



The Economic Value of  
Yosemite Community College District

# EXECUTIVE SUMMARY



**Y**OSEMITE Community College District (YCCD) creates value in many ways. The district plays a key role in helping students increase their employability and achieve their individual potential. It draws students to the region, generating new dollars and opportunities for the Yosemite Community College District.\* YCCD provides students with the education, training, and skills they need to have fulfilling and prosperous careers. Furthermore, YCCD is a place for students to meet new people, increase their self-confidence, and promote their overall health and well-being.

YCCD influences both the lives of its students and the regional economy. The colleges support a variety of industries in the Yosemite Community College District, serve regional businesses, and benefit society as a whole in California from an expanded economy and improved quality of life. The benefits created by YCCD even extend to the state and local government through increased tax revenues and public sector savings.

This study measures the economic impacts created by YCCD on the business community and the benefits the district 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 the district, for fiscal year (FY) 2019-20. Impacts on the Yosemite Community College District 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.

\* For the purposes of this analysis, the Yosemite Community College District consists of Stanislaus County and Tuolumne County and parts of the following four counties: Calaveras County, Merced County, San Joaquin County, and Santa Clara County.

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*YCCD influences both the **lives of its students** and the **regional economy**.*

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YOSEMITE COMMUNITY COLLEGE DISTRICT



# Economic impact analysis

YCCD promotes economic growth in the Yosemite Community College District through its direct expenditures and the resulting expenditures of students and regional businesses. The district serves as an employer and buyer of goods and services for its day-to-day operations. Its activities attract students from outside the Yosemite Community College District, whose expenditures benefit regional vendors. In addition, YCCD is a primary source of higher education to the Yosemite Community College District residents and a supplier of trained workers to regional industries, enhancing overall productivity in the regional workforce.

## Operations spending impact



YCCD adds economic value to the Yosemite Community College District as an employer of regional residents and a large-scale buyer of goods and services. In FY 2019-20, the colleges employed 1,336 full-time and part-time faculty and staff, 94% of whom lived in the Yosemite Community College District. Total payroll at YCCD was \$141.5 million, much of which was spent in the region for groceries, mortgage and rent payments, dining out, and other household expenses. In addition, the colleges spent \$67.3 million on day-to-day expenses related to facilities, supplies, and professional services.

YCCD's day-to-day operations spending added \$165 million in income to the region during the analysis year. This figure represents the district's payroll, the multiplier effects generated by the in-region spending of the district and its employees, and a downward adjustment to account for funding that the district received from regional sources. The \$165 million in added income is equivalent to supporting 1,573 jobs in the region.

## Construction spending impact



YCCD invests in construction 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 regional economy. In FY 2019-20, YCCD's construction spending generated \$1.6 million in added income, which is equivalent to supporting 20 jobs.

## Student spending impact



Around 6% of students attending YCCD originated from outside the region in FY 2019-20, and some of these students relocated to the Yosemite Community College District to attend YCCD. These

IMPACTS CREATED  
BY YCCD IN FY 2019-20



**\$165 million**  
Operations Spending Impact



**\$1.6 million**  
Construction Spending Impact



**\$23.2 million**  
Student Spending Impact



**\$515.8 million**  
Alumni Impact



**\$705.5 million**  
TOTAL IMPACT

- OR -

**9,820**  
JOBS SUPPORTED

students may not have come to the region if the colleges did not exist. In addition, some in-region students, referred to as retained students, would have left the Yosemite Community College District if not for the existence of YCCD. While attending the colleges, these relocated and retained students spent money on groceries, accommodation, transportation, and other household expenses. This spending generated \$23.2 million in added income for the regional economy in FY 2019-20, which supported 503 jobs in the Yosemite Community College District.

## Alumni impact



The education and training YCCD provides for regional residents has the greatest impact. Since its establishment, students have studied at YCCD and entered the regional workforce with greater knowledge and new skills. Today, hundreds of thousands of former YCCD students are employed in the Yosemite Community College District. As a result of their YCCD educations, the students receive higher earnings and increase the productivity of the businesses that employ them. In FY 2019-20, YCCD alumni generated \$515.8 million in added income for the regional economy, which is equivalent to supporting 7,725 jobs.

