



EXECUTIVE SUMMARY

JULY 2021



The Economic Value of the Community College of Allegheny County



COMMUNITY COLLEGE OF ALLEGHENY COUNTY (CCAC) creates value in many ways. The college plays a key role in helping students increase their employability and achieve their individual potential. The college draws students to the county, generating new dollars and opportunities for Allegheny County. CCAC provides students with the education, training, and skills they need to have fulfilling and prosperous careers. Furthermore, CCAC is a place for students to meet new people, increase their self-confidence, and promote their overall health and well-being.

CCAC influences both the lives of its students and the county economy. The college supports a variety of industries in Allegheny County, serves county businesses, and benefits society as a whole in Pennsylvania from an expanded economy and improved quality of life. The benefits created by CCAC even extend to the state and local government through increased tax revenues and public sector savings.

This study measures the economic impacts created by CCAC on the business community and the benefits the college generates in return for the investments made by its key stakeholder groups—students, taxpayers, and society. The following two analyses are presented:



Economic impact analysis

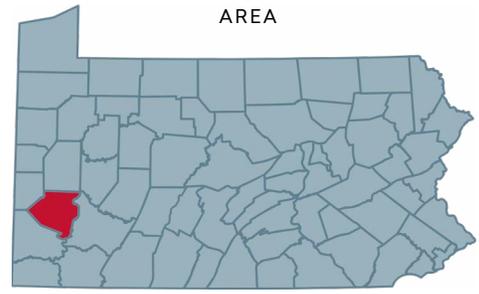


Investment analysis

All results reflect employee, student, and financial data, provided by the college, for fiscal year (FY) 2019-20. Impacts on the Allegheny County economy are reported under the economic impact analysis and are measured in terms of added income. The returns on investment to students, taxpayers, and society in Pennsylvania are reported under the investment analysis.

CCAC influences both the **lives of its students** and the **regional economy**.

THE
CCAC
SERVICE
AREA





CCAC promotes economic growth in Allegheny County through its direct expenditures and the resulting expenditures of students and county businesses. The college serves as an employer and buyer of goods and services for its day-to-day and construction operations. The college's activities attract students from outside Allegheny County, whose expenditures benefit county vendors. In addition, CCAC is a primary source of higher education to Allegheny County residents and a supplier of trained workers to county industries, enhancing overall productivity in the county workforce.

Operations spending impact



CCAC adds economic value to Allegheny County as an employer of county residents and a large-scale buyer of goods and services. In FY 2019-20, the college employed 1,926 full-time and part-time faculty and staff, 78% of whom lived in Allegheny County. Total payroll at CCAC was \$91.9 million, much of which was spent in the county for groceries, mortgage and rent payments, dining out, and other household expenses. In addition, the college spent \$30.5 million on day-to-day expenses related to facilities, supplies, and professional services.

CCAC's day-to-day operations spending added \$123.2 million in income to the county during the analysis year. This figure represents the college's payroll, the multiplier effects generated by the in-county spending of the college and its employees, and a downward adjustment to account for funding that the college received from county sources. The \$123.2 million in added income is equivalent to supporting 2,200 jobs in the county.

Construction Spending Impact



CCAC invests in construction each year to maintain its facilities, create additional capacities, and meet its growing educational demands. While the amount varies from year to year, these quick infusions of income and jobs have a substantial impact on the county economy. In FY 2019-20, CCAC's construction spending generated \$3.4 million in added income, which is equivalent to supporting 39 jobs.

IMPACTS CREATED BY CCAC IN FY 2019-20



Operations spending impact
\$123.2 million



Construction spending impact
\$3.4 million



Student spending impact
\$25.4 million



Alumni impact
\$1.2 billion



TOTAL ECONOMIC IMPACT
\$1.3 billion

OR

Jobs supported
15,705

Student spending impact



Around 36% of credit students attending CCAC originated from outside the county in FY 2019-20, and some of these students relocated to Allegheny County to attend CCAC. These students may not have come to the county if the college did not exist. In addition, some in-county students, referred to as retained students, would have left Allegheny County if not for the existence of CCAC. While attending the college, these relocated and retained students spent money on groceries, accommodation, transportation, and other household expenses. This spending generated \$25.4 million in added income for the county economy in FY 2019-20, which supported 424 jobs in Allegheny County.

