



The Economic Value of the North Orange County Community College District





THE NORTH ORANGE COUNTY COMMUNITY COLLEGE DISTRICT (NOCCCD)—comprised of Cypress College, Fullerton College, and North Orange Continuing Education—creates value in many ways. The colleges play a key role in helping students increase their employability and achieve their individual potential. The District draws students to the county, generating new dollars and opportunities for Orange County. NOCCCD provides students with the education, training, and skills they need to have fulfilling and prosperous careers. Furthermore, NOCCCD is a place for students to meet new people, increase their self-confidence, and promote their overall health and well-being.

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

This study measures the economic impacts created by NOCCCD on the business community and the benefits the colleges generate in return for the investments made by its key stakeholder groups—students, taxpayers, and society. The following two analyses are presented:



Orange County,
California

NOCCCD influences both the **lives of its students** and the **county economy**.

Economic impact analysis

Investment analysis

All results reflect employee, student, and financial data, provided by the colleges, for fiscal year (FY) 2023-24. Impacts on the Orange 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.

Economic impact analysis



NOCCCD promotes economic growth in Orange County through its direct expenditures and the resulting expenditures of students and county businesses. The District serves as an employer and buyer of goods and services for its day-to-day and construction operations. The colleges' activities attract students from outside Orange County, whose expenditures benefit county vendors. In addition, NOCCCD is one of the primary sources of higher education to Orange County residents and a supplier of trained workers to county industries, enhancing overall productivity in the county workforce.

Operations spending impact



NOCCCD adds economic value to Orange County as an employer of county residents and a large-scale buyer of goods and services. In FY 2023-24, the colleges employed 2,671 full-time and part-time faculty and staff, 58% of whom lived in Orange County. Total payroll at NOCCCD was \$290.3 million, much of which was spent in the county on groceries, mortgage and rent payments, dining out, and other household expenses. In addition, the colleges spent \$181.6 million on expenses related to facilities, supplies, and professional services (excluding construction).

NOCCCD's operations spending added \$398.7 million in income to the county during the analysis year. This figure represents the District's payroll, the multiplier effects generated by the in-county spending of the colleges and its employees, and a downward adjustment to account for funding that the colleges received from county sources. The **\$398.7 million** in added income is equivalent to supporting **3,144 jobs** in the county.

Construction spending impact



NOCCCD invests in capital projects each year to maintain its facilities, create additional capacities, and meet its 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 2023-24, NOCCCD's construction spending generated **\$4.4 million** in added income, which is equivalent to supporting **38 jobs**.

Impacts created by
NOCCCD in FY 2023-24



Operations spending impact

398.75 million

+



Construction spending impact

\$4.4 million

+



Student spending impact

\$140.3 million

+



Alumni impact

\$2.1 billion



Total economic impact

\$2.7 billion

OR



Jobs supported

25,657



Student spending impact



Around 23% of NOCCCD students originated from outside the county in FY 2023-24, and some of these students relocated to Orange County to attend NOCCCD. 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 Orange County if not for the existence of NOCCCD. While attending the colleges, these relocated and retained students spent money on groceries, accommodation, transportation, and other household expenses. This spending generated **\$140.3 million** in added income for the county economy in FY 2023-24, which supported **1,947 jobs** in Orange County.

Alumni impact



The education and training NOCCCD provides for county residents has the greatest impact. Since the establishment of the colleges, students have studied at NOCCCD and entered the county workforce with greater knowledge and new skills. Today, hundreds of thousands of former NOCCCD students are employed in Orange County. As a result of their education from NOCCCD, the students receive higher earnings and increase the productivity of the businesses that employ them. In FY 2023-24, NOCCCD alumni generated **\$2.1 billion** in added income for the county economy, which is equivalent to supporting **20,528 jobs**.

Total impact

NOCCCD added \$2.7 billion in income to the Orange County economy during the analysis year, equal to the sum of the operations and construction spending impacts; the student spending impact; and the alumni impact. For context, the **\$2.7 billion** impact was equal to approximately **0.9%** of the total gross regional product (GRP) of Orange County. This contribution that the colleges provided on their own is nearly as large as half of the entire Arts, Entertainment, & Recreation industry in the county.

