



Executive Summary

The **Economic Contribution** *of*

Southwestern Community College District
State of California



emsi

April 2012



Economic Growth Analysis

Investment Analysis



Socioeconomic Impact Study

STUDY HIGHLIGHTS

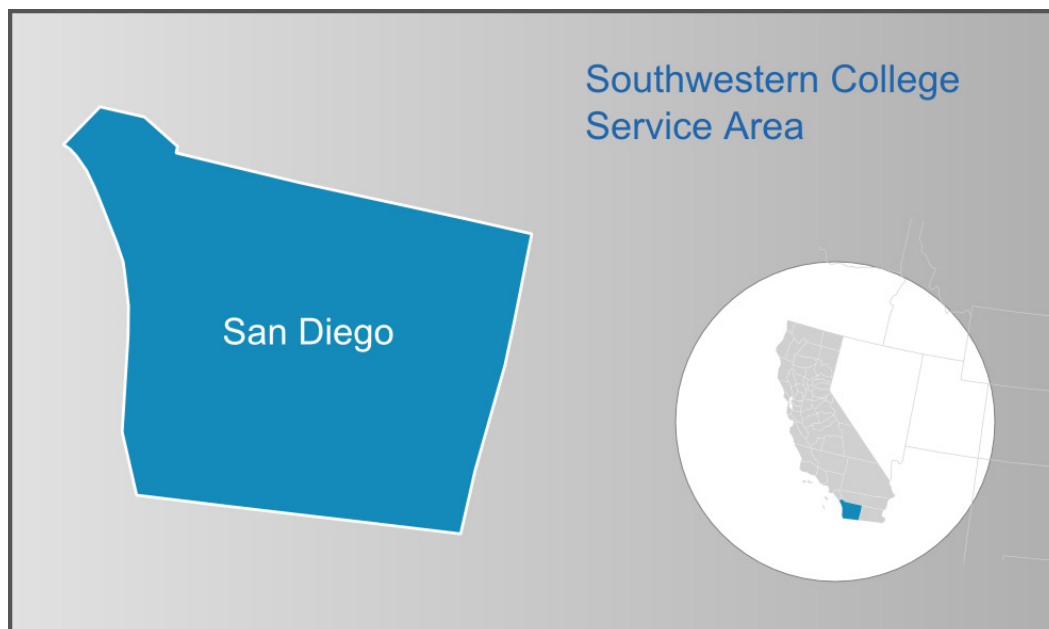
INVESTMENT ANALYSIS

- For every dollar students invest in SCCD, they receive a cumulative **\$5.40** in higher future income (discounted) over the course of their working careers.
- California benefits from improved health and reduced welfare, unemployment, and crime, saving the public some **\$6.1 million** per year.
- Taxpayers see a rate of return of **7.5%** on their investment in SCCD.

ECONOMIC GROWTH ANALYSIS

- The San Diego County economy receives approximately **\$74.8 million** in net added income each year due to SCCD payroll and operations spending.
- The accumulated credits achieved by former SCCD students over the past 30 years translated to **\$428.8 million** in added regional income in 2010-11 due to the higher earnings of students and increased output of businesses.

SAN DIEGO COUNTY MAP



Executive Summary

INTRODUCTION

How do the San Diego County economy and the state of California benefit from the presence of Southwestern Community College District (SCCD)?

In this study, EMSI applies a comprehensive model designed to quantify the economic benefits of community and technical colleges and translate these into common sense benefit/cost and investment terms. The study includes two major analyses:

1. **Investment Analysis:** Treats education funding as an investment, calculating all measurable returns and comparing them to costs, from the perspec-

tives of students, taxpayers, and society as a whole.

2. **Economic Growth Analysis:** Measures added income in the region due to college operations and the accumulated skills of past and present students still in the workforce.

The economic impact model has been field-tested to generate more than 900 studies for community, technical, and further education colleges in the US, Canada, the UK, and Australia. To see the full documentation of the study, please contact the college.

