

# THE ECONOMIC VALUE

*Of College of the Canyons*



SEPTEMBER 2015

ANALYSIS OF THE ECONOMIC IMPACT & RETURN ON INVESTMENT OF EDUCATION

*College of the Canyons (COC) creates value in many ways. The college plays a key role in helping students increase their employability and achieve their individual potential. It provides students with the skills they need to have a fulfilling and prosperous career. Further, it supplies an environment for students to meet new people, increase their self-confidence, and promote their overall health and well-being.*

The value of COC influences both the lives of students and also the regional economy. The college serves a range of industries in Santa Clarita Valley, supports local businesses, and benefits society as a whole in California from an expanded economy and improved quality of life. The benefits created by COC even extend to the state and local government through increased tax revenues and public sector savings.

The purpose of this study is to investigate the economic impacts created by COC on the business community and the benefits that the college generates in return for the investments made by its key stakeholder groups—students, taxpayers, and society. The county the college serves is defined as Los Angeles county; referred to as the Santa Clarita Valley. The following two analyses are presented:

- **ECONOMIC IMPACT ANALYSIS**
- **INVESTMENT ANALYSIS**

All results reflect student and financial data for Fiscal Year (FY) 2013-14. Impacts on the regional business community are reported under the economic impact analysis. Results are measured in terms of gross regional product (GRP). The return on investment to students, taxpayers, and society are reported under the investment analysis. Both analyses are described more fully in the following sections.

# ECONOMIC IMPACT ANALYSIS

*COC promotes economic growth in Santa Clarita Valley in a variety of ways. The college is an employer and buyer of goods and services, and the living expenses of students benefit local businesses. In addition, COC is a primary source of education to Santa Clarita Valley residents and a supplier of trained workers to Santa Clarita Valley industries.*

## OPERATIONS SPENDING IMPACT

COC is an important employer in Santa Clarita Valley. In FY 2013-14, the college employed 2,230 full-time and part-time faculty and staff. Of these, 71% lived in Santa Clarita Valley. Total payroll at COC was \$75.4 million, much of which was spent in the county for groceries, rent, eating out, clothing, and other household expenses.

COC is itself a large-scale buyer of goods and services. In FY 2013-14 the college spent \$58.9 million to cover its expenses for facilities, professional services, and supplies.

COC added \$82.8 million in GRP to the county during the analysis year as a result of its day-to-day operations. This figure represents the college's payroll, the multiplier effects generated by the spending of the college and its employees, and a downward adjustment to account for funding that the college received from state and local sources.

**TABLE 1. IMPACTS CREATED BY COC IN FY 2013-14**

GRP	JOBS
<b>\$82.8 MILLION</b>	<b>2,324</b>
Operations spending impact	
<b>\$1.2 MILLION</b>	<b>24</b>
Student spending impact	
<b>\$229.5 MILLION</b>	<b>3,493</b>
Alumni impact	
<b>\$313.6 MILLION</b>	<b>5,841</b>
Total impact	

## IMPACT OF STUDENT SPENDING

Around 7% of students attending COC originated from outside the county in FY 2013-14. Some of these students relocated to Santa Clarita Valley. These students would not have come to the county if the college did not exist. In addition, a number of in-county students would have left the area for other education opportunities if not for the existence of COC. While attending the college, these relocator and retained students spent \$28.4 million to purchase groceries, rent accommodation, pay for transportation, and so on. A significant portion of these expenditures occurred in the county, generating \$1.2 million in GRP in the county economy during the analysis year.

**TABLE 2. COC IMPACT BY INDUSTRY**

<b>INDUSTRY</b>	<b>GRP (THOU- SANDS)</b>	<b>JOBS</b>
Public Admin- istration	\$94,742	1,350
Professional and Technical Services	\$16,338	361
Information	\$12,204	223
Health Care and Social As- sistance	\$11,117	147

## **ALUMNI IMPACT**

The education and training COC provides for county residents results in the greatest impact. As shown in Figure 1, since the college was established, students have studied at COC and entered the regional workforce with new skills. Today, thousands of former students are employed in Santa Clarita Valley.

