



Santiago Canyon College

DIVISION OF CONTINUING EDUCATION

Analysis of the Economic Impact and Return on Investment of Education

THE ECONOMIC VALUE OF SANTIAGO CANYON COLLEGE'S
**CONTINUING EDUCATION
PROGRAM**

January 2020



Executive summary

Santiago Canyon College's Continuing Education Program (CE program) creates value in many ways. The noncredit program plays a key role in helping students increase their employability and achieve their individual potential. The noncredit program draws students to the city, generating new dollars and opportunities for the City of Orange.* The CE program provides students with the education, training, and skills they need to have fulfilling and prosperous careers. Furthermore, the CE program is a place for students to meet new people, increase their self-confidence, and promote their overall health and well-being.

The CE program influences both the lives of its students and the local economy. The noncredit program supports a variety of industries in the City of Orange, serves local businesses, and benefits society as a whole in California from an expanded economy and improved quality of life. The benefits created by the CE program even extend to the state government through increased tax revenues and public sector savings.

This study measures the economic impacts created by the CE program on the business community and the benefits the noncredit program 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 Rancho Santiago Community College District (RSCCD) for fiscal year (FY) 2018-19. Impacts on the City of Orange 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.

* The City of Orange consists of the following zip codes: 92857, 92859, 92865, 92866, 92867, 92862, 92863, 92864, 92868, and 92869.



*The CE program influences both the **lives of its students** and the **local economy**.*

Economic impact analysis

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

OPERATIONS SPENDING IMPACT

The CE program adds economic value to the City of Orange as an employer of local residents and a large-scale buyer of goods and services. In FY 2018-19, the noncredit program employed 251 full-time and part-time faculty and staff, 15% of whom lived in the City of Orange. Total payroll at the CE program was \$9.9 million, much of which was spent in the city for groceries, mortgage and rent payments, dining out, and other household expenses. In addition, the noncredit program spent \$898.4 thousand on day-to-day expenses related to facilities, supplies, and professional services.

The CE program’s day-to-day operations spending added \$10.4 million in income to the city during the analysis year. This figure represents the noncredit program’s payroll, the multiplier effects generated by the in-city spending of the noncredit program and its employees. The \$10.4 million in added income is equivalent to supporting 255 jobs in the city.

STUDENT SPENDING IMPACT

Some in-city students, referred to as retained students, would have left the City of Orange if not for the existence of the CE program. While attending the noncredit program, these retained students spent money on groceries, accommodation, transportation, and other household expenses. This spending generated \$3.2 million in added income for the local economy in FY 2018-19, which supported 63 jobs in the City of Orange.

IMPACTS CREATED BY THE CE PROGRAM IN FY 2018-19

ADDED INCOME	JOBS
\$10.4 million	255
Operations spending impact	
\$3.2 million	63
Student spending impact	
\$62.5 million	631
Alumni impact	
\$76.1 million	949
Total impact	



ALUMNI IMPACT

The education and training the CE program provides for local residents has the greatest impact. Since its establishment, students have studied at the CE program and entered the local workforce with greater knowledge and new skills. Today, thousands of former the CE program students are employed in the City of Orange. As a result of their the CE program educations, the students receive higher earnings and increase the productivity of the businesses that employ them. In FY 2018-19, the CE program alumni generated \$62.5 million in added income for the local economy, which is equivalent to supporting 631 jobs.

TOTAL IMPACT

The CE program added \$76.1 million in income to the City of Orange 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 \$76.1 million impact was equal to approximately 0.5% of the total gross regional product (GRP) of the City of Orange. This contribution that the center provided on its own was larger than the entire Arts, Entertainment, & Recreation industry in the city.

The CE program's total impact can also be expressed in terms of jobs supported. The \$76.1 million impact supported 949 local jobs, using the jobs-to-sales ratios specific to each industry in the city. In addition, the \$76.1 million, or 949 supported jobs, stemmed from different industry sectors. Among non-education industry sectors, the CE program's spending and alumni in the Retail Trade industry sector supported 128 jobs in FY 2018-19. These are impacts that would not have been generated without the noncredit program's presence in the City of Orange.