NOCCCD's total impact can also be expressed in terms of jobs supported. The **\$2.7 billion** impact supported **25,657 county jobs**, using the jobs-to-sales ratios specific to each industry in the county. This means that one out of every 95 jobs in Orange County is supported by the activities of NOCCCD and its students. In addition, the \$2.7 billion, or 25,657 supported jobs, stemmed from different industry sectors. For instance, among non-education industry sectors, the spending of NOCCCD and its students and the activities of its alumni in the Professional & Technical Services industry sector supported 2,182 jobs in FY 2023-24. If the colleges did not exist, these impacts would not have been generated in Orange County.

NOCCCD impacts by industry (jobs supported)



3,767

Retail Trade



2,253

Other Services (except Public Admin)



2,182

Professional & Technical Services



1,975

Accommodation & Food Services



1,764

Real Estate & Rental & Leasing

One out of every 95 jobs in Orange County is supported by the activities of NOCCCD 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 NOCCCD as an investment from the perspectives of students, taxpayers, and society in California. As with the economic impact analysis, this analysis considers only FY 2023-24 activities.

Student perspective



In FY 2023-24, NOCCCD served 47,210 credit and 16,928 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 NOCCCD's students in FY 2023-24 amounted to a present value of \$186.2 million, equal to \$62.2 million in out-of-pocket expenses (including future principal and interest on student loans) and \$124.0 million in forgone time and money.

In return for their investment, NOCCCD's students will receive a stream of higher future earnings that will continue to grow throughout their working lives. For example, the average NOCCCD certificate completer from FY 2023-24 will see annual earnings that are \$4,100 higher than a person with a high school diploma or equivalent working in California. Similarly, the average NOCCCD associate degree graduate from the same cohort will see annual earnings that are \$10,300 higher than a person with a high school diploma or equivalent working in California. Over a working lifetime, the benefits of an associate degree or certificate will amount to the undiscounted values of \$350,200 and \$139,400, respectively, in higher earnings per graduate. The present value of the cumulative higher future earnings that NOCCCD's FY 2023-24 students will receive over their working careers is \$1.3 billion.

The students' benefit-cost ratio is 6.9. In other words, for every dollar students invest in NOCCCD in the form of out-of-pocket expenses and forgone time and money, they

Students see a high rate of return for their investment in NOCCCD



Average annual return for NOCCCD students
25.0%



Stock market 30-year average annual return
10.1%

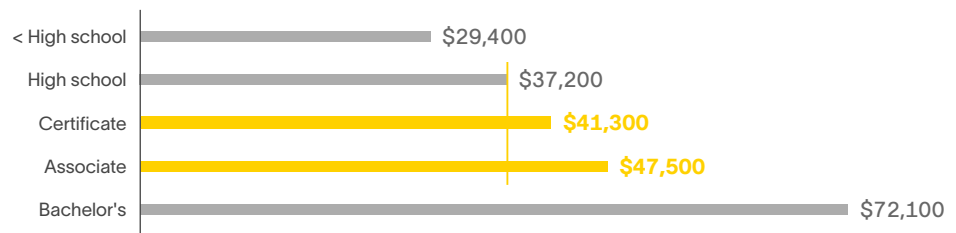


Interest earned on savings account (national deposit rate)
0.5%

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

Average earnings by education level at career midpoint

The average certificate completer and associate degree graduate from NOCCCD will see an increase in earnings of **\$4,100** and **\$10,300**, respectively, each year compared to a person with a high school diploma or equivalent working in California.



Source: Lightcast employment data



will receive a cumulative value of \$6.90 in higher future earnings. Annually, the students' investment in NOCCCD has an average annual internal rate of return of 25.0%, which is impressive compared to the U.S. stock market's 30-year average rate of return of 10.1%.