Alumni impact



The education and training CCAC provides for county residents has the greatest impact. Since its establishment, students have studied at CCAC and entered the county workforce with greater knowledge and new skills. Today, hundreds of thousands of former CCAC students are employed in Allegheny County. As a result of their CCAC educations, the students receive higher earnings and increase the productivity of the businesses that employ them. In FY 2019-20, CCAC alumni generated \$1.2 billion in added income for the county economy, which is equivalent to supporting 13,043 jobs.

Total impact

CCAC added \$1.3 billion in income to the Allegheny County economy during the analysis year, equal to the sum of the operations and construction spending impacts, the student spending impact, and the alumni impact. For context, the \$1.3 billion impact was equal to approximately 1.3% of the total gross regional product (GRP) of Allegheny County. This contribution from the college alone is nearly as large as the entire Utilities industry in the region.

CCAC's total impact can also be expressed in terms of jobs supported. The \$1.3 billion impact supported 15,705 county jobs, using the jobs-to-sales ratios specific to each industry in the county. This means that one out of every 57 jobs in Allegheny County is supported by the activities of CCAC and its students. In addition, the \$1.3 billion, or 15,705 supported jobs, stemmed from different industry sectors. Among non-education industry sectors, CCAC's spending and alumni in the Health Care & Social Assistance industry sector supported 3,866 jobs in FY 2019-20. These are impacts that would not have been generated without the college's presence in Allegheny County.

CCAC IMPACTS BY INDUSTRY (JOBS SUPPORTED)



One out of every 57 jobs in the Allegheny County is supported by the activities of CCAC and its students.



An investment analysis evaluates the costs associated with a proposed venture against its expected benefits. If the benefits outweigh the costs, then the investment is financially worthwhile. The analysis presented here considers CCAC as an investment from the perspectives of students, taxpayers, and society in Pennsylvania.

Student perspective



In FY 2019-20, CCAC served 24,158 credit and 17,536 non-credit students. In order to attend the college, the students paid for tuition, fees, books, and supplies. They also took out loans and will incur interest on those loans. Additionally, students gave up money they would have otherwise earned had they been working instead of attending college. The total investment made by CCAC's students in FY 2019-20 amounted to a present value of \$131.7 million, equal to \$39.8 million in out-of-pocket expenses (including future principal and interest on student loans) and \$91.9 million in forgone time and money.

In return for their investment, CCAC's students will receive a stream of higher future earnings that will continue to grow throughout their working lives. For example, the average CCAC associate degree graduate from FY 2019-20 will see annual earnings that are \$11,000 higher than a person with a high school diploma or equivalent working in Pennsylvania. Over a working lifetime, the benefits of the associate degree over a high school diploma will amount to an undiscounted value of \$451 thousand in higher earnings per graduate. The present value of the cumulative higher future earnings that CCAC's FY 2019-20 students will receive over their working careers is \$614.5 million.

STUDENTS SEE A HIGH RATE OF RETURN FOR THEIR INVESTMENT IN CCAC



Average annual return for CCAC students
19.7%



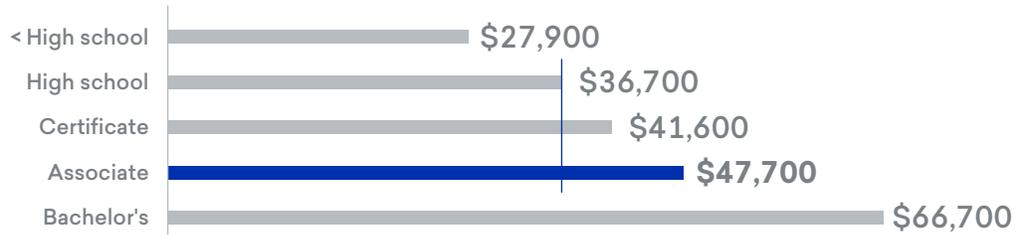
Stock market 30-year average annual return
9.9%



Interest earned on savings account (National Rate Cap)
0.8%

Source: Forbes' S&P 500, 1989-2018. FDIC.gov, 6-2019.