## Total impact

YCCD added \$705.5 million in income to the Yosemite Community College District 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 \$705.5 million impact was equal to approximately 2.5% of the total gross regional product (GRP) of the Yosemite Community College District. This contribution that the district provided on its own was nearly as large as the entire Accommodation & Food Services industry in the region.

YCCD's total impact can also be expressed in terms of jobs supported. The \$705.5 million impact supported 9,820 regional jobs, using the jobs-to-sales ratios specific to each industry in the region. This means that one out of every 32 jobs in the Yosemite Community College District is supported by the activities of YCCD and its students. In addition, the \$705.5 million, or 9,820 supported jobs, stemmed from different industry sectors. Among non-education industry sectors, YCCD's spending and alumni in the Health Care & Social Assistance industry sector supported 1,895 jobs in FY 2019-20. These are impacts that would not have been generated without the district's presence in the Yosemite Community College District.

### YCCD IMPACTS BY INDUSTRY (JOBS SUPPORTED)



**One out of every 32 jobs** in the Yosemite Community College District is supported by the activities of YCCD and its students.



# 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 YCCD as an investment from the perspectives of students, taxpayers, and society in California.

## Student perspective



In FY 2019-20, YCCD served 27,796 credit and 1,588 non-credit students. In order to attend the colleges, the students paid for tuition, fees, books, and supplies. They also gave up money they would have otherwise earned had they been working instead of attending college. The total investment made by YCCD's students in FY 2019-20 amounted to a present value of \$86.2 million, equal to \$28.6 million in out-of-pocket expenses and \$57.5 million in forgone time and money.

In return for their investment, YCCD's students will receive a stream of higher future earnings that will continue to grow throughout their working lives. For example, the average YCCD associate degree graduate from FY 2019-20 will see annual earnings that are \$8,200 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 \$344.4 thousand in higher earnings per graduate. The present value of the cumulative higher future earnings that YCCD's FY 2019-20 students will receive over their working careers is \$475.1 million.

### STUDENTS SEE A HIGH RATE OF RETURN FOR THEIR INVESTMENT IN YCCD



20.2%

Average annual return for YCCD students



9.9%

Stock market 30-year average annual return

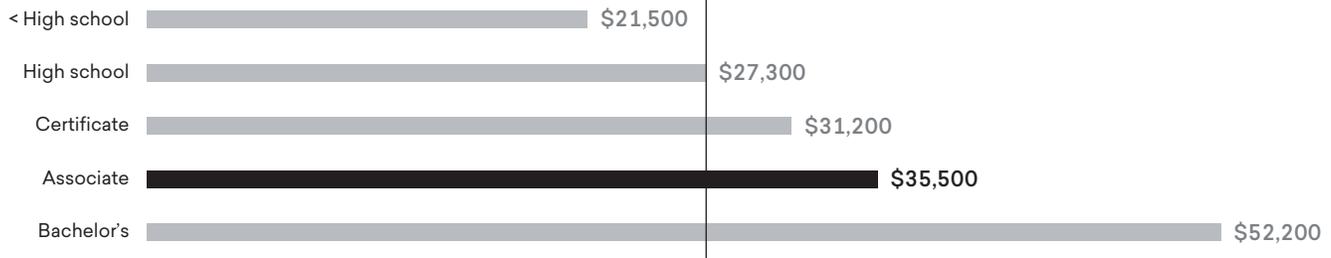


0.8%

Interest earned on savings account (National Rate Cap)

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

The average associate degree graduate from YCCD will see an increase in earnings of **\$8,200** each year compared to a person with a high school diploma or equivalent working in California.



Source: Emsi employment data.

The students' benefit-cost ratio is 5.5. In other words, for every dollar students invest in YCCD, in the form of out-of-pocket expenses and forgone time and money, they will receive a cumulative value of \$5.50 in higher future earnings. Annually, the students' investment in YCCD has an average annual internal rate of return of 20.2%, which is impressive compared to the U.S. stock market's 30-year average rate of return of 9.9%.

