The Socioeconomic Benefits Generated by 39 Community College Districts in Illinois. Executive Summary.

Christophersen, Kjell A.; Robison, M. Henry


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The community colleges (CCs), Illinois Community College Trustees Association (ICCTA), and Illinois Community College Board (ICCB) worked with CCBenefits, Inc. with funding from the Association for Community College Trustees (ACCT) on this project.


Reports - Research (143)

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*Illinois Community College System

This report summary presents several economic benefits that the state of Illinois receives from its 39 community college districts. The benefits are witnessed at the state, student, and taxpayer level and can be classified into four categories: contribution to local jobs, increased earning by graduates, widespread social benefits, and financial return to taxpayers. In total, the authors project that the community college districts supply $9.9 billion of the annual earnings in the state's economy.

Specifically, the districts pay wages and salaries to faculty and staff and educate and train students who will enrich the workforce. From the student's perspective, having completed community college credits improves their future earning potential. For example, the authors estimate that for every full-time year that students attend Illinois community colleges, they will earn approximately $3,800 more per year once they start working. Taxpayers also indirectly benefit from the community college districts within the state. Higher education provided by these institutions translates into a decreased likelihood of tobacco or alcohol abuse on the part of the student and reduced crime, welfare, and unemployment. (JCC)
The Socioeconomic Benefits Generated by 39 Community College Districts in Illinois

State of Illinois

Executive Summary

10-September-2002

Kjell A. Christophersen & M. Henry Robison
Executive Summary

HIGHLIGHTS

- The 39 community college districts in Illinois pay $1.0 billion in direct faculty and staff wages and salaries, and explain an additional $8.9 billion in wages and salaries off campus.

- Taxpayers see a real money “book” return of 13.8% on their annual investments in the community colleges and recover all investments in 9.1 years.

- Students enjoy an attractive 26.1% annual return on their investment of time and money — for every $1 the student invests in a college education, he or she will receive a cumulative $7.30 in discounted higher future earnings over the next 34.7 years.

- The State of Illinois benefits from improved health and reduced welfare, unemployment, and crime, saving the public some $175.7 million per year.

INTRODUCTION

How does the State of Illinois economy benefit from the presence of the 39 community college districts in the state? An obvious question often asked, but rarely answered with more than anecdotes. The community colleges (CCs), Illinois Community College Trustee Association (ICCTA), and Illinois Community College Board (ICCB) worked with CCBenefits, Inc. to apply a comprehensive economic model that was developed by the economists to capture and quantify the economic and social benefits of CCs. The model, which took over a year to develop with funding from the Association for Community College Trustees (ACCT), relies on data collected from individual CCs, and translates these into common sense benefit-cost and investment terms. It has been subjected to peer review, field tested on over 160 different CCs throughout the nation, and now applied to the community college districts in Illinois. Model results are based on solid economic theory, carefully drawn functional relationships, and a wealth of national and local education-related data. The model provides relief from the all-too-common “advocacy analyses” that inflate benefits, understate costs, and thus discredit the process of higher education impact assessment.

Four types of benefits are tracked: (1) contributions to local job and income formation (regional economic benefits); (2) higher earnings captured by exiting students; (3) a broad collection of social benefits (improved health, reduced crime, and lower welfare and unemployment); and (4) the return to taxpayers for their CC support.

THE RESULTS

For a more in depth exploration of the study, the reader is encouraged to consult the main report containing the detailed assumptions, their context, and the computation procedures.

➤ Statewide Perspective

The existence of the 39 CC districts in the State of Illinois explains $9.9 billion of all annual earnings in the state economy (see map). The earnings explained by the colleges are equal to that of roughly 239,757 jobs. The earnings and job effects break down as follows:
Higher Earnings due to Past Instruction
Each year students leave the 39 college districts and join or rejoin the local workforce. Their added skills translate to higher earnings and a more robust economy. Based on current enrollment, turnover, and the growth of instruction over time, the workforce embodies an estimated 124.1 million credits of past instruction (credit and non-credit hours). The accumulated contribution of past CC instruction adds some $8.4 billion in annual earnings to the State of Illinois economy (equal to that of 203,504 jobs).

Student Perspective
The student's perspective on the benefits of higher education is the most obvious: he or she sacrifices tuition and current earnings for a lifetime of higher earnings. For every credit completed students will, on average, earn $120 more per year every year they are in the workforce. Alternatively, for every full-time year they attend they will earn an additional $3,767 per year. In the aggregate (all exiting students), the higher earnings amount to some $866.2 million per year for each year they remain in the workforce.

From an investment standpoint, the CC students will, on average, enjoy a 26.1%
rate of return on their investments of time and money, which compares favorably with the returns on other investments, e.g., the long-term return on US stocks and bonds. The corresponding B/C ratio (the sum of the discounted future benefits divided by the sum of the discounted costs) is 7.3, i.e., for every $1 the student invests in community college education, he or she will receive a cumulative of $7.30 in discounted higher future earnings over the next 34.7 years. The payback period (the time needed to recover all costs) is 5.6 years.

