

**Highlights from Economic Modeling Specialists, Inc. (formerly CC Benefits, Inc.)
“The Economic Contribution of Yosemite Community College District”
January 2006**

- Over 29,000 credit and non-credit students attend college in YCCD each year. As many as 75% of these students remain in the region and contribute to the local economy.
- It is estimated that the present-day YCCD Service Area **workforce** embodies **over 5.1 million** credit and non-credit hours of past and present training.
- **YCCD skills** embodied in the present-day workforce **increase income in the YCCD Service Area economy** where former students are employed **by \$612.1 million**. Associated multiplier (**indirect**) **effects** increase income **by an added \$116.5 million**.
- **YCCD operations and capital spending** currently generate roughly **\$41.9 million in regional income** to the current YCCD Service Area economy.
- The state and local communities in the YCCD Service Area will see a **\$17 a year savings** for **each unit** earned by YCCD students, including savings associated with improved health, lower crime costs, and reduced welfare and unemployment. When aggregated across all existing students, the State of California will **benefit from \$7.1 million** worth of avoided costs **each year over the next 37-year period**.
- For **each dollar appropriated** by state and local government, taxpayers will see a cumulative **return on investment** of **\$2.53 over the next 37 years** or so (as long as the students remain in the workforce).
- A student who graduates with an Associate Degree from one of the YCCD colleges earns an average of over \$27,000 per year, which is 112% more than someone without a high school diploma or GED and 35% more than someone with a high school diploma or GED.
- A student who graduates with a one-year certificate from one of the YCCD colleges earns an average of over \$23,000 per year, which is 81% more than someone without a high school diploma or GED and 16% more than someone with a high school diploma or GED.
- YCCD students will see their current annual income increase, on average, by almost \$100 for each credit completed at YCCD.

FACT SHEET: ECONOMIC IMPACT OF YOSEMITE COMMUNITY COLLEGE DISTRICT

What role does the Yosemite Community College District (YCCD) play in the local economy? The results of this study demonstrate that YCCD is a sound investment from multiple perspectives. Students benefit from improved lifestyles and increased earnings. Taxpayers benefit from an enlarged economy and lower social costs. And 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.

YCCD stimulates the state and local economy

- The current YCCD Service Area economy owes roughly **\$41.9 million** in regional income to YCCD operations and capital spending.
- YCCD activities encourage new business, assist existing business, and create long-term economic growth. The colleges enhance worker skills and provide customized training to local business and industry. It is estimated that the present-day YCCD Service Area workforce embodies over **5.1 million** credit and non-credit hours of past and present YCCD training.
- YCCD skills embodied in the present-day workforce increase income in the YCCD Service Area economy where the former students are employed by **\$612.1 million**. Associated multiplier effects (sometimes called indirect effects) increase income by another **\$116.5 million**.
- Altogether, the present-day economy in the YCCD Service Area owes roughly **\$770.6 million** of its current labor and non-labor income to the past and present efforts of YCCD. Clearly it is not inaccurate to describe YCCD as an engine of economic growth.

The YCCD regional economy is measurably stronger.

YCCD leverages taxpayer dollars

- For every credit earned by YCCD students, the state and local community will see social savings amounting to some **\$17** per year, including savings associated with improved health, lower crime costs, and reduced welfare and unemployment.
- When aggregated across all exiting students, the State of California will benefit from **\$7.1 million** worth of avoided costs each year over the next 37-year period.
- Students benefit from higher earnings, thereby expanding the tax base and reducing the tax burden on state and local taxpayers. When aggregated together, students generate about **\$40.0 million** annually in higher earnings due to their YCCD education.

YCCD generates a return on government investment

- State and local government allocated around **\$81.6 million** in support of YCCD in fiscal year 2005. For every dollar appropriated by state and local government, taxpayers will see a cumulative return of **\$2.53** over the next 37 years or so, or as long as the students are in the workforce.
- State and local government support for YCCD will be fully recovered in **12** years, in the form of higher tax receipts and avoided social costs.

YCCD returns far more to taxpayers than it costs.

- State and local government will see a rate of return of **11%** on their support for YCCD. This return compares very favorably with private sector rates of return on similar long-term investments.