## Taxpayer perspective



YCCD 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 revenue created in the state. As YCCD 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 2019-20 students' working lives, the state and local government will have collected a present value of \$138.9 million in added taxes.

Benefits to taxpayers will also consist of savings generated by the improved lifestyles of YCCD students and the corresponding reduced government services. Education is statistically correlated with a variety of lifestyle changes. Students' YCCD educations will generate savings in three main categories: 1) health-care, 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. YCCD 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 district for a copy of the main report. Altogether, the present value of the benefits associated with a YCCD education will generate \$25.1 million in savings to state and local taxpayers.

Total taxpayer benefits amount to \$164 million, the present value sum of the added taxes and public sector savings. Taxpayer costs are \$152.1 million, equal to the amount of state and local government funding YCCD received in FY 2019-20. These benefits and costs yield a benefit-cost ratio of 1.1. This means that for every dollar of public money invested in YCCD in FY 2019-20, taxpayers will receive a cumulative value of \$1.10 over the course of the students'

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*For every dollar of public money invested in YCCD, taxpayers will receive a cumulative value of **\$1.10** over the course of the students' working lives.*

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### STUDENT PERSPECTIVE

\$475.1 million  
Present value benefits

\$86.2 million  
Present value costs

\$388.9 million  
Net present value

| Benefit-cost ratio | Rate of return |
|--------------------|----------------|
| 5.5                | 20.2%          |



### TAXPAYER PERSPECTIVE

\$164 million  
Present value benefits

\$152.1 million  
Present value costs

\$11.9 million  
Net present value

| Benefit-cost ratio | Rate of return |
|--------------------|----------------|
| 1.1                | 1.9%           |



### SOCIAL PERSPECTIVE

\$2.2 billion  
Present value benefits

\$291 million  
Present value costs

\$1.9 billion  
Net present value

| Benefit-cost ratio | Rate of return |
|--------------------|----------------|
| 7.5                | 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.

working lives. The average annual internal rate of return for taxpayers is 1.9%, which compares favorably to other long-term investments in the public and private sectors.

### Social perspective



Society as a whole in California benefits from the presence of YCCD 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 YCCD 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 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 the district for a copy of the main report.

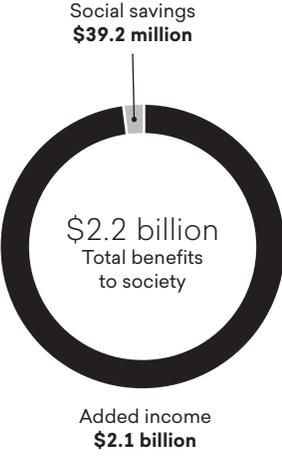
Altogether, the social benefits of YCCD equal a present value of \$2.2 billion. These benefits include \$2.1 billion in added income through students' increased lifetime earnings and increased business output, as well as \$39.2 million in social savings related to health, crime, and income assistance in California. People in California invested a present value total of \$291 million in YCCD in FY 2019-20. The cost includes all the college and student costs.

The benefit-cost ratio for society is 7.5, equal to the \$2.2 billion in benefits divided by the \$291 million in costs. In other words, for every dollar invested in YCCD, people in California will receive a cumulative value of \$7.50 in benefits. The benefits of this investment will occur for as long as YCCD's FY 2019-20 students remain employed in the state workforce.

### Summary of investment analysis results

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

SOCIAL BENEFITS IN CALIFORNIA FROM YCCD



# Conclusion

The results of this study demonstrate that YCCD creates value from multiple perspectives. The district benefits regional businesses by increasing consumer spending in the region and supplying a steady flow of qualified, trained workers to the workforce. YCCD enriches the lives of students by raising their lifetime earnings and helping them achieve their individual potential. It benefits state and local taxpayers through increased tax receipts and a reduced demand for government-supported social services. Finally, YCCD 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 2019-20 academic and financial reports from YCCD, 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 the district for a copy of the main report.

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**multiple perspectives.**

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