➢ Taxpayer Perspectives
State and local government allocated $1.1 billion in support of the Illinois community college districts during the analysis year. Is this a good use of taxpayer money? Our analysis indicates that the answer is a resounding yes: returns far outweigh the costs, particularly when a collection of social savings is included in the assessment. For example, persons with higher education are 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 $24 per credit per year, counted as an indirect benefit of CC education. When aggregated across all exiting students, the State of Illinois will benefit from $175.7 million worth of avoided costs per year, broken down as follows:

• Improved Health
State of Illinois area employers will see health-related absenteeism decline by 188,210 days per year, with a corresponding annual dollar savings of $20.7 million. The state will benefit from the health-related savings of 12,391 fewer smokers and 3,051 fewer alcohol abusers. The corresponding dollar savings are $36.7 million and $24.2 million per year, now and into the future (these savings include insurance premiums, copayments and deductibles, and withholding for Medicare and Medicaid).

• Reduced Crime
Studies show that incarceration drops with each year of higher education. In the State of Illinois, 3,821 fewer individuals will be incarcerated per year, resulting in annual savings of $41.6 million (combined savings from reduced arrest, prosecution, jail, and reform costs). Reductions in victim costs (e.g., property damage, legal expenses, lost workdays, etc.) result in savings of $8.7 million per year. Finally, that people are employed rather than incarcerated adds $15.6 million of earnings per year to the economy.

• Reduced Welfare/Unemployment
There will be 1,709 fewer people on welfare, and 2,431 fewer drawing unemployment benefits per year, respectively, saving some $7.1 million and $21.1 million per year in the state.

➢ Taxpayer Return on Investment
The return on a year's worth of state and local government investment in the Illinois CCs is obtained by projecting the associated educational benefits into the future, discounting them back to the present, and weighing these against the $1.1 billion state and local taxpayers invested during the analysis year to support the 39 college districts in the system. The analysis assumes that without the state and local government support (61% of the budgets on average) the 39 college districts would have to
shut the college's doors. Two investment perspectives are possible, one broad and one narrow.

- **Broad Perspective**
  Taxpayers expect their annual investment in the CCs to result in higher lifetime earnings for students and social savings from lifestyle changes (reduced crime, welfare and unemployment, and improvements in health). From a broad investment perspective, the value of all future earnings and associated social savings is compared to the year's worth of state and local taxpayer support that made the benefits possible. Following this procedure, the B/C ratio generated for the whole system is 16.1, i.e., every dollar of state or local tax money invested in Illinois' CCs today returns a cumulative of $16 over the next 30 years.

- **Narrow Perspective**
  The narrow perspective limits the benefit stream to state and local government budgets, namely increased tax collections and expenditure savings. For example, in place of total increased student earnings, the narrow perspective includes only the increased state and local tax receipts from those higher earnings. Similarly, in place of overall crime, welfare, unemployment and health savings, the narrow perspective includes only those portions that translate to actual reductions in state and local government expenditures. Note here that it is normal for the state government to undertake activities wanted by the public, but which are 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 B/C ratio equal to or just greater than 1, and/or a rate of return equal to or just greater than the 4.0% discount rate used in this analysis) would be a most favorable outcome, certainly one that justifies continued taxpayer support of the college. For Illinois, the narrow perspective results greatly exceed the minimum expectations. The results indicate strong and positive returns: a RR of 13.8%, a B/C ratio of 2.5 (every dollar of state or local tax money invested today returns a cumulative $2.46 over the next 30 years), and a short payback period of only 9.1 years.

**CONCLUSION**

The results of this study demonstrate that the investment in the Illinois community colleges is sound from a multiple of perspectives. It enriches the lives of students while reducing the demand for taxpayer-supported social services. Finally, it contributes to the vitality of both the local and state economies.
Benefits at a Glance

<table>
<thead>
<tr>
<th>Regional Analysis</th>
<th>Regional Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Regional Economic Development</strong></td>
<td></td>
</tr>
<tr>
<td>Increment from college operations</td>
<td>$1,500,647,000</td>
</tr>
<tr>
<td>Increment from past student productivity</td>
<td>$8,423,786,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>$9,924,433,000</td>
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<tr>
<td><strong>Job equivalent</strong></td>
<td>239,757</td>
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<tr>
<td><strong>Annual Benefits</strong></td>
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<tr>
<td>Higher earnings</td>
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<tr>
<td>Aggregate (all student)</td>
<td>$866,191,603</td>
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<tr>
<td>Per Credit</td>
<td>$120</td>
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<tr>
<td>Per year full time equivalent student</td>
<td>$3,767</td>
</tr>
<tr>
<td>Social savings</td>
<td></td>
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<tr>
<td>Aggregate (all students)</td>
<td>$175,733,029</td>
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<tr>
<td>Per Credit</td>
<td>$24</td>
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<tr>
<td>Per year full time equivalent student</td>
<td>$1,493</td>
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### Investment Analysis

<table>
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<tr>
<th>Investment Analysis</th>
<th>RR</th>
<th>B/C Ratio</th>
<th>Payback (Years)</th>
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<tr>
<td>Students</td>
<td>26.1%</td>
<td>7.3</td>
<td>5.6</td>
</tr>
<tr>
<td>Taxpayers: Broad Perspective</td>
<td>NA</td>
<td>16.1</td>
<td>NA</td>
</tr>
<tr>
<td>Taxpayers: Narrow Perspective</td>
<td>13.8%</td>
<td>2.5</td>
<td>9.1</td>
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</table>

In sum, the graph shows that the college explains a total of 3.1% of all earnings ($316.9 billion) generated from all sources in the economic region.
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**Author(s):** Kyel A. Christophersen + M. Henry Robison

**Corporate Source:** Illinois Community College Trustees Association

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