THE CE PROGRAM IMPACTS BY INDUSTRY

JOBS SUPPORTED

128
Retail Trade
127
Professional & Technical Services
75
Health Care & Social Assistance
60
Administrative & Waste Services
47
Accommodation & Food Services



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 the CE program as an investment from the perspectives of students, taxpayers, and society in California.

STUDENT PERSPECTIVE

In FY 2018-19, the CE program served 9,892 noncredit students. Of the 9,892 students served through the CE program, 2,363 were enrolled in the inmate education program. The inmate education program offers a range of courses from adult basic education, food service management, and substance abuse, among others. In order to attend the noncredit program, the students paid for their books and supplies but did not have to pay for tuition. They also gave up money they would have otherwise earned had they been working instead of attending the program. The total investment made by the CE program's students in FY 2018-19 amounted to a present value of \$35.4 million, equal to \$0.1 thousand in out-of-pocket expenses for books and supplies and \$35.4 million in forgone time and money.

In return for their investment, the CE program's students will receive a stream of higher future earnings that will continue to grow throughout their working lives. For example, the average CE program certificate completer from FY 2018-19 will see annual earnings that are \$4,800 higher than a person with a high school diploma or equivalent working in California. Over a working lifetime, the benefits of the certificate over a high school diploma will amount to an undiscounted value of \$120 thousand in higher earnings per graduate. The present value of the cumulative higher future earnings that the CE program's FY 2018-19 students will receive over their working careers is \$127.7 million.

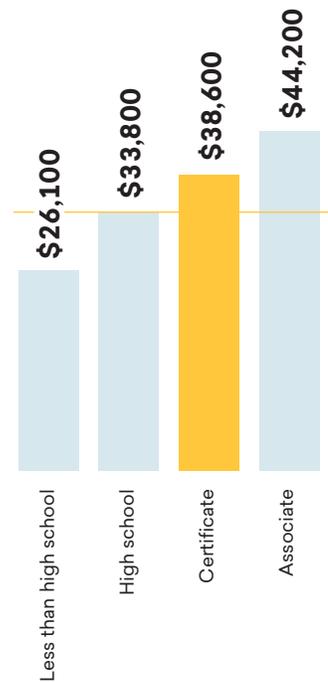
The students' benefit-cost ratio is 3.6. In other words, for every dollar students invest in the CE program, in the form of out-of-pocket expenses and forgone time and money, they will receive a cumulative value of \$3.60 in higher future earnings. Annually, the students' investment in the CE program has an average annual internal rate of return of 25.2%, which is impressive compared to the U.S. stock market's 30-year average rate of return of 9.9%.

TAXPAYER PERSPECTIVE

The CE program generates more in tax revenue than it takes. These benefits to taxpayers consist primarily of taxes that the state government will collect from the added revenue created in the state. As the CE program students will earn more, they

AVERAGE EARNINGS BY EDUCATION LEVEL AT CAREER MIDPOINT IN CALIFORNIA

The average certificate completer from the CE program will see an increase in earnings of **\$4,800** each year compared to a person with a high school diploma or equivalent working in California.



Source: Emsi complete employment data.

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 government will have collected a present value of \$30.4 million in added taxes.

Benefits to taxpayers will also consist of savings generated by the improved lifestyles of the CE program students and the corresponding reduced government services. Education is statistically correlated with a variety of lifestyle changes. Students' CE program 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. The CE program 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 RSCCD for a copy of the main report. Altogether, the present value of the benefits associated with a CE program education will generate \$7.8 million in savings to state taxpayers.

Total taxpayer benefits amount to \$38.2 million, the present value sum of the added taxes and public sector savings. Taxpayer costs are \$14.1 million, equal to the amount of state government funding the CE program received in FY 2018-19. These benefits and costs yield a benefit-cost ratio of 2.7. This means that for every dollar of public money invested in the CE program in FY 2018-19, taxpayers will receive a cumulative value of \$2.70 over the course of the students' working lives. The average annual internal rate of return for taxpayers is 13.1%, which compares favorably to other long-term investments in the public and private sectors.