THE RESULTS

Investment Analysis

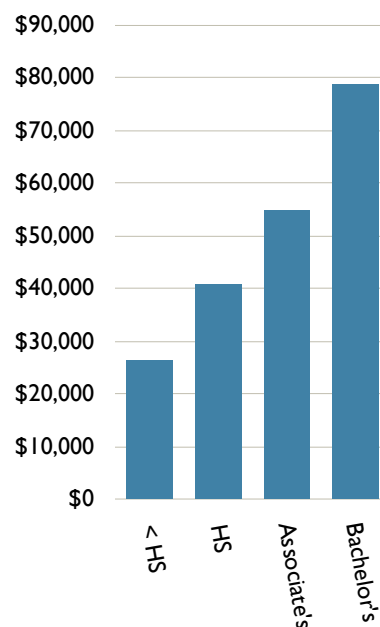
Student Perspective

Benefits of higher education are most obvious from the student perspective: students sacrifice current earnings (as well as money to pay for tuition) in return for a lifetime of higher income. Compared to someone with a high school diploma, associate's degree graduates earn \$14,300 more per year, on average, over the course of a working lifetime (undiscounted).

From an investment standpoint, SCCD students enjoy a 16.3% rate of return on their investments of time and money. This compares favorably with returns on other investments, e.g., long-term return on stocks and bonds.

The corresponding benefit/cost ratio is 5.4, i.e., for every dollar students invest in SCCD education, they receive a cumulative of \$5.40 in higher future income over their working careers. This is a real return that accounts for any discounting that occurs during the entire period. The payback period is 9.3 years.

Earnings by Education Level in San Diego County



SCCD INVESTMENT ANALYSIS AT A GLANCE

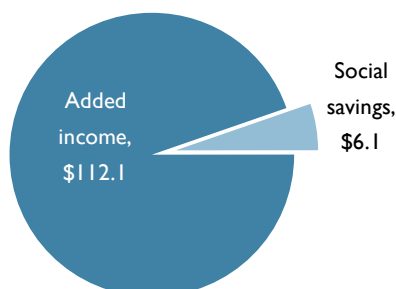
Stakeholder	Rate of Return	Benefit/Cost	Payback (Years)
Student perspective	16.3%	5.4	9.3
Social perspective	NA	20.7	NA
Taxpayer perspective	7.5%	2.2	16.2

Social Perspective

From the perspective of society as a whole, the benefits of education accrue to different publics. For example, SCCD students expand the state's economic base through their higher incomes, while the businesses that employ them also become more productive through the students' added skills. These benefits, together with the associated ripple effects, contribute an estimated \$112.1 million in taxable income to the California economy each year.

As they achieve higher levels of education, SCCD students are also less likely to smoke or abuse alcohol, draw welfare or unemployment benefits, or commit crimes. This translates into associated dollar savings (i.e., avoided costs) to the public equal to approximately \$6.1 million annually. These are benefits that are incidental to the operations of SCCD and accrue for years into the future, for as long as students remain active in the workforce.

Total Annual Benefits to the California Public Due to SCCD (\$ Millions)



To compare benefits to costs, we project benefits into the future, discount them back to the present, and weigh them against the \$86.6 million that state and

local taxpayers spent in FY 2010-11 to support the college. Following this procedure, it is estimated that SCCD provides a benefit/cost ratio of 20.7, i.e. every dollar of state and local tax money invested in the college today yields a cumulative of \$20.70 in benefits that accrue to all California residents, in terms of added taxable income and avoided social costs.

Taxpayer Perspective

Under the taxpayer perspective, only benefits that accrue to state and local governments are counted, namely, increased tax collections and reduced government expenditures. For example, in place of increased income, the taxpayer perspective includes only the increased state and local tax receipts from those higher incomes. Similarly, in place of overall crime, welfare, unemployment and health savings, the taxpayer perspective includes only those that translate to actual reductions in state and local government expenditures.

Note here that government often undertakes activities wanted by the public, but which may be unprofitable in the marketplace. This means that positive economic returns are generally not expected from government investments. From the taxpayer perspective, therefore, even a small positive return (a benefit/cost ratio equal to or greater than 1, or a rate of return equal to or greater than the 3% discount rate used in the taxpayer investment analysis) would be a favorable outcome.

