



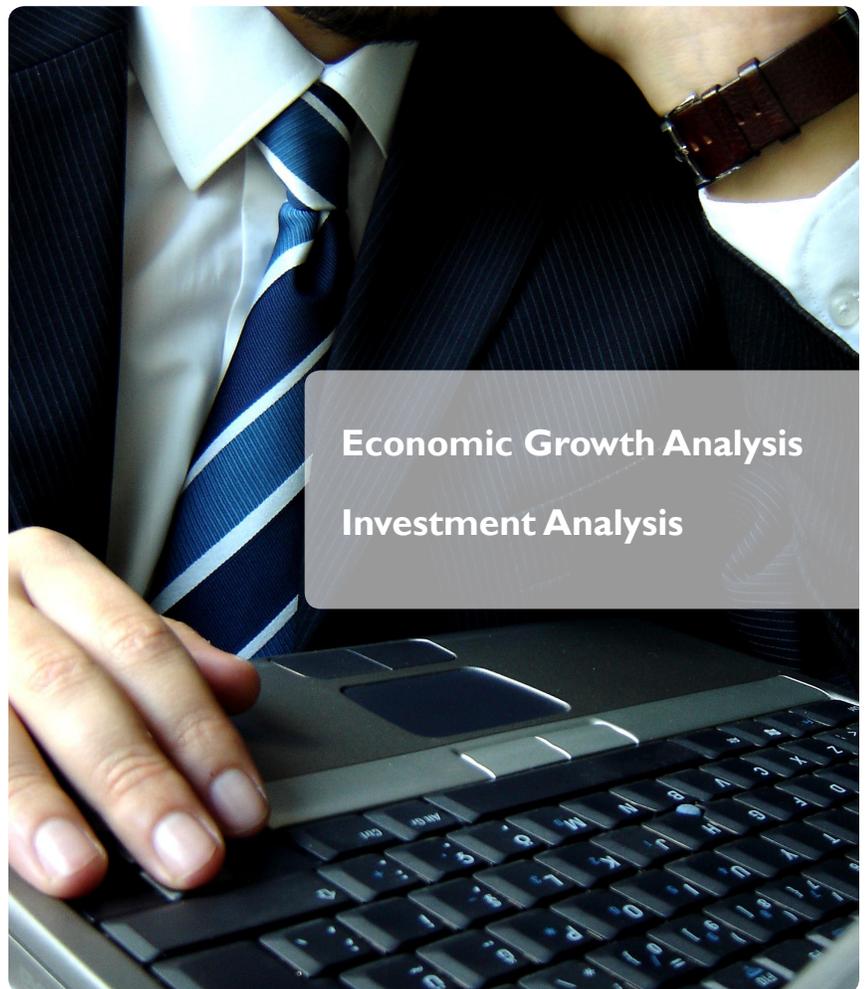
## EXECUTIVE SUMMARY

# The Economic Contribution of

Owens State Community College

*State of Ohio*

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and  
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Economic Growth Analysis  
Investment Analysis



February-09



## SOCIOECONOMIC IMPACT (SEIM) STUDY

### Study Highlights

- Students enjoy an attractive **16%** annual return on their investment of time and money.
- For every \$1 students invest in OSCC, they receive a cumulative **\$5.00** in higher future income over the course of their working careers.
- Taxpayers see a return of **15%** on their annual investments in OSCC.
- The State of Ohio benefits from improved health and reduced welfare, unemployment, and crime, saving the public some **\$5.8 million** per year each year that students are in the workforce.
- The accumulated credits of past and present OSCC instruction translated to **\$581.3 million** in added income in FY 2007-08 due to the higher earnings of students and the increased output of businesses.

### OSCC Service Area Map



# EXECUTIVE SUMMARY

## Introduction

*How do the OSCC Service Area economy and the State of Ohio benefit from the presence of Owens State Community College (OSCC)?*

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 Owens State Community College.”

### Economic Growth Analysis

OSCC 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:

#### OSCC Spending Effect

OSCC 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 OSCC, it is estimated that the OSCC Service Area economy received a net

of \$68.6 million in added labor and non-labor income due to OSCC operations in FY 2007-08.

#### Student Spending

Approximately 26% of OSCC’s 2007-08 student population either commuted or relocated to the OSCC 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 OSCC’s out-of-area students in FY 2007-08 generated around \$548,800 in added income in the OSCC Service Area economy.

#### Student Productivity

OSCC’s greatest contribution to the economy is its capacity to provide worker training and career enhancement opportunities to area residents. Un-

## Economic Growth Results at a Glance

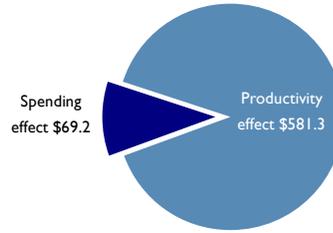
### Added Income

<b>College Spending Effect</b>	\$68,644,400
<b>Student Spending Effect</b>	\$548,800
<b>Productivity Effect*</b>	\$581,344,200

\* Measures the effect of past and present students who were still active in the workforce during the analysis year.

Source: See the Main Report.

### Total Added Income Due to OSCC



like the college operations effect and the student spending effect, the accumulation of OSCC skills in the workforce increases over time as newly-trained students enter the workforce year after year. Based on historical enrollment at OSCC over the past thirty-year period, it is estimated that there were 2.4 million credits of past and present OSCC instruction still active in the service area workforce in FY 2007-08. These skills translated to higher earnings for students and increased output for businesses, yielding a total impact of approximately \$581.3 million in added income in FY 2007-08.

