The Socioeconomic Benefits Generated by Capital Community College

State of Connecticut

Executive Summary

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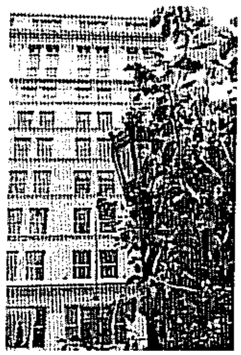
Executive Summary

HIGHLIGHTS

- Capital Community College pays $18.0 million annually in direct faculty and staff wages, salaries, and benefits in the local region, and accounts for an additional $89.5 million in earnings off campus.
- Taxpayers see a real money "book" return of 7.9% on their annual investments in Capital Community College and recover all investments in 14.5 years.
- Students enjoy an attractive 24% annual return on their investment of time and money—for every $1 the student invests in CCC, he or she will receive a cumulative $6.85 in higher future earnings over the next 30 years or so.
- The State of Connecticut benefits from improved health and reduced welfare, unemployment, and crime, saving the public some $1.5 million per year.

INTRODUCTION

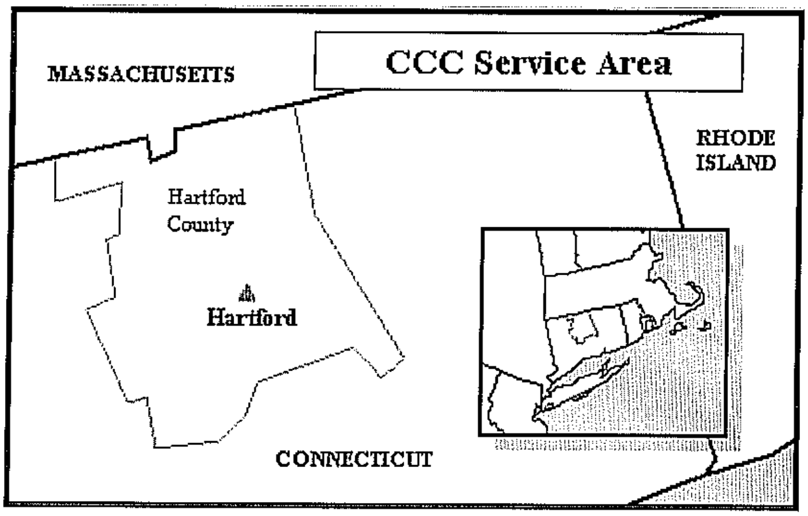
How do the CCC Service Area economy and the State of Connecticut benefit from the presence of Capital Community College (CCC)? An obvious question often asked, but rarely answered with more than anecdotes. In this study, CCbenefits, Inc. applied a comprehensive economic model they developed with funding from the Association for Community College Trustees (ACCT). The model, which took over a year to develop, was designed to capture and quantify the economic and social benefits of community and technical colleges. It relies on data collected from individual two-year colleges, and translates these into common sense benefit/cost and investment terms. The model has been subjected to peer review and field-tested on over 350 different community and technical colleges throughout the United States and Canada. 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 an analytical alternative 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) regional economic benefits (contributions to local job and income formation); (2) higher earnings captured by exiting students; (3) a broad collection of social benefits (improved health, reduced crime, lower welfare, and unemployment); and (4) the return to taxpayers for their college support.

THE RESULTS

For a more in-depth exploration of this topic, the reader is encouraged to consult the Main Report, "The Socioeconomic Benefits Generated by Capital Community College," containing the detailed assumptions, their context, and the computation procedures.



- **Regional Perspective—the Capital Community College Economy**

CCC accounts for $107.6 million of all annual earnings in the CCC Service Area economy (see map). The earnings explained by CCC are equal to that of roughly 2,500 jobs. The earnings and job effects break down as follows:

- *CCC Operations and Capital Spending*

CCC faculty and staff earnings generate additional incomes as they are spent. Likewise, CCC operating and capital expenditures generate still further earnings. Altogether, these earnings account for $27.1 million annually in the CCC Service Area economy (equal to that of around 620 jobs).

- *Higher Earnings due to Past Instruction*

Each year students leave CCC and join or rejoin the local workforce. Their added skills translate to higher earnings and a more robust CCC Service Area economy. Based on current enrollment, turnover, and the growth of instruction over time, the local region workforce embodies an estimated 592,000 credits of past and present instruction (credit and non-credit hours). The accumulated contribution of past and present CCC instruction adds some $80.5 million in annual earnings to the CCC Service Area economy (equal to that of around 1,900 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, CCC students will, on average, earn $148 more per year each year they are in the workforce. Alternatively, for every full-time year they attend they will earn an additional $4,420 per year. In the aggregate (all exiting students), the higher earnings amount to some $6.8 million per year for each year they remain in the workforce.

From an investment standpoint, CCC students will enjoy a 24% 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 benefit/cost ratio (the sum of the discounted future benefits divided by the sum of the discounted costs) is 6.9, i.e., for every $1 the student invests in CCC education, he or she will receive a cumulative of $6.85 in higher future earnings over the next 30 years or so. The payback period (the time needed to recover all costs) is 6.1 years.

➢ **Taxpayer Perspectives**

The state government spent $18.2 million in support of CCC 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 $33 per credit per year, counted as an indirect benefit of CCC education. When aggregated across all exiting students, the State of Connecticut will benefit from $1.5 million worth of avoided costs per year, broken down as follows:

- *Improved Health*

Employers in the CCC Service Area will see health-related absenteeism decline by approximately 2,150 days per year, with a corresponding annual dollar savings of $262,800. The state will benefit from the health-related savings of roughly 3 fewer smokers and 10 fewer alcohol abusers. The corresponding dollar savings are $9,900 and $114,900 per year, now and into the future (these savings include insurance premiums, co-payments and deductibles, and withholding for Medicare and Medicaid).

