



## EXECUTIVE SUMMARY

# The Economic Contribution of

Central Community College

*State of Nebraska*

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Economic Growth Analysis  
Investment Analysis



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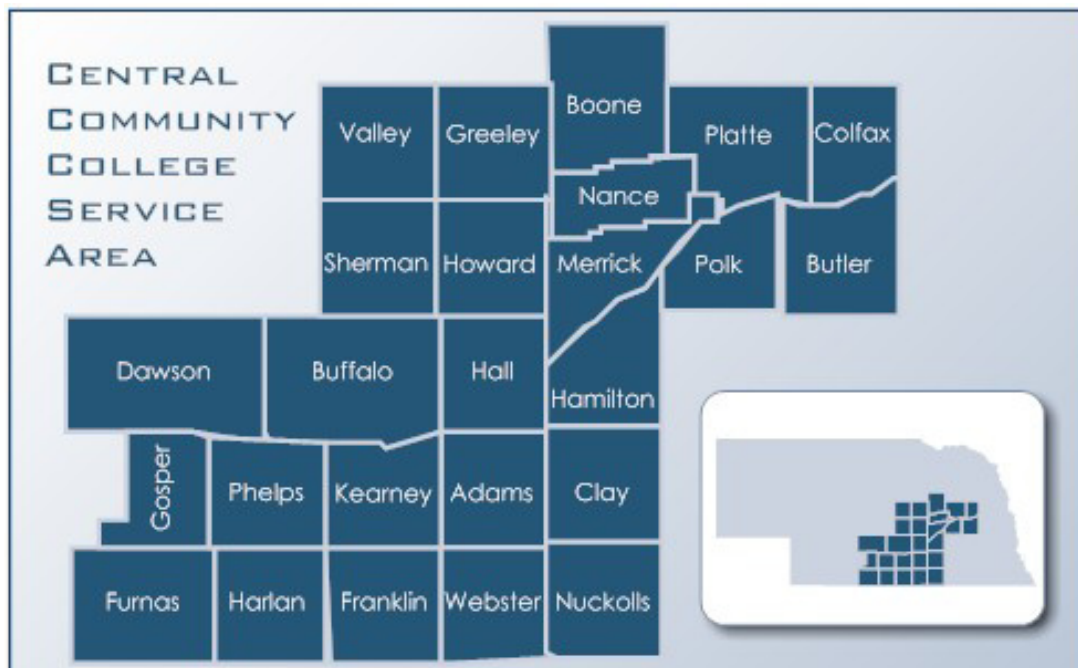


## SOCIOECONOMIC IMPACT (SEIM) STUDY

### Study Highlights

- Students enjoy an attractive **18%** annual return on their investment of time and money.
- For every \$1 students invest in CCC, they receive a cumulative **\$4.90** in higher future income over the course of their working careers.
- Taxpayers see a return of **9%** on their annual investments in CCC.
- The State of Nebraska benefits from improved health and reduced welfare, unemployment, and crime, saving the public around **\$1.5 million** per year each year that students are in the workforce.
- The accumulated credits of past and present CCC instruction translated to **\$218.9 million** in added income in FY 2006-07 due to the higher earnings of students and the increased output of businesses.

### CCC Service Area Map



# EXECUTIVE SUMMARY

## Introduction

*How do the CCC Service Area economy and the State of Nebraska benefit from the presence of Central Community College (CCC)?*

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

1. **Economic Growth Analysis:** Measures added income in the service area due to college operations, student spending, and the accumu-

lated skills of past and present students still in the workforce.

2. **Investment Analysis:** Treats education funding as an investment, calculating all measurable returns and comparing them to costs, from the perspectives of students, taxpayers, and society as a whole.

The economic impact model has been field-tested to generate more than 800 studies for community and technical colleges in the United States, Canada, and the United Kingdom.

## The Results

For an in-depth discussion of the results, the reader is encouraged to consult the Main Report, “The Economic Contribution of Central Community College.”

### Economic Growth Analysis

CCC affects the local economy in three ways: (1) through its local purchases, including wages paid to faculty and staff; (2) through the spending of students who come from outside the service area; and (3) through the increase in the skill base of the local workforce. These effects break down as follows:

#### CCC Operations Spending

CCC 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 CCC, it is estimated that the CCC Service Area received a net of \$26.9 million in added labor and non-labor income in FY 2006-07 due to CCC operations.