During the analysis year, past and present students of COC generated \$229.5 million in GRP for the county. This figure represents the higher wages that students earned during the year, the increased output of the businesses that employed the students, and the multiplier effects that occurred as students and their employers spent money at other businesses.

## **TOTAL IMPACT**

The overall impact of COC on the local business community during the analysis year amounted to \$313.6 million in GRP, equal to the sum of the operations spending impact, the student spending impact, and the alumni impact. Table 2 outlines the top industries impacted by COC. The \$313.6 million in GRP was equal to approximately 2.7% of the GRP of Santa Clarita Valley. By comparison, this contribution that the college provides on its own is nearly as large as the entire regional Accommodation & Food Services industry.

## **DR. DIANNE G. VAN HOOK UNIVERSITY CENTER**

In January of 2002 College of the Canyons opened the University Center, which now has five university partners who offer baccalaureate, masters, and doctoral programs on the Valencia Campus. The mission of the Center is to provide immediate access to upper-division and graduate level educational opportunities in Santa Clarita and remove barriers to pursuing their education.

As a result of College of the Canyons building this partnership and a 110,000 square foot facility on its campus, 2,339 students have graduated from the University Center, including 853 undergraduates and 1,486 graduate-level students since 2002.

Altogether 1,295 students at the University Center generated 11,289 credits in AY 2013-14. Applying the same \$119 value per CHE to these students as was used for other students in this analysis, the Santa Clarita Community College District could conservatively expect an additional **\$1.3 million** in higher regional income each year. Since the university partners are providing the training and not College of the Canyons, the full impact of these dollars cannot be attributed to the college alone. Nonetheless, it is because of COC's leadership and orientation to student achievement that the University Center exists.

# INVESTMENT ANALYSIS

*Investment analysis is the process of evaluating total costs and measuring these against total benefits to determine whether or not a proposed venture will be profitable. If benefits outweigh costs, then the investment is worthwhile. If costs outweigh benefits, then the investment will lose money and is considered unprofitable. This study considers COC as an investment from the perspectives of students, taxpayers, and society. The backdrop for the analysis is the entire California economy.*

## STUDENT PERSPECTIVE

In FY 2013-14, COC served 23,559 credit students and 3,448 non-credit students. In order to attend college, students paid for tuition, fees, books, and supplies. They also gave up money that they would have otherwise earned had they been working instead of attending college. The total investment made by COC's students in FY 2013-14 amounted to \$190.5 million, equal to \$32.8 million in out-of-pocket expenses plus \$157.7 million in forgone time and money.

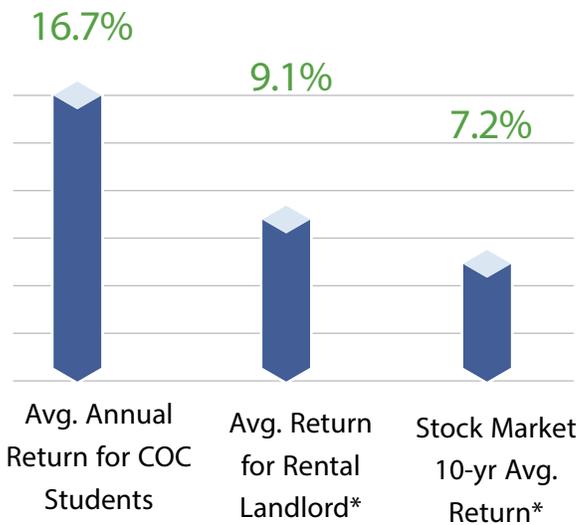
In return for their investment, COC's students will receive a stream of higher future wages that will continue to grow through their working lives. As shown in Figure 2, mean income levels at the midpoint of the average-aged worker's career increase as people achieve higher levels of education. For example, the average associate's degree completer from COC will see an increase in earnings of \$10,300 each year compared to someone with a high school diploma or equivalent. Over a working lifetime, this increase in earnings amounts to an undiscounted value of approximately \$463,500 in higher income.

