

The Economic Value of the Contra Costa Community College District





THE CONTRA COSTA COMMUNITY COLLEGE DISTRICT* (4CD) 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 county, generating new dollars and opportunities for Contra Costa County. 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.

4CD influences both the lives of students and the county economy. The colleges support a variety of industries in Contra Costa County, serve county businesses, and benefit society as a whole in California from an expanded economy and improved quality of life. Additionally, the benefits created by 4CD extend to the state and local government through increased tax revenues and public sector savings.

This study measures the economic impacts created by 4CD 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) 2022-23. Impacts on the Contra Costa County 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.



Contra Costa County, California

4CD influences both the
lives of students and
the **county economy**.

* The Contra Costa College District consists of Contra Costa College, Diablo Valley College, Los Medanos College, and the Contra Costa College District Office.

Economic impact analysis



4CD promotes economic growth in Contra Costa County through its direct expenditures and the resulting expenditures of students and county 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 Contra Costa County, whose expenditures benefit county vendors. In addition, the colleges are primary sources of higher education to Contra Costa County residents and suppliers of trained workers to county industries, enhancing overall productivity in the county workforce.

Operations spending impact



4CD adds economic value to Contra Costa County as an employer of county residents and a large-scale buyer of goods and services. In FY 2022-23, the colleges employed 3,724 full-time and part-time faculty and staff, 55% of whom lived in Contra Costa County. Total payroll at 4CD was \$231.8 million, much of which was spent in the county for groceries, mortgage and rent payments, dining out, and other household expenses. In addition, the colleges spent \$139.2 million on expenses related to facilities, supplies, and professional services (excluding construction).

4CD's operations spending added \$233.9 million in income to the county during the analysis year. This figure represents the colleges' payroll, the multiplier effects generated by the in-county spending of the colleges and their employees, and a downward adjustment to account for funding that the colleges received from county sources. The \$233.9 million in added income is equivalent to supporting 3,711 jobs in the county.

Construction spending impact



The 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 county economy. In FY 2022-23, 4CD's \$30.0 million of construction spending generated \$15.7 million in added income, which is equivalent to supporting 129 jobs.

Student spending impact



Around 20% of students attending 4CD originated from outside the county in FY 2022-23, and some of these students relocated to Contra Costa County

Impacts created by
4CD in FY 2022-23



Operations spending impact
\$233.9 million

+



Construction spending impact
\$15.7 million

+



Student spending impact
\$224.8 million

+



Alumni impact
\$1.8 billion



Total economic impact
\$2.3 billion

OR



Jobs supported
23,752



to attend the colleges. These students may not have come to the county if the colleges did not exist. In addition, some in-county students, referred to as retained students, would have left Contra Costa County if not for the existence of 4CD. While attending the colleges, these relocated and retained students spent money on groceries, accommodation, transportation, and other household expenses. This spending generated \$224.8 million in added income for the county economy in FY 2022-23, which supported 2,790 jobs in Contra Costa County.

Alumni impact



The education and training the colleges provide for county residents has the greatest impact. Since the colleges were established, students have studied at 4CD and entered the county workforce with greater knowledge and new skills. Today, hundreds of thousands of former 4CD students are employed in Contra Costa County. As a result of their education from 4CD, the students receive higher earnings and increase the productivity of the businesses that employ them. In FY 2022-23, 4CD alumni generated \$1.8 billion in added income for the county economy, which is equivalent to supporting 17,121 jobs.

Total impact

4CD added \$2.3 billion in income to the Contra Costa County 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 \$2.3 billion impact was equal to approximately 2.6% of the total gross regional product (GRP) of Contra Costa County. This contribution that the colleges provided on their own was larger than the entire Transportation & Warehousing industry in the county.

4CD's total impact can also be expressed in terms of jobs supported. The \$2.3 billion impact supported 23,752 county jobs, using the jobs-to-sales ratios specific to each industry in the county. This means that one out of every 25 jobs in Contra Costa County is supported by the activities of the colleges and their students. In addition, the \$2.3 billion, or 23,752 supported jobs, stemmed from different industry sectors. For instance, among non-education industry sectors, the spending of 4CD and their students and the activities of their alumni in the Health Care & Social Assistance industry sector supported 2,914 jobs in FY 2022-23. If the colleges did not exist, these impacts would not have been generated in Contra Costa County.

4CD impacts by industry (jobs supported)



One out of every 25 jobs
in Contra Costa County is
supported by the activities
of 4CD and its students.

Investment analysis



An investment analysis evaluates the costs associated with a proposed venture against its expected benefits. The analysis presented here evaluates 4CD as an investment from the perspectives of students, taxpayers, and society in California. As with the economic impact analysis, this analysis considers only FY 2022-23 activities.

Student perspective



In FY 2022-23, 4CD served 41,588 credit and 982 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 4CD students in FY 2022-23 amounted to a present value of \$144.8 million, equal to \$48.9 million in out-of-pocket expenses (including future principal and interest on student loans) and \$96.6 million in forgone time and money.

In return for their investment, 4CD's students will receive a stream of higher future earnings that will continue to grow throughout their working lives. For example, the average 4CD associate degree graduate from FY 2022-23 will see annual earnings \$10,500 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 school diploma will amount to an undiscounted value of \$436.8 thousand in higher earnings per graduate. The present value of the cumulative higher future earnings that 4CD's FY 2022-23 students will receive over their working careers is \$1.2 billion.

The students' benefit-cost ratio is 8.4. In other words, for every dollar students invest in 4CD in the form of out-of-pocket expenses and forgone time and money, they will receive a cumulative value of \$8.40 in higher future earnings. Annually, the students' investment in 4CD has an average annual internal rate of return of 23.1%, which is impressive compared to the U.S. stock market's 30-year average rate of return of 10.1%.