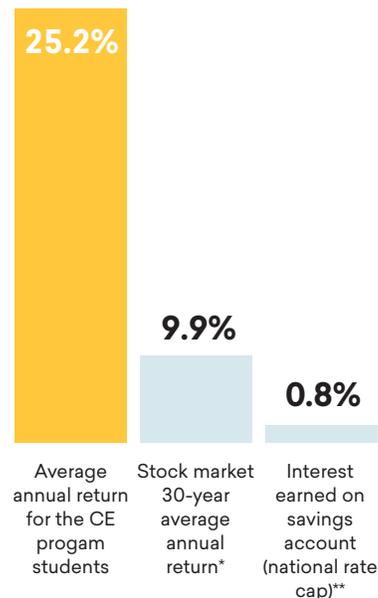
*For every dollar of public money invested in the CE program, taxpayers will receive a cumulative value of **\$2.70** over the course of the students' working lives.*

SOCIAL PERSPECTIVE

Society as a whole in California benefits from the presence of the CE program 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 California.

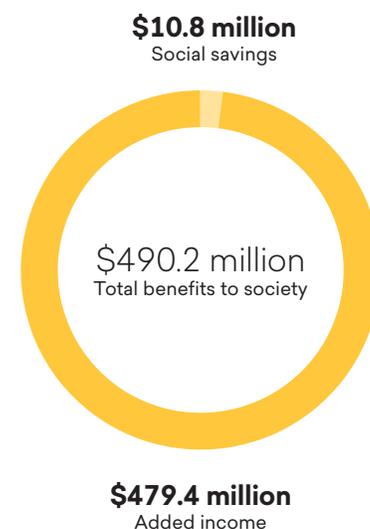
Benefits to society also consist of the savings generated by the improved lifestyles of the CE program students. As discussed in the previous section, education is statistically correlated with a variety of lifestyle changes that generate social savings. Note that these costs are avoided by the consumers but are distinct from the costs avoided by the taxpayers outlined above. Healthcare savings include avoided

STUDENTS SEE A HIGH RATE OF RETURN FOR THEIR INVESTMENT IN THE CE PROGRAM



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

SOCIAL BENEFITS IN CALIFORNIA FROM THE CE PROGRAM



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 RSCCD for a copy of the main report.

Altogether, the social benefits of the CE program equal a present value of \$490.2 million. These benefits include \$479.4 million in added income through students' increased lifetime earnings and increased business output, as well as \$10.8 million in social savings related to health, crime, and income assistance in California. People in California invested a present value total of \$46.2 million in the CE program in FY 2018-19. The cost includes all the noncredit program and student costs.

The benefit-cost ratio for society is 10.6, equal to the \$490.2 million in benefits divided by the \$46.2 million in costs. In other words, for every dollar invested in the CE program, people in California will receive a cumulative value of \$10.60 in benefits. The benefits of this investment will occur for as long as the CE program's FY 2018-19 students remain employed in the state workforce.

SUMMARY OF INVESTMENT ANALYSIS RESULTS

The results of the analysis demonstrate that the CE program 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 CE program education. At the same time, taxpayers' investment in the CE program 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	\$127.7 million	\$38.2 million	\$490.2 million
Present value costs	\$35.4 million	\$14.1 million	\$46.2 million
Net present value	\$92.2 million	\$24.1 million	\$443.9 million
Benefit-cost ratio	3.6	2.7	10.6
Rate of return	25.2%	13.1%	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 the CE program creates value from multiple perspectives. The noncredit program benefits local businesses by increasing consumer spending in the city and supplying a steady flow of qualified, trained workers to the workforce. The CE program enriches the lives of students by raising their lifetime earnings and helping them achieve their individual potential. The noncredit program benefits state taxpayers through increased tax receipts and a reduced demand for government-supported social services. Finally, the CE program 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 2018-19 academic and financial reports from RSCCD, 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 RSCCD for a copy of the main report.

*The results of this study demonstrate that the CE program creates value from **multiple perspectives**.*



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