For SCCD, the results indicate positive returns: a rate of return of 7.5% and a benefit/cost ratio of 2.2 (every dollar of state or local tax money invested in SCCD today returns \$2.20).

Economic Growth Analysis

SCCD affects the local economy in two ways: (1) through its local purchases, including wages paid to faculty and staff; and (2) through the increase in the skill base of the local workforce. These effects break down as follows:

College Operations Effect

SCCD creates income through the earnings of its faculty and staff, as well as through its own operating and capital expenditures. Adjusting for taxes and other monies withdrawn from the local economy in support of SCCD, it is estimated that the San Diego County economy receives a net of \$74.8 million in added labor and non-labor income due to SCCD operations each year.

Student Productivity Effect

Every year students leave SCCD and join or rejoin the regional workforce. Their added skills translate to higher income and a more robust San Diego County economy. Based on SCCD's historical enrollment and credit production over the past 30-year period, it is estimated that the accumulated contribution of SCCD instruction received by former students (both completers and non-completers) annually adds some \$428.8 million in income to San Diego County.

Total Effect

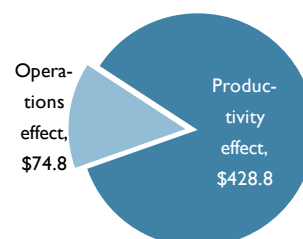
Altogether, the average annual added income due to the activities of SCCD and its former students equals \$503.6 million. This is approximately equal to 0.3% of the total San Diego County economy.

SCCD ECONOMIC GROWTH RESULTS AT A GLANCE

Added Income

College operations effect	\$74,808,000
Student productivity effect	\$428,799,000
GRAND TOTAL	\$503,607,000

Total Added Income in San Diego County Due to SCCD (\$ Millions)



CONCLUSION

The results of this study demonstrate that SCCD is a sound investment from multiple perspectives. The college enriches the lives of students and increases their lifetime incomes. It benefits taxpayers by generating

increased tax revenues from an enlarged economy and reducing the demand for taxpayer-supported social services. Finally, it contributes to the vitality of both the local and state economies.



ABOUT THE STUDY

This report summarizes the results from “The Economic Contributions of Southwestern Community College District” detailing the role that the college plays in promoting economic development, enhancing students’ careers, and improving quality of life. Data sources include, but are not limited to, 2010-11 academic and financial reports from the college, industry and employment data from the U.S. Bureau of Labor Statistics, earnings and demographic data from the U.S. Census Bureau, and a variety of studies and surveys relating education to social behavior.

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Overview Fact Sheet

Southwestern Community College District plays a significant role in the local economy and is a sound investment from multiple perspectives. Students benefit from improved lifestyles and increased earnings. Taxpayers benefit from a larger economy and lower social costs. Finally, the community as a whole benefits from increased job and investment opportunities, higher business revenues, greater availability of public funds, and an eased tax burden.

INVESTMENT ANALYSIS

Student Perspective

- SCCD served **28,369** credit students and **334** non-credit students in the 2010-11 reporting year.
- Education increases lifetime income. The average income at the career midpoint of someone with an associate's degree in San Diego County is **\$54,900**, 35% more than a student with a high school diploma.

Students enjoy a 16.3% rate of return on their investment in SCCD.

- Throughout his or her working career, the average SCCD student's discounted lifetime income increases by **\$5.40** for every dollar invested in SCCD.
- Students enjoy an attractive **16.3%** average rate of return on their SCCD educational investment, recovering all costs (including tuition, fees, and forgone wages) in 9.3 years.

Social Perspective

- Higher earnings of SCCD students and associated increases in state income expand the tax base in California by about **\$112.1 million** each year.
- California will see avoided social costs amounting to **\$6.1 million** per year due to SCCD students, including savings associated with improved health, reduced crime, and reduced welfare and unemployment.

Taxpayer Perspective

- State and local governments allocated approximately **\$86.6 million** in support of SCCD in FY 2010-11.
- For every dollar of this support, taxpayers see a cumulative return of **\$2.20** over the course of students' working careers (in the form of higher tax receipts and avoided costs).