Students see a high rate of return for their investment in 4CD



Average annual return for 4CD students

23.1%



Stock market 30-year average annual return

10.1%



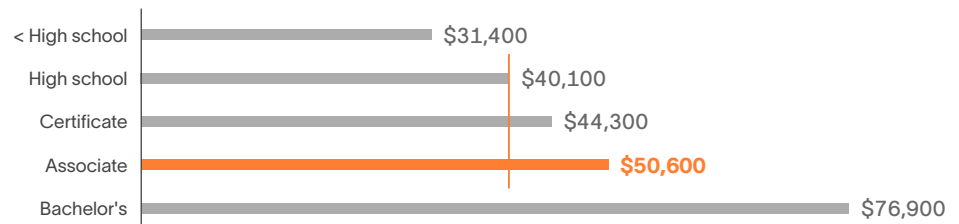
Interest earned on savings account (national deposit rate)

0.5%

Source: Forbes' S&P 500, 1994-2023; FDIC.gov, March 2023

Average earnings by education level at career midpoint

The average associate degree graduate from 4CD will see an increase in earnings of **\$10,500** each year compared to a person with a high school diploma or equivalent working in California.



Source: Lightcast employment data



Taxpayer perspective



4CD generates more in tax revenue than it receives. 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 4CD'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 2022-23 students' working lives, the state and local government will have collected a present value of \$569.9 million in added taxes.

Benefits to taxpayers will also consist of savings generated by the improved lifestyles of students attending 4CD and the corresponding reduced government services. Education is statistically correlated with a variety of lifestyle changes. The education that 4CD students receive will generate savings in three main categories: 1) health care, 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. 4CD'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 4CD for a copy of the main report. Altogether, the present value of the benefits associated with an education through 4CD will generate \$70.0 million in savings to state and local taxpayers.

Total taxpayer benefits amount to \$639.9 million, the present value sum of the added tax revenue and public sector savings. Taxpayer costs are \$324.3 million, equal to the amount of state and local government funding 4CD received in FY 2022-23. These benefits and costs yield a benefit-cost ratio of 2.0. This means that for every dollar of public money invested in 4CD in FY 2022-23, taxpayers will receive a cumulative present value of \$2.00 over the course of the students' working lives. The average annual internal rate of return for taxpayers is 4.2%, which compares favorably to other long-term investments in the public sector.

For every dollar of public money invested in 4CD, taxpayers will receive a cumulative value of **\$2.00** over the course of the students' working lives.

Social perspective



Society as a whole in California benefits from the presence of 4CD 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.

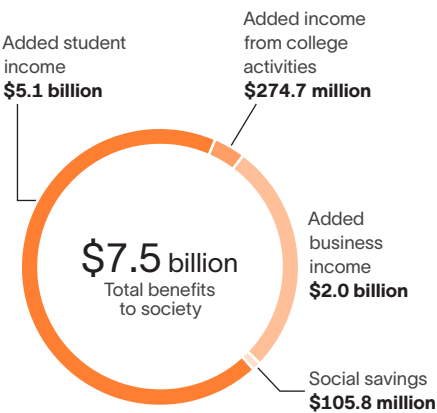
Benefits to society also consist of the savings generated by the improved lifestyles of 4CD's students. As discussed in the previous section, education is statistically correlated with a variety of lifestyle changes that generate social savings. Note that these costs are avoided by the consumers but are distinct from the costs avoided by the taxpayers outlined above. Health care 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 4CD for a copy of the main report.

Altogether, the social benefits of 4CD equal a present value of \$7.5 billion. These benefits include \$5.1 billion in added student income, \$2.1 billion in added business income, \$274.7 million in added income from college activities, as well as \$105.8 million in social savings related to health, the justice system, and income assistance in California. People in California invested a present value total of \$521.8 million in 4CD in FY 2022-23. The cost includes all the colleges' expenditures and student costs.

The benefit-cost ratio for society is 14.4, equal to the \$7.5 billion in benefits divided by the \$521.8 million in costs. In other words, for every dollar invested in 4CD, people in California will receive a cumulative value of \$14.40 in benefits. The benefits of this investment will occur for as long as 4CD's FY 2022-23 students remain employed in the state workforce.

Social benefits in California from 4CD



Source: Lightcast impact model

Summary of investment analysis results

The results of the analysis demonstrate that 4CD 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 education through 4CD. At the same time, taxpayers' investment in 4CD returns more to government budgets than it costs and creates a wide range of social benefits throughout California.

Summary of investment analysis results

Student perspective		Taxpayer perspective		Social perspective	
Present value benefits \$1.2 billion		Present value benefits \$639.9 million		Present value benefits \$7.5 billion	
Present value costs \$144.8 million		Present value costs \$324.3 million		Present value costs \$521.8 million	
Net present value \$1.1 billion		Net present value \$315.6 million		Net present value \$7.0 billion	
Benefit-cost ratio	Rate of return	Benefit-cost ratio	Rate of return	Benefit-cost ratio	Rate of return
8.4	23.1%	2.0	4.2%	14.4	n/a*

* The rate of return is not reported for the social perspective because the beneficiaries are not necessarily the same as the original investors.

Conclusion

*The results of this study demonstrate that 4CD creates value from **multiple perspectives**.*

The colleges benefit county businesses by increasing consumer spending in the county and supplying a steady flow of qualified, trained workers to the workforce. 4CD enriches 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, 4CD benefits 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 2022-23 academic and financial reports from 4CD, industry and employment data from the U.S. Bureau of Labor Statistics and U.S. Census Bureau, outputs of Lightcast'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 system for a copy of the main report.



Lightcast 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 Lightcast 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 lightcast.io/solutions/education to learn more or connect with us.