**FIGURE 2. ANNUAL INCOME BY EDUCATION LEVEL AT CAREER MIDPOINT IN SANTA CLARITA VALLEY**



Source: EMSI complete employment data.

**FIGURE 3. STUDENT RATE OF RETURN**



\*RealityTrac's Q3 2014  
\*Forbes's S&P 500, 1994-2014.

The present value of the higher future wages that COC's students will receive over their working careers is \$891.2 million. Dividing this value by the \$190.5 million in student costs yields a benefit-cost ratio of 4.7. In other words, for every \$1 students invest in COC in the form of out-of-pocket expenses and forgone time and money, they receive a cumulative of \$4.70 in higher future wages. The average annual rate of return for students is 16.7%. This is an impressive return, especially when compared to the 10-year average 7.2% return to the US stock market (Figure 3).

### TAXPAYER PERSPECTIVE

COC generates more in tax revenue than it takes. These benefits to taxpayers consist primarily of taxes that the state and local government will collect from the added income created in the state. As COC students earn more, they will make higher tax payments. Employers will also make higher tax payments as they increase their output and purchase more supplies and services. By the end of the FY 2013-14 students' working careers, the state and local government will have collected a present value of \$260.5 million in added taxes.

Benefits to taxpayers consist of the savings generated by the improved lifestyles of students and the proportionally reduced government expenditures. Education is statistically correlated with a variety of lifestyle changes that generate taxpayer savings across three main categories: 1) health, 2) crime, and 3) unemployment. Improved health habits lower the students' demand for national health care services. Students are also less likely to commit crimes, so the demand for law enforcement and criminal justice services is reduced (study references are available in the main report). Students are also more employable, so the demand for welfare and unemployment benefits, such as income assistance and welfare benefits, is reduced. For a list of study references to these statistical benefits, please contact the college for a copy of the main report. All of these benefits will generate a present value of \$30.2 million in savings to state and local taxpayers.





Total benefits to taxpayers equal \$290.7 million, equal to the sum of the added taxes and public sector savings. Comparing this to the taxpayer costs of \$76.5 million—equal to the funding that COC received from the state and local government during the analysis year—yields a benefit-cost ratio of 3.8. This means that for every \$1 of public money invested in COC, taxpayers receive a cumulative value of \$3.80 over the course of the students’ working lives. The average annual rate of return is 9.3%, a solid investment that compares favorably with other long-term investments in both the private and public sectors (Figure 3).

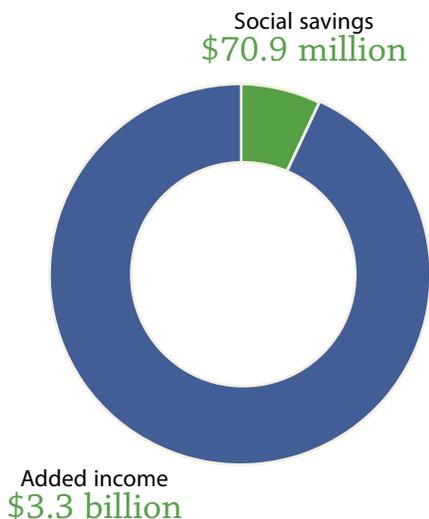
### SOCIAL PERSPECTIVE

Society as a whole within California benefits from the presence of COC in two major ways. The first and largest benefit that society receives is the added income created in the state. As discussed in the previous section, the higher student wages and increased business output stimulate increases in income across the state. This raises prosperity in California and expanding the economic base for society as a whole.