- State and local governments see a rate of return of **7.5%** on their support for SCCD. This return compares very favorably with private sector rates of return on similar long-term investments.

ECONOMIC GROWTH ANALYSIS

College Operations Effect

- The San Diego County economy annually receives roughly **\$74.8 million** in income due to SCCD operations. This is a conservative figure adjusted to account for monies that leave the economy or are withdrawn from the economy in support of the college.

Added income attributable to the accumulation of SCCD skills amounts to \$428.8 million each year.

Productivity Effect

- The current San Diego County economy embodies an estimated **2.5 million** credits that have accumulated over the past 30-year period as thousands of former SCCD students (completers and non-completers) enter the workforce year after year.
- SCCD skills translate to higher earnings for students and increased output of businesses. The added income attributable to the accumulation of SCCD credits in the workforce amounts to **\$428.8 million** each year.

Total Effect

- Altogether, the average annual added income due to the activities of SCCD and its former students equals **\$503.6 million**. This is approximately equal to **0.3%** of the total San Diego County economy.

Social Perspective

SCCD Increases State Income

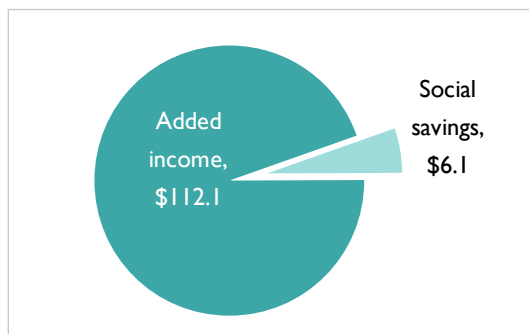


- The activities of SCCD's 2010-11 student body will generate about \$73.8 million in labor income in the state economy each year.
- Once SCCD's current students become active in the workforce, they will promote business output, raise consumer spending, and increase property income in the state. All of this contributes an additional \$38.3 million in taxable income each year.
- Altogether, higher student income and associated effects on business productivity add \$112.1 million in income annually to the state economy.

SCCD Reduces Social Costs

- Education is statistically correlated with improved lifestyle behaviors, including reduced incidences of absenteeism, alcohol abuse, and smoking, lower probability of committing crime, and fewer welfare and unemployment claims.

Annual Benefits to the California Public Due to SCCD (\$ Millions)



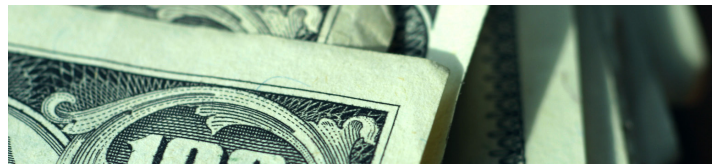
- It is estimated that SCCD's 2010-11 student population will generate social savings to the California public equal to \$6.1 million a year.
- These savings accrue to all state and local residents—students, homeowners, businesses, and taxpayers.



Taxpayer Perspective

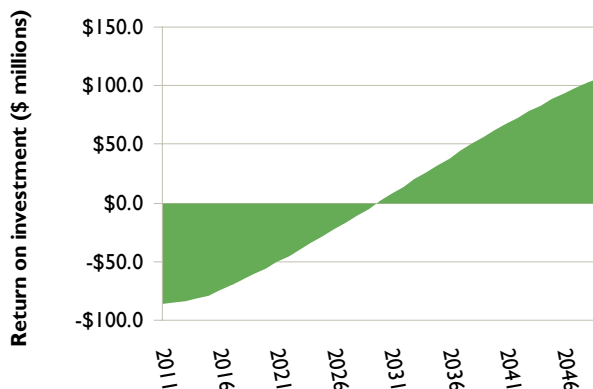
SCCD Leverages Taxpayer Dollars

- An estimated 97% of SCCD students remain in California and contribute to economic growth. Students who enter the workforce expand the tax base by generating higher earnings and reducing social costs.
- Higher student earnings and associated increases in property income generate about \$12 million in added tax revenue each year.
- State and local governments will save approximately \$704,400 in avoided social costs each year, including savings associated with improved health, lower costs of law enforcement, and fewer welfare claimants.



