

Economic Impact

Economic Growth Analysis Investment Analysis

EXECUTIVE SUMMARY REPORT

Report prepared by



www.economicmodeling.com



This report summarizes the results from *The Economic Impact of Broward College, released December 2012*, 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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Executive Summary

INTRODUCTION

How do the Broward County economy and the state of Florida benefit from the presence of Broward College?

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 perspectives of students, taxpayers, and society as a whole.
- 2. Economic Growth Analysis: Measures added income in the region due to college operations, student spending, the accumulated skills of past and present students still in the workforce, and the increased productivity of transfer students that are able to obtain higher levels of education because of their Broward College education.

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

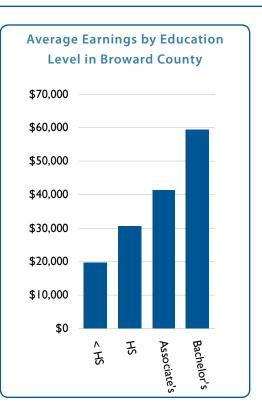
Investment Analysis

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 \$10,800 more per year, on average, over the course of a working lifetime (undiscounted).

From an investment standpoint, Broward College students enjoy a 15.6% 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 6.2, i.e., for every dollar students invest in Broward College education, they receive a cumulative of \$6.20 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 10.1 years.

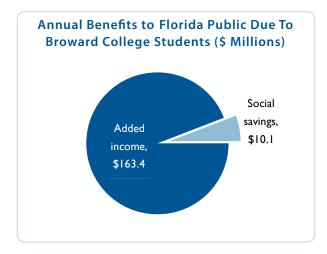


Stakeholder	Rate of Return	Benefit/Cost	Payback (Years)
Student perspective	15.6%	6.2	10.1
Social perspective	NA	12.9	NA
Taxpayer perspective	4.8%	1.4	21.9

Social Perspective

From the perspective of society as a whole, the benefits of education accrue to different publics. For example, Broward College 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 \$163.4 million in taxable income to the Florida economy each year.

As they achieve higher levels of education, Broward College 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 \$10.1 million annually. These are benefits that are incidental to the operations of Broward College and accrue for years into the future, for as long as students remain active in the workforce.



To compare benefits to costs, we project benefits into the future, discount them back to the present, and weigh them against the \$87.2 million that state and local taxpayers spent in FY 2010-11 to support the college. Following this procedure, it is estimated that Broward College provides a benefit/cost ratio of 12.9, i.e. every dollar of state and local tax money invested in the college today yields a cumulative of \$12.90 in benefits that accrue to all Florida 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 Broward College, the results indicate positive returns: a rate of return of 4.8% and a benefit/cost ratio of 1.4 (every dollar of state or local tax money invested in Broward College today returns \$1.40).

Economic Growth Analysis

Broward College 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 region; and (3) through the increase in the skill base of the local workforce. These effects break down as follows:

College Operations Effect

Broward College 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 Broward College, it is estimated that the Broward County economy receives a net of \$141.9 million in added labor and non-labor income due to Broward College operations each year.

Student Spending Effect

Students from outside the region spend money for room and board, transportation, entertainment, and other miscellaneous personal expenses. These expenditures create jobs and incomes for local businesses. The spending of Broward College's non-local students generates approximately \$9.1 million in added income in the Broward County economy each year.

Student Productivity Effect

Every year students leave Broward College and join or rejoin the regional workforce. Their added skills

IMPACTS ANALYSIS AT A GLANCE

Added Income	
College operations effect	\$141,904,000
Student spending effect	\$9,099,000
Student productivity effect	\$888,540,000
Transfer effect	\$4,643,000
GRAND TOTAL	\$1,044,186,000

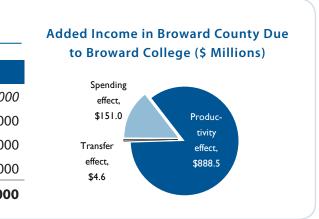
translate to higher income and a more robust Broward County economy. Based on Broward College's historical enrollment and credit production over the past 30-year period, it is estimated that the accumulated contribution of Broward College instruction received by former students (both completers and non-completers) annually adds some \$888.5 million in income to Broward County.

Transfer Effect

But for Broward College many students would not have pursued their education beyond the college level, so part of the increased productivity stemming from the transfer students is attributable to the college. Since 2001 over 10,000 students have moved on to universities or other colleges to pursue additional education. The impacts of these students are far reaching. However, only a small portion of these students remain in and contribute to the Broward County economy. The impact on the county derived from the transfer focus of the college amounts to just over \$4.6 million.

Total Effect

Altogether, the average annual added income due to the activities of Broward College and its former students equals \$1 billion. This is approximately equal to 1.5% of the total Broward County economy.



CONCLUSION

The results of this study demonstrate that Broward College 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.



Socioeconomic Impact Study

STUDY HIGHLIGHTS

INVESTMENT ANALYSIS

- For every dollar students invest in Broward College, they receive a cumulative **\$6.20** in higher future income (discounted) over the course of their working careers.
- Florida benefits from improved health and reduced welfare, unemployment, and crime, saving the public some **\$10.1 million** per year.
- Taxpayers see a rate of return of **4.8%** on their investment in Broward College.

ECONOMIC GROWTH ANALYSIS

- The net added income generated by Broward College operations (**\$141.9 million**) and the spending of non-local students (**\$9.1 million**) contributes a total of **\$151 million** in income to the Broward County economy each year.
- The accumulated credits achieved by former Broward College students over the past 30 years translate to **\$888.5 million** in added regional income each year due to the higher earnings of students and increased output of businesses.



Broward County, Florida



Year Incorporated: 1915

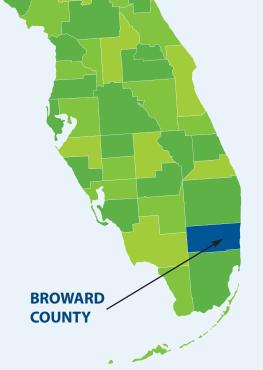
Total Land Area: 1,230 square miles

Municipalities: 31

County Population: 1,753,162

Residents in Labor Force: 978,951

Number of Businesses: 55,289



Source: Broward County Board of Commissioners