YCCD increases students' earning potential

- A total of 29,317 credit and non-credit students attended the district colleges in academic year 2004-2005. As many as **75%** of these students stay in the region initially after they leave college and contribute to the local economy.
- Studies demonstrate that education increases lifetime earnings. The average annual earnings of a student with a one-year certificate are **\$23,208**, or **81%** more than someone without a high school diploma or GED, and **16%** more than a student with a high school diploma. The average earnings of someone with an Associate Degree are **\$27,184**, or **112%** more than someone without a high school diploma or GED, and **35%** more than a student with a high school diploma or GED.
- YCCD students will see their annual income increase, on average, by about **\$98** per year for every credit completed at YCCD during the analysis year.
- Over the next 37 years in the workforce, the average YCCD student's discounted lifetime earnings (i.e., future values expressed in present value terms) will increase **\$6.01** for every education dollar invested (in the form of tuition, fees, books, and foregone earnings from employment).
- Students enjoy an attractive **19%** rate of return on their YCCD educational investment, and recover all costs (including wages foregone while attending) in **8** years.

Past YCCD students are measurably better off.

TAXPAYER PERSPECTIVES: YOSEMITE COMMUNITY COLLEGE DISTRICT

State and local taxpayers earn 11% rate of return on their investment in Yosemite Community College District.

The verdict is in: Yosemite Community College District adds more money to the state treasury than it takes out. Not only do the colleges pull their own weight, but they also effectively subsidize other sectors funded by the taxpayers. Absent YCCD, 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: broad and narrow. To better appreciate both of these, we develop them more fully below.

Broad Investment Perspective

In the broad perspective we add up all benefits regardless of recipient and compare the total to the investment made in a benefit/cost ratio. If the ratio is less than one, the investment is not worthwhile; if it is greater than one, the investment can be considered sound.

Some examples: a transportation authority justifies a new road by showing that the 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 accruing to park users exceed the public outlay for park infrastructure, operation, and the net value of extractive resources not used. All benefits are counted, not just those that accrue back to state or local government. This is the hallmark of the broad investment perspective.

Applying this perspective to YCCD, the benefits accrue to different publics. The students accrue the higher earnings as long as they are in the workforce, whereas the public at large accrue the external social benefits (i.e., reduced crime, welfare and unemployment, improved health, and less absenteeism from work). All of these are tallied up and compared to the investments made by state and local government, or the taxpayers. A broad perspective benefit/cost ratio greater than 1.0 is a minimal indicator of a worthwhile public investment.

Yosemite Community College District's benefit/cost ratio thus counted is 16. This means that, for every dollar invested, the public at large will receive a cumulative of \$16 back over the next 37-year period, or as long as the students are in the workforce.

Narrow Investment Perspective

The narrow investment perspective counts only benefits that can be entered into the books of state and local governments. For example, a portion of higher student earnings will be captured by state and local governments in the form of added tax receipts. Additionally, because state and local governments bear part of the cost of crime, their budgets benefit from education-induced crime reductions. The same holds in varying degrees for the other assorted benefits of an educated populace. The bottom line: while state and local governments spend money in support of Yosemite Community College District, they receive benefits in the form of increased tax receipts and an assortment of reduced expenditures or avoided social costs.

Worthwhile public projects routinely generate negative narrow perspective returns. Generally, the role of government is to provide services that the public wants, but the business sector finds unprofitable. Considerable funds are spent on public parks, for example, yet except for entry fees and some concessionaire or special events receipts, no monies directly return to the state or local taxpayers. From a narrow investment perspective, taxpayer returns are negative, and the park is justified by the benefits tracked under the broad perspective.

The important finding of this analysis is that the results are not only strong from the broad perspective but, unlike most government endeavors, the taxpayer investments generate strong results from the narrow perspective as well. Economists generally assume a 4.0% discount rate in analyzing government investments, assuming that governments can obtain unsecured loans at a rate of 4.0% or receive a return of 4.0% on any excess funds were they to be invested. **Since YCCD's narrow rate of return of 11% is greater than 4%, we conclude that the state government actually makes money on the investment.** By funding the colleges, therefore, other beneficiaries of state funding are actually subsidized through the revenues generated by the colleges.