SCCD Generates a Return on Public Investment

Long-term Return to State and Local Taxpayers on Their SCCD Investment



- State and local governments allocated about \$86.6 million in support of SCCD in FY 2010-11.
- For every dollar appropriated by state and local governments to SCCD, taxpayers will see a return with a cumulative added value of \$2.20 in the form of higher tax revenues and avoided social costs.
- State and local governments will receive a rate of return of 7.5% on their investments in SCCD.

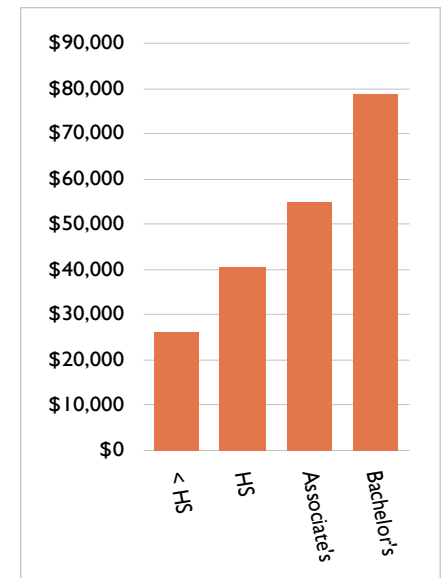
Student Perspective

Education Will Pay You Back—For a Lifetime



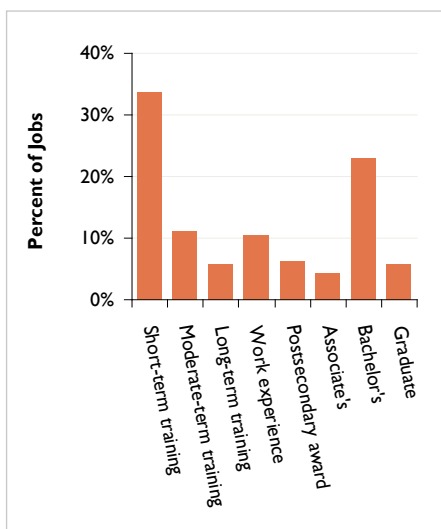
- Students enjoy an attractive 16.3% rate of return on their SCCD educational investment.
- Over the course of his or her working career, the average SCCD student's lifetime earnings will increase \$5.40 for every dollar invested in their SCCD education (in the form of tuition, fees, and forgone earnings).
- The average annual income of the typical associate's degree graduate in San Diego County at the midpoint of his or her career is \$54,900, 35% more than someone with a high school diploma.
- Over the course of a working lifetime, associate's degree graduates in San Diego County earn \$572,000 more than someone with a high school diploma (undiscounted).

Average Earnings in San Diego County



Education Is Your Ticket to a Better Job

Projected 2021 Jobs in San Diego County by Skill Level



- By 2021 it is anticipated that there will be about 584,900 new and replacement jobs available in San Diego County.
- About 33% of these jobs will require an education level equal to an associate's degree or greater.
- Another 6% of available jobs in 2021 will require some kind of post-secondary certificate or vocational award.



Social & Taxpayer Perspectives

State and local taxpayers earn a 7.5% rate of return on their investment in Southwestern Community College District.

Southwestern Community College District adds more money to the state treasury than it takes out. Not only does the college pull its own weight, but it also effectively subsidizes other sectors funded by the taxpayers. Absent SCCD, taxes would actually have to be raised in order to maintain services in all other sectors at their current levels. The return on investment is considered from two taxpayer perspectives: social and taxpayer.

Social Perspective

The social perspective adds up all benefits attributable to SCCD, regardless of recipient, and compares the total to the original investment made. This is called the “benefit/cost ratio.” If the ratio is less than 1.0, the investment is not worthwhile; if it is greater, the investment is considered sound.

For example, a transportation authority might justify a new road by showing that savings in travel time and vehicle expenses accrued by thousands of drivers exceed the project’s cost. Public parks are justified by showing that recreation, scenic, and other values enjoyed by park users exceed the cost of park infrastructure, operation, and the net value of the park’s land and resources not used for other purposes. So the social perspective counts all benefits, not just those that accrue back to state or local government.