The average associate degree graduate from CCAC will see an increase in earnings of **\$11,000** each year compared to a person with a high school diploma or equivalent working in Pennsylvania.



Source: Emsi employment data.

The students' benefit-cost ratio is 4.7. In other words, for every dollar students invest in CCAC, in the form of out-of-pocket expenses and forgone time and money, they will receive a cumulative value of \$4.70 in higher future earnings. Annually, the students' investment in CCAC has an average annual internal rate of return of 19.7%, which is impressive compared to the U.S. stock market's 30-year average rate of return of 9.9%.

Taxpayer perspective



CCAC generates more in tax revenue than it takes. These benefits to taxpayers consist primarily of taxes that the state and local government will collect from the added revenue created in the state. As CCAC students will earn more, they will make higher tax payments throughout their working lives. Students' employers will also make higher tax payments as they increase their output and purchases of goods and services. By the end of the FY 2019-20 students' working lives, the state and local government will have collected a present value of \$166.2 million in added taxes.

Benefits to taxpayers will also consist of savings generated by the improved lifestyles of CCAC students and the corresponding reduced government services. Education is statistically correlated with a variety of lifestyle changes. Students' CCAC educations will generate savings in three main categories: 1) healthcare, 2) crime, and 3) income assistance. Improved health will lower students' demand for national health care services. In addition, students will be less likely to interact with the criminal justice system, resulting in a reduced demand for law enforcement and victim costs. CCAC students will be more employable, so their reduced demand for income assistance such as welfare and unemployment benefits will benefit taxpayers. For a list of study references, contact the college for a copy of the main report. Altogether, the present value of the benefits associated with a CCAC education will generate \$11.4 million in savings to state and local taxpayers.

Total taxpayer benefits amount to \$177.6 million, the present value sum of the added taxes and public sector savings. Taxpayer costs are \$70.9 million, equal to the amount of state and local government funding CCAC received in FY 2019-20. These benefits and costs yield a benefit-cost ratio of 2.5. This means that for every dollar of public money invested in CCAC in FY 2019-20, taxpayers will receive a cumulative value of \$2.50 over the course of the students' working lives. The average annual internal rate of return for taxpayers is 8.2%, which compares favorably to other long-term investments in the public and private sectors.

Social perspective

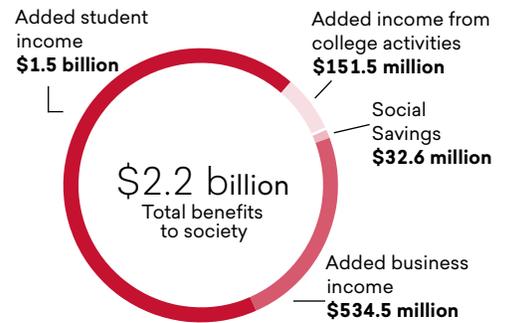


Society as a whole in Pennsylvania benefits from the presence of CCAC in two major ways. Primarily, society benefits from an increased economic base in the state. This is attributed to higher student earnings and increased business output, which raise economic prosperity in Pennsylvania.

For every dollar of public money invested in CCAC, taxpayers will receive a cumulative value of **\$2.50** over the course of the students' working lives.

Benefits to society also consist of the savings generated by the improved lifestyles of CCAC students. As discussed in the previous section, education is statistically correlated with a variety of lifestyle changes that generate social savings. Note that these costs are avoided by the consumers but are distinct from the costs avoided by the taxpayers outlined above. Healthcare savings include avoided medical costs associated with smoking, alcohol dependence, obesity, drug abuse, and depression. Savings related to crime include reduced security expenditures and insurance administration, lower victim costs, and reduced expenditures by the criminal justice system. Income assistance savings include reduced welfare and unemployment claims. For a list of study references, contact the college for a copy of the main report.