Taxpayer perspective



NOCCCD 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 NOCCCD 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 2023-24 students' working lives, the state and local government will have collected a present value of \$575.5 million in added taxes.

For every dollar of public money invested in NOCCCD, taxpayers will receive a cumulative value of **\$1.70** over the course of the students' working lives.

Benefits to taxpayers will also consist of savings generated by the improved lifestyles of NOCCCD students and the corresponding reduced government services. Education is statistically correlated with a variety of lifestyle changes. The education that NOCCCD 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. NOCCCD 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 colleges for a copy of the main report. Altogether, the present value of the benefits associated with an education from NOCCCD will generate \$67.1 million in savings to state and local taxpayers.

Total taxpayer benefits amount to \$642.7 million, the present value sum of the added tax revenue and public sector savings. Taxpayer costs are \$375.7 million, equal to the amount of state and local government funding NOCCCD received in FY 2023-24. These benefits and costs yield a benefit-cost ratio of 1.7. This means that for every dollar of public money invested in NOCCCD in FY 2023-24, taxpayers will receive a cumulative present value of \$1.70 over the course of the students' working lives. The average annual internal rate of return for taxpayers is 4.3%, which compares favorably to other long-term investments in the public sector.

Social perspective



Society as a whole in California benefits from the presence of NOCCCD 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 NOCCCD students. As discussed in the previous section, education is statistically correlated with a variety of lifestyle changes that generate social savings. Note that

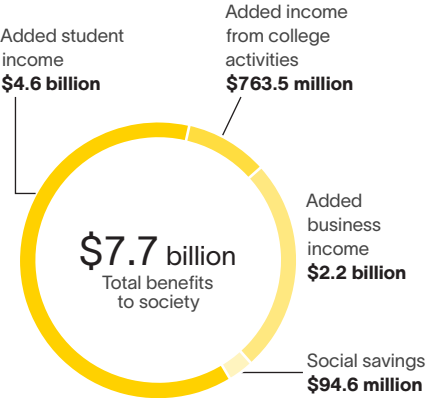


these costs are avoided by the consumers but are distinct from the costs avoided by the taxpayers outlined above. Health care savings include avoided medical costs associated with smoking, obesity, substance abuse, and depression. Justice system savings include avoided costs to the government and society due to less judicial activity. Income assistance savings include reduced welfare and unemployment claims. For a list of study references, contact the colleges for a copy of the main report.

Altogether, the social benefits of NOCCCD equal a present value of \$7.7 billion. These benefits include \$4.6 billion in added student income, \$2.2 billion in added business income, \$763.1 million in added income from the colleges’ activities, as well as \$94.6 million in social savings related to health, the justice system, and income assistance in California. People in California invested a present value total of \$646.5 million in NOCCCD in FY 2023-24. The cost includes all the colleges and students’ costs.

The benefit-cost ratio for society is 11.9, equal to the \$7.7 billion in benefits divided by the \$646.5 million in costs. In other words, for every dollar invested in NOCCCD, people in California will receive a cumulative value of \$11.90 in benefits. The benefits of this investment will occur for as long as NOCCCD’s FY 2023-24 students remain employed in the state workforce.

Social benefits in California from NOCCCD



Source: Lightcast impact model

Summary of investment analysis results

The results of the analysis demonstrate that NOCCCD 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 from NOCCCD. At the same time, taxpayers’ investment in NOCCCD 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 \$1.3 billion		Present value benefits \$642.7 million		Present value benefits \$7.7 billion	
Present value costs \$0.2 billion		Present value costs \$375.7 million		Present value costs \$0.6 billion	
Net present value \$1.1 billion		Net present value \$266.9 million		Net present value \$7.1 billion	
Benefit-cost ratio	Rate of return	Benefit-cost ratio	Rate of return	Benefit-cost ratio	Rate of return
6.9	25.0%	1.7	4.3%	11.9	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 NOCCCD 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. NOCCCD 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, NOCCCD 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 2023-24 academic and financial reports from NOCCCD, 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 colleges 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.