#### Student Spending

Approximately 6% of the CCC student population either commuted or relocated to the CCC Service Area to attend college. Out-of-area students spent money to buy books and supplies, while those who moved to the area rented apartments, purchased food, paid for transportation, attended sports and cultural events, and so on. These expenditures created revenue for local businesses. It is estimated that the spending of CCC’s out-of-area students generated around \$663,000 in added income in FY 2006-07.

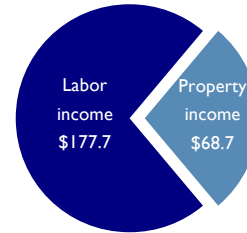
## Economic Growth Results at a Glance

### Added Income

<b>College Operations Effect</b>	\$26,880,500
<b>Student Spending Effect</b>	\$663,000
<b>Past Student Productivity Effect</b>	\$218,884,500

Source: See the Main Report.

### Total Added Income Due to CCC



### Past Student Productivity

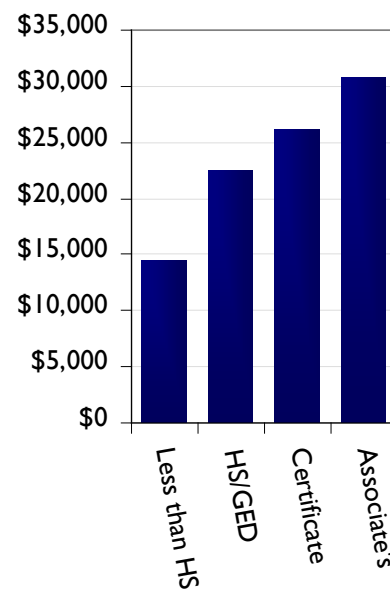
Each year students leave CCC and join or rejoin the local workforce. Based on historical enrollment at CCC over the past thirty-year period, it is estimated that there were 1.4 million accumulated credits of past and present CCC instruction in the service area workforce in FY 2006-07. These skills translated to higher earnings for students and increased output for businesses. The added income attributable to the accumulation of CCC credits was approximately \$218.9 million in FY 2006-07.

### 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. For every credit completed, CCC students earn, on average, \$114 more per year each year they are in the workforce. Compared to someone with a high school diploma, Associate Degree graduates will see an increase in income of around \$282,200 over the course of a working lifetime. Aggregate higher income for the 2006-07 student population amounts to approximately \$13.4 million per year for each year students remain in the workforce.

### Earnings by Education Level



From an investment standpoint, CCC students enjoy a 18% 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 4.9, i.e., for every \$1 students invest in CCC education, they receive a cumulative of \$4.90 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 8 years.

**Social Perspective**

From the perspective of society as a whole, the benefits of education accrue to different publics, whether students, homeowners, businesses, or taxpayers. For example, students benefit from higher earnings, while the public at large enjoys benefits associated with an expanded economic base. In addition, the public benefits from a variety of external social savings due to reduced substance abuse, lower welfare and unemployment, and reduced crime.

In terms of added income, students expand the economic base of the state economy through their added skills, which serve to make them and the businesses that employ them more productive. *It is estimated that the activities of CCC's 2006-07 student body will contribute a total of \$17.8 million in taxable income to the Nebraska economy each year (in the aggregate).*

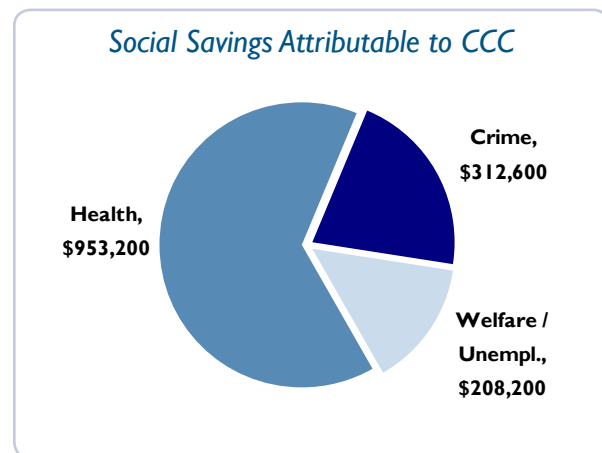
Persons with higher education are also less likely to smoke or abuse alcohol, draw welfare or unemployment benefits, or commit crimes. This translates into associated dollar savings (avoided costs) amounting to around \$13 per credit per year, counted as an indirect benefit of CCC education. *When aggregated across all exiting students, the State of Nebraska benefits from \$1.5 million worth of avoided costs per year, each year that students are in the workforce.* Social savings break down as follows.