SOCIAL BENEFITS IN PENNSYLVANIA FROM CCAC



Source: Emsi impact model.

Altogether, the social benefits of CCAC equal a present value of \$2.2 billion. These benefits include \$1.5 billion in added student income, \$534.5 million in added business income, \$151.5 million in added income from college activities, as well as \$32.6 million in social savings related to health, crime, and income assistance in Pennsylvania. People in Pennsylvania invested a present value total of \$232.8 million in CCAC in FY 2019-20. The cost includes all the college and student costs.

The benefit-cost ratio for society is 9.5, equal to the \$2.2 billion in benefits divided by the \$232.8 million in costs. In other words, for every dollar invested in CCAC, people in Pennsylvania will receive a cumulative value of \$9.50 in benefits. The benefits of this investment will occur for as long as CCAC's FY 2019-20 students remain employed in the state workforce.

Summary of Investment Analysis Results

The results of the analysis demonstrate that CCAC is a strong investment for all three major stakeholder groups—students, taxpayers, and society. As shown, students receive a great return for their investments in a CCAC education. At the same time, taxpayers' investment in CCAC returns more to government budgets than it costs and creates a wide range of social benefits throughout Pennsylvania.

STUDENT PERSPECTIVE		TAXPAYER PERSPECTIVE		SOCIAL PERSPECTIVE	
Present value benefits		Present value benefits		Present value benefits	
\$614.5 million		\$177.6 million		\$2.2 billion	
Present value costs		Present value costs		Present value costs	
\$131.7 million		\$70.9 million		\$0.2 billion	
Net present value		Net present value		Net present value	
\$482.8 million		\$106.7 million		\$2 billion	
Benefit-cost ratio	Rate of return	Benefit-cost ratio	Rate of return	Benefit-cost ratio	Rate of return
4.7	19.7%	2.5	8.2%	9.5	n/a*

* The rate of return is not reported for the social perspective because the beneficiaries of the investment are not necessarily the same as the original investors.

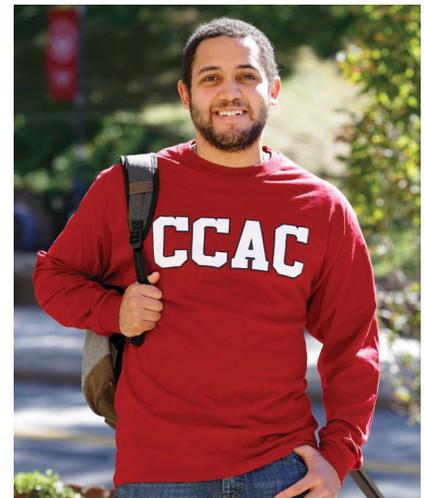
CONCLUSION

The results of this study demonstrate that CCAC creates value from multiple perspectives. The college benefits county businesses by increasing consumer spending in the county and supplying a steady flow of qualified, trained workers to the workforce. CCAC enriches the lives of students by raising their lifetime earnings and helping them achieve their individual potential. The college benefits state and local taxpayers through increased tax receipts and a reduced demand for government-supported social services. Finally, CCAC benefits society as a whole in Pennsylvania by creating a more prosperous economy and generating a variety of savings through the improved lifestyles of students.

About the study

Data and assumptions used in the study are based on several sources, including the FY 2019-20 academic and financial reports from COC, industry and employment data from the U.S. Bureau of Labor Statistics and U.S. Census Bureau, outputs of Emsi's Multi-Regional Social Accounting Matrix model, and a variety of studies and surveys relating education to social behavior. The study applies a conservative methodology and follows standard practice using only the most recognized indicators of economic impact and investment effectiveness. For a full description of the data and approach used in the study, please contact the college for a copy of the main report.

The results of this study demonstrate that CCAC creates value from **multiple perspectives**.



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