Benefits to society also consist of the savings generated by the improved lifestyles of students. Similar to the taxpayer section above, education is statistically correlated with a variety of lifestyle changes that generate social savings. Note that these costs are avoided by the consumers, and are distinct from the costs avoided by taxpayers outlined above. Health savings include avoided medical costs associated with smoking, alcoholism, obesity, drug abuse, and mental disorders. Crime savings include reduced security expenditures and insurance administration, lower victim costs, and reduced criminal justice system expenditures. Unemployment savings include the reduced employer contributions towards unemployment claims. For a list of study references to these statistical benefits, please contact the college for a copy of the main report.

Figure 4 shows the present value of the added income and social savings that will occur in California over the working lifetime of the FY 2013-14 student population at COC. Added income amounts to a present value of \$3.3 billion due to the increased lifetime incomes of students and associated increases in business output. Social savings amount to \$70.9 million, the sum of health, crime, and unemployment savings in California. Altogether, total benefits to society equal \$3.3 billion (in present value terms).

**FIGURE 4. PRESENT VALUE OF ADDED INCOME AND SOCIAL SAVINGS IN CALIFORNIA**



**TABLE 3. SUMMARY OF INVESTMENT ANALYSIS RESULTS**

<b>STUDENT PERSPECTIVE</b>	
<b>\$891,238</b>	Benefits (thousands)
<b>\$190,486</b>	Costs (thousands)
<b>\$700,752</b>	Net present value (thousands)
<b>4.7</b>	Benefit-cost ratio
<b>16.7%</b>	Rate of return

<b>TAXPAYER PERSPECTIVE</b>	
<b>\$290,659</b>	Benefits (thousands)
<b>\$76,518</b>	Costs (thousands)
<b>\$214,142</b>	Net present value (thousands)
<b>3.8</b>	Benefit-cost ratio
<b>9.3%</b>	Rate of return

<b>SOCIAL PERSPECTIVE</b>	
<b>\$3,330,681</b>	Benefits (thousands)
<b>\$313,062</b>	Costs (thousands)
<b>\$3,017,618</b>	Net present value (thousands)
<b>10.6</b>	Benefit-cost ratio
<b>N/A</b>	Rate of return*

\* 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.

Society invested \$313.1 million in COC educations during the analysis year. This includes all expenditures by COC, all student expenditures, and all student opportunity costs. For every dollar of this investment, society as a whole in California will receive a cumulative value of \$10.60 in benefits, equal to the \$3.3 billion in benefits divided by the \$313.1 million in costs. These benefits will occur for as long as COC’s FY 2013-14 students remain employed in the state workforce.

### **SUMMARY OF INVESTMENT ANALYSIS RESULTS**

Table 3 presents the results of the investment analysis for all three of COC’s major stakeholder groups—students, taxpayers, and society. As shown, students receive great value for their educational investment. At the same time, the investment made by state and local taxpayers to the college creates a wide range of benefits to society and returns more to government budgets than it costs.



# CONCLUSION



The results of this study demonstrate that COC creates value from multiple perspectives. The college benefits local businesses by increasing consumer spending in the county and supplying a steady flow of qualified, trained workers into the workforce. It enriches the lives of students by raising their lifetime incomes and helping them achieve their individual potential. It 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. Finally, it benefits state and local taxpayers through increased tax receipts across the state and a reduced demand for government-supported social services.

## ABOUT THE STUDY

Data and assumptions used in the study are based on several sources, including the FY 2013-14 academic and financial reports from the college, industry and employment data from the U.S. Bureau of Labor Statistics and U.S. Census Bureau, outputs of EMSI's Social Accounting Matrix (SAM) 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 investment effectiveness and economic impact. For a full description of the data and approach used in the study, please contact the college for a copy of the technical report.

## ABOUT EMSI

Economic Modeling Specialists International, a CareerBuilder company, is a leading provider of economic impact studies and labor market data to educational institutions, workforce planners, and regional developers in the U.S. and internationally. Since 2000, EMSI has completed over 1,200 economic impact studies for educational institutions in four countries. Visit [www.economicmodeling.com](http://www.economicmodeling.com) for more information about EMSI's products and services.