It is important to note that, while the college and student spending effects would disappear immediately should OSCC cease to exist, the student productivity effect is unique in that much of it would remain in the economy even without the presence of the college. Over time, however, the effects of student productivity would gradually reduce and ultimately become zero as former students leave the workforce.

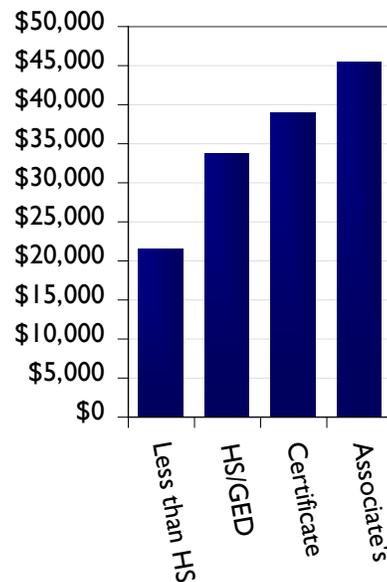
### Investment Analysis

#### 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, OSCC students earn, on average, \$171 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 \$448,400 over the course of a working lifetime. Aggregate higher income for the 2007-08 student population amounts to approximately \$56.8 million per year for each year students remain in the workforce.

### Earnings by Education Level



From an investment standpoint, OSCC students enjoy a 16% 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 5.0, i.e., for every \$1 students invest in OSCC education, they receive a cumulative of \$5.00 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 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 OSCC's 2007-08 student body will contribute a total of \$73.9 million in taxable income to the Ohio economy each year (in the aggregate).*

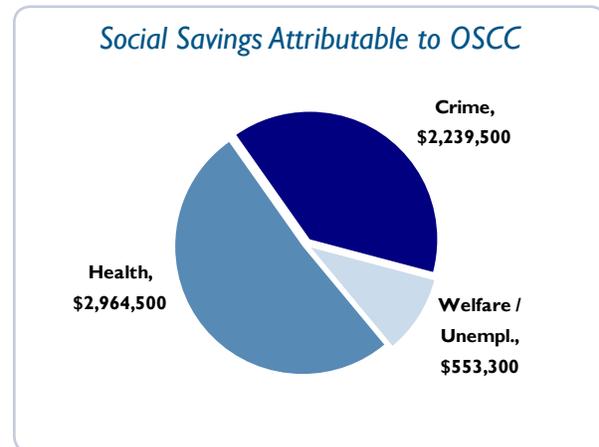
Persons with higher education are also less likely to smoke or abuse alcohol, draw welfare or unemployment benefits, or commit crimes. This translates into associated dollar savings (avoided costs) amounting to some \$17 per credit per year, counted as an indirect benefit of OSCC education. *When aggregated across all exiting students, the State of Ohio benefits from \$5.8 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 Ohio see annual dollar savings of \$806,000 due to reduced worker absenteeism. The State also benefits from health-related savings of roughly \$1.4 million and \$808,300 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 Ohio, crime-related savings will amount to \$1.1 million 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 \$363,500 per year. Finally, the productivity of people who are employed rather than incarcerated adds \$742,700 of earnings per year to the economy.

**Reduced Welfare/Unemployment:** The number of fewer people claiming welfare or unemployment benefits will save the public some \$414,500 and \$138,800 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 OSCC is obtained by projecting the associated educational benefits into the future, discounting them back to the present, and weighing them against the \$53.7 million state taxpayers spent during the analysis year to support the college.

Following this procedure, it is estimated that OSCC provides a benefit/cost ratio of 28.8, i.e., every dollar of state tax money invested in OSCC today returns a cumulative of \$28.80 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**

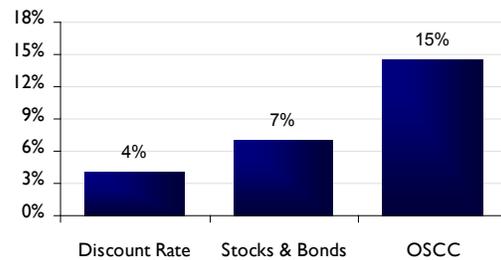
Under the taxpayer perspective, only benefits that accrue to state and local government are counted, namely, increased tax collections and reduced government expenditures. For example, in place of increased income, the narrow perspective includes only the increased state and local tax receipts from those 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 ex-

pected 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 OSCC, the narrow perspective results greatly exceed the minimum expectations.

*The results indicate strong and positive returns: a rate of return of 15% and a benefit/cost ratio of 3.8 (every dollar of state or local tax money invested in OSCC today returns \$3.80).*

**Taxpayer Rate of Return**



**Investment Analysis at a Glance**

**Annual Benefits**

Benefit Type	Annual Amount
<b>Higher Earnings</b>	
Aggregate (all students)	\$56,821,800
Per credit hour equivalent (CHE)	\$171
Per full-time equivalent (FTE) student	\$5,122
<b>Social Savings</b>	
Aggregate (all students)	\$5,757,300
Per credit hour equivalent (CHE)	\$17
Per full-time equivalent (FTE) student	\$519

**Investment Summary**

Stakeholder	Rate of Return	Benefit/Cost	Payback (Years)
Students	16.2%	5.0	8.9
Social (Broad) Perspective	NA	28.8	NA
Taxpayer (Narrow) Perspective	14.6%	3.8	9.3

Source: See the Main Report.

## Conclusion

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The results of this study demonstrate that OSCC 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 Owens State 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, 2007-08 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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