- *Reduced Crime*

Studies show that incarceration drops with each year of higher education. In the CCC Service Area, about 20 fewer individuals will be incarcerated per year, resulting in annual savings of $238,300 (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 $262,400 per year. Finally, that people are employed rather than incarcerated adds $113,300 of earnings per year to the economy.

- *Reduced Welfare/Unemployment*

There will be around 80 fewer people on welfare, and 20 fewer drawing unemployment benefits per year, saving some $322,800 and $203,100 per year, respectively.

➢ **Taxpayer Return on Investment**

The return on a year's worth of state government investment in CCC is obtained by projecting the associated educational benefits into the future, discounting them back to the present, and weighing these against the $18.2 million state taxpayers spent during the analysis year to support the college. The analysis is based on the portion of CCC operations that is wholly dependent on state government support. Two investment perspectives are possible, one broad and one narrow.

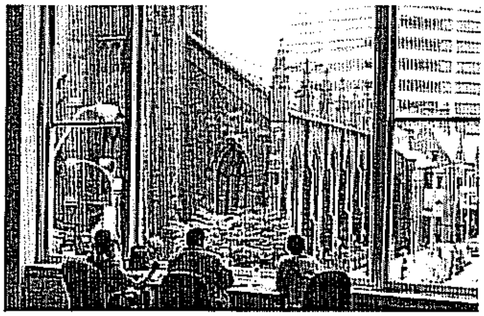
- *Broad Perspective*

Taxpayers expect their annual investment in CCC 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 taxpayer support that made the benefits possible. Following this procedure, it is estimated that CCC provides a benefit/cost ratio of 10.2, i.e., every dollar of state tax money invested in CCC today returns a cumulative of $10 over the next 30 years.

- *Narrow Perspective*

The narrow perspective limits the benefit stream to state 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 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 government expenditures.

Note here that it is normal for the state government to undertake activities wanted by the public, 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 benefit/cost 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 CCC, the narrow perspective results greatly exceed the minimum expectations. The results indicate strong and positive returns: a rate of return of 7.9%, a benefit/cost ratio of 1.5 (every dollar of state tax money invested in CCC today returns $1.55), and a short payback period of only 14.5 years.

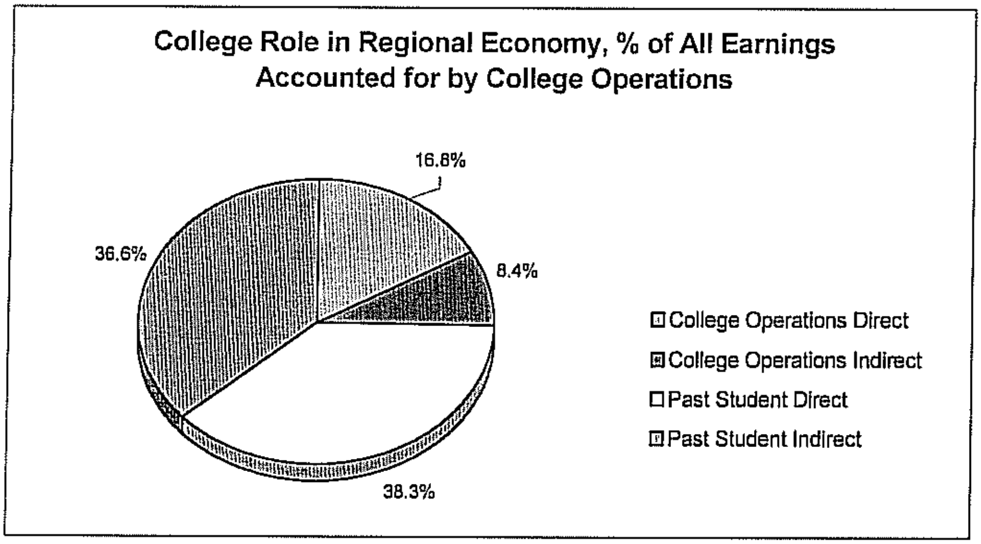


CONCLUSION

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.

Benefits at a Glance

Regional Analysis			Regional Impact
Regional Economic Development			
Increment from CCC operations			$27,073,000
Increment from past student productivity			$80,494,000
Total			$107,567,000
Job equivalent			2,508
Annual Benefits			
Higher earnings			
Aggregate (all students)			$6,773,279
Per Credit			$148
Per full-year equivalent student			$4,420
Social savings			
Aggregate (all students)			$1,527,381
Per Credit			$33
Per full-year equivalent student			$997
Investment Analysis	**RR**	**B/C Ratio**	**Payback (Years)**
Students	23.9%	6.9	6.1
Taxpayers: Broad Perspective	NA	10.2	NA
Taxpayers: Narrow Perspective	7.9%	1.5	14.5



The table above shows that approximately $107.6 million in regional earnings are explained by the college. The graph on the left shows the breakdown of these earnings in terms of college operations and past student productivity effects.

This short summary report is one of six products generated for this impact study. In addition, one long report intended for economists and college institutional researchers (93 pp) lays out the detailed assumptions and analysis. Another report (10 pp) provides detailed tabular results by gender, ethnicity, and entry levels of education, and a one-page fact sheet contains highlights of the study results at a glance. The study also includes a one-page write-up in layman's terms about the differences between the broad and narrow taxpayer perspectives. Lastly, a PowerPoint presentation is developed showing the main results for college presidents to adapt and use in speeches before state legislators and other education stakeholders.