Benefits generated by SCCD also accrue to different groups. Students benefit from higher incomes, employers benefit from increased worker productivity, and the public at large benefits from an expanded economic base. The public also enjoys a variety of external social benefits, such as reduced crime, lower welfare and unemployment, improved health, and less absenteeism from work. All of these are tallied up and compared to the investment made by state and local governments, or the taxpayers. A social perspective benefit/cost ratio greater than 1.0 is a minimal indicator of a worthwhile public investment.

Counting benefits and costs in this way, SCCD’s benefit/cost ratio is 20.7. In other words, the cumulative added value attached to each dollar invested will have a present value of \$20.70 by the end of the students’ working career.

Taxpayer Perspective

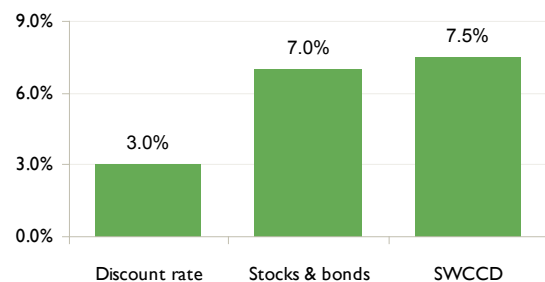
The taxpayer investment perspective counts only benefits that can be entered into the books of state and local governments. For example, educated workers earn more and thus pay more taxes. Furthermore, because state and

local governments bear part of the cost of crime, their budgets benefit from education’s crime-reducing effect, and the same is true for other benefits of an educated populace. The bottom line: state and local governments receive returns from their support of SCCD in the form of increased tax revenue and savings associated with avoided social costs.

Worthwhile public projects often generate negative taxpayer perspective returns, because the role of government is to provide services that the public wants but that the business sector may find unprofitable. Considerable funds are spent on public parks, for example, yet they yield little or no direct return. From a taxpayer perspective, returns are negative, though the park is justified by the benefits tracked under the social perspective.

But unlike most government endeavors, funding for SCCD generates strong results from *both* the social and taxpayer perspectives. Economists generally assume a 3% discount rate in analyzing government investments, assuming that governments can obtain unsecured loans at a rate of 3% or receive a 3% return on any excess funds, if they were invested. *Since SCCD’s taxpayer rate of return of 7.5% is greater than 3%, state and local governments actually make money on the investment.* By funding the college, therefore, other recipients of state and local funding are actually subsidized through the revenues generated by the college.

Comparison of SCCD’s Rate of Return to Discount Rate and Average Return on Stocks and Bonds



Business Perspective

SCCD Raises Consumer Spending

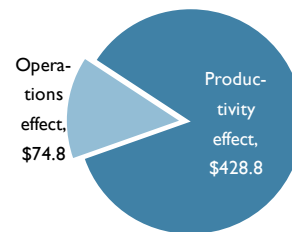


- SCCD employed 617 full-time and 704 part-time faculty and staff in the 2010-11 reporting year, with an annual payroll of \$79.9 million.
- In addition to payroll, SCCD spent \$13.1 million in FY 2010-11 for supplies and services, of which an estimated 50% was spent in San Diego County.

SCCD Generates New Income

- SCCD payroll and spending for supplies and services generate a net impact of \$74.8 million in added income in the economy each year.
- The increased productivity of workers due to the accumulation of past and present SCCD skills in the San Diego County workforce contributes approximately \$428.8 million in added income each year.

Added Income in San Diego County Due to SCCD (\$ Millions)



SCCD Creates a Skilled Workforce

- SCCD activities encourage new business, assist existing business, and create long-term economic growth. The college enhances worker skills and provides customized training to local business and industry.
- An estimated 2.5 million SCCD credits have accumulated in the San Diego County workforce over the past 30-year period as former SCCD students (completers and non-completers) enter the regional workforce each year.

Projected 2021 Jobs by Skill Level in San Diego County (%)

