added taxes and public sector savings. Taxpayer costs are \$10.1 billion, equal to the amount of state and local government funding California's Community Colleges received in FY 2018-19. These benefits and costs yield a benefit-cost ratio of 2.1. This means that for every dollar of public money invested in California's Community Colleges in FY 2018-19, taxpayers will receive a cumulative present value of \$2.10 over the course of the students' working lives. The average annual internal rate of return for taxpayers is 5.4%, which compares favorably to other long-term investments in the public and private sectors.

Social perspective



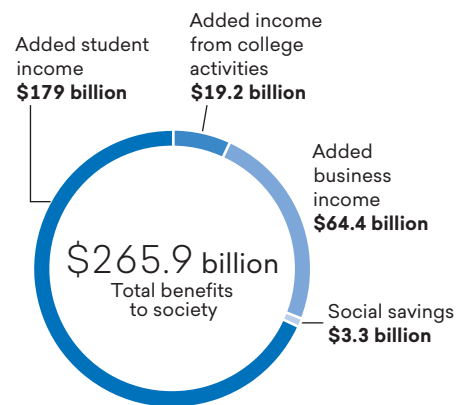
Society as a whole in California benefits from the presence of California's Community Colleges in two major ways. Primarily, society benefits from an increased economic base in the state. This is attributed to the added income from students' increased lifetime earnings (added student income) and increased business output (added business income), which raise economic prosperity in California.

Benefits to society also consist of the savings generated by the improved lifestyles of California's Community 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. Justice system savings include avoided costs to the government and society due to less judicial activity. Income assistance savings include reduced welfare and unemployment claims. For a list of study references, contact the Foundation for California Community Colleges for a copy of the main report.

Altogether, the social benefits of California's Community Colleges equal a present value of \$265.9 billion. These benefits include \$179.0 billion in added student income, \$64.4 billion in added business income, \$19.2 billion in added income from colleges activities, as well as \$3.3 billion in social savings related to health, crime, and income assistance in California. People in California invested a present value total of \$22.8 billion in California's Community Colleges in FY 2018-19. The cost includes all the colleges' expenditures and student costs.

The benefit-cost ratio for society is 11.7, equal to the \$265.9 billion in benefits divided by the \$22.8 billion in costs. In other words, for every dollar invested in California's Community Colleges, people in California will receive a cumulative

SOCIAL BENEFITS IN CALIFORNIA FROM CALIFORNIA'S COMMUNITY COLLEGES






Source: Emsi Burning Glass impact model.

value of \$11.70 in benefits. The benefits of this investment will occur for as long as California’s Community Colleges’ FY 2018-19 students remain employed in the state workforce.

Summary of investment analysis results

The results of the analysis demonstrate that California’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 investments in a California’s Community College education. At the same time, taxpayers’ investment in California’s Community Colleges returns more to government budgets than it costs and creates a wide range of social benefits throughout California.

 STUDENT PERSPECTIVE		 TAXPAYER PERSPECTIVE		 SOCIAL PERSPECTIVE	
Present value benefits		Present value benefits		Present value benefits	
\$54.4 billion		\$21.5 billion		\$265.9 billion	
Present value costs		Present value costs		Present value costs	
\$10.9 billion		\$10.1 billion		\$22.8 billion	
Net present value		Net present value		Net present value	
\$43.5 billion		\$11.4 billion		\$243.1 billion	
Benefit-cost ratio	Rate of return	Benefit-cost ratio	Rate of return	Benefit-cost ratio	Rate of return
5.0	19.6%	2.1	5.4%	11.7	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.

CONCLUSION

The results of this study demonstrate that California'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. California'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 government-supported social services. Finally, California's Community Colleges benefit society as a whole in California 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 the Foundation for California Community Colleges, industry and employment data from the U.S. Bureau of Labor Statistics and U.S. Census Bureau, outputs of Emsi Burning Glass' 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 Foundation for California Community Colleges for a copy of the main report.

The results of this study demonstrate that California's Community Colleges create value from **multiple perspectives.**



Emsi Burning Glass provides colleges and universities with labor market data that help create better outcomes for students, businesses, and communities. Our data, which cover more than 99% of the U.S. workforce, are compiled from a wide variety of government sources, job postings, and online profiles and résumés. Hundreds of institutions use Emsi Burning Glass to align programs with regional needs, drive enrollment, connect students with in-demand careers, track their alumni's employment outcomes, and demonstrate their institution's economic impact on their region. Visit economicmodeling.com/higher-education to learn more or connect with us.