**Improved Health:** Employers in the State of Nebraska see annual dollar savings of \$203,400 due to reduced worker absenteeism. The State also benefits from health-related savings of roughly \$509,800 and \$240,000 per year as a result of reduced tobacco and alcohol abuse. These savings include insurance premiums, co-payments, deductibles, and withholding for Medicare and Medicaid.

**Reduced Crime:** Incarceration drops with each

year of higher education. In the State of Nebraska, crime-related savings will amount to \$177,400 each year, including savings from reduced arrest, prosecution, jail, and reform costs. Reductions in victim costs (e.g., property damage, legal expenses, lost workdays, etc.) will result in savings of \$56,900 per year. Finally, the productivity of people who are employed rather than incarcerated adds \$78,300 of earnings per year to the economy.

**Reduced Welfare/Unemployment:** The number of fewer people claiming welfare or unemployment benefits will save the public approximately \$167,000 and \$41,200 per year, respectively.



These benefits accrue for years out into the future, as long as students remain in the workforce. The return on a year's worth of government funding in CCC is obtained by projecting the associated educational benefits into the future, discounting them back to the present, and weighing them against the \$31.8 million state and local taxpayers spent during the analysis year to support the college.

Following this procedure, it is estimated that CCC provides a benefit/cost ratio of 11.8, i.e., every dollar of state and local tax money invested in CCC today returns a cumulative of \$11.80 over the students' working careers, in terms of added income and avoided social costs. This is a "real" return, meaning that results reflect current year dollars. The unadjusted, or "nominal," return would be significantly higher.

**Taxpayer Perspective**

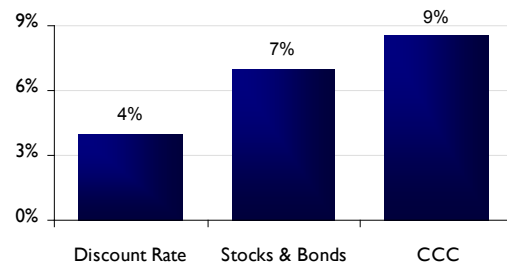
Under the taxpayer perspective, only benefits that accrue to state and local government are counted, namely, increased tax collections and reduced government expenditures. For example, in place of increased income, the narrow perspective includes only the increased state and local tax receipts from those higher incomes. Similarly, in place of over-all crime, welfare, unemployment and health savings, the narrow 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 narrow 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 4% discount rate used in this analysis) would be a favorable outcome. For CCC, the narrow perspective results greatly exceed the minimum expectations.

*The results indicate strong and positive returns: a rate of return of 9% and a benefit/cost ratio of 1.8 (every dollar of state or local tax money invested in CCC today returns \$1.80).*

**Taxpayer Rate of Return**



**Investment Analysis at a Glance**

**Annual Benefits**

Benefit Type	Annual Amount
<b>Higher Earnings</b>	
Aggregate (2006-07 student population)	\$13,357,500
Per credit hour equivalent (CHE)	\$114
Per full-time equivalent (FTE) student	\$3,434
<b>Social Savings</b>	
Aggregate (2006-07 student population)	\$1,474,000
Per credit hour equivalent (CHE)	\$13
Per full-time equivalent (FTE) student	\$379

**Investment Summary**

Stakeholder	Rate of Return	Benefit/Cost	Payback (Years)
<b>Students</b>	18.3%	4.9	7.7
<b>Social (Broad) Perspective</b>	NA	11.8	NA
<b>Taxpayer (Narrow) Perspective</b>	8.5%	1.8	13.4

Source: See the Main Report.

## Conclusion

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The results of this study demonstrate that CCC 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 Full Study

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This short summary is one of nine documents that comprise the full impact study. The Main Report is intended for economists and college institutional researchers and lays out the detailed assumptions and analysis. Several fact sheets highlight the results from key perspectives: General Overview, Business Perspective, Social Perspective, Taxpayer Perspective, Broad vs. Narrow Taxpayer Perspective, and Student Perspective. Lastly, a PowerPoint presentation shows the main results in a brief, conference-friendly format.

## About EMSI

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EMSI is a leading provider of socioeconomic impact and strategic planning tools to community and technical colleges in the United States and Canada. Visit us at [www.economicmodeling.com](http://www.economicmodeling.com) for more information. To see full documentation of the study, please contact the college.



## **Socioeconomic Impact (SEIM) Study**

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**What are the measurable benefits of higher education?**

**Is education a worthwhile public investment?**

**Can students increase their earning potential by taking college courses?**

**Who benefits more from higher education: students or the general public?**

This report summarizes the results from “The Economic Contributions of Central Community College” 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, 2006-07 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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