

Executive Summary

The Economic Value of Jamestown Community College







AMESTOWN COMMUNITY COLLEGE (JCC) 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 region, generating new dollars and opportunities for the JCC Service Area.* JCC provides students with the education, training, and skills they need to have fulfilling and prosperous careers. Furthermore, JCC is a place for students to meet new people, increase their self-confidence, and promote their overall health and well-being.

JCC influences both the lives of its students and the regional economy. The college supports a variety of industries in the JCC Service Area, serves regional businesses, and benefits society as a whole in New York from an expanded economy and improved quality of life. Additionally, the benefits created by JCC extend to the state and local government through increased tax revenues and public sector savings.

This study measures the economic impacts created by JCC 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) 2022-23. Impacts on the JCC Service Area 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 New York are reported under the investment analysis.

For the purposes of this analysis, the JCC Service Area is comprised of Allegany, Cattaraugus, and Chautauqua Counties.



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economy.

Economic impact analysis



JCC promotes economic growth in the JCC Service Area through its direct expenditures and the resulting expenditures of students and regional 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 the JCC Service Area, whose expenditures benefit regional vendors. In addition, JCC is one of the primary sources of higher education to the JCC Service Area residents and a supplier of trained workers to regional industries, enhancing overall productivity in the regional workforce.

Operations spending impact

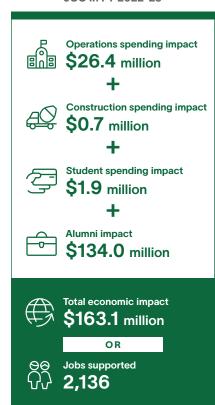
JCC adds economic value to the JCC Service Area as an employer of regional residents and a large-scale buyer of goods and services. In FY 2022-23, the college employed 379 full-time and part-time faculty and staff, 81% of whom lived in the JCC Service Area. Total payroll at JCC was \$23.7 million, much of which was spent in the region for groceries, mortgage and rent payments, dining out, and other household expenses. In addition, the college spent \$15.0 million on expenses related to facilities, supplies, and professional services (excluding construction).

JCC's operations spending added \$26.4 million in income to the region during the analysis year. This figure represents the college's payroll, the multiplier effects generated by the in-region spending of the college and its employees, and a downward adjustment to account for funding that the college received from regional sources. The \$26.4 million in added income is equivalent to supporting 405 jobs in the region.

Construction spending impact

JCC invests in capital projects 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 regional economy. In FY 2022-23, JCC's construction spending generated \$0.7 million in added income, which is equivalent to supporting 10 jobs.

Impacts created by JCC in FY 2022-23



Student spending impact

Around 15% of students attending JCC originated from outside the region in FY 2022-23, and some of these students relocated to the JCC Service Area to attend JCC. These students would likely not have come to the region if the College did not exist. In addition, some in-region students, referred to as retained students, would have left the JCC Service Area if not for the existence of JCC. While attending the college, these relocated and retained students spent money on groceries, accommodation, transportation, and other household expenses. This spending generated \$1.9 million in added income for the regional economy in FY 2022-23, which supported 30 jobs in the JCC Service Area.

Alumni impact

The education and training JCC provides for regional residents has the greatest impact. Since the establishment of the College, in 1956, students have studied at JCC and entered the regional workforce with greater knowledge and new skills. Today, thousands of former JCC students are employed in the JCC Service Area. As a result of their education from JCC, the students receive higher earnings and increase the productivity of the businesses that employ them. In FY 2022-23, JCC alumni generated \$134.0 million in added income for the regional economy, which is equivalent to supporting 1,692 jobs.

JCC impacts by industry (jobs supported)



319

Health Care & Social Assistance



232

Retail Trade



174

Government, Non-Education



127

Other services (Except Public Admin)



115

Arts, Entertainment & Recreation

Total impact

JCC added \$163.1 million in income to the JCC Service Area 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 \$163.1 million impact was equal to approximately 1.4% of the total gross regional product (GRP) of the JCC Service Area. This contribution that the college provided on its own is over half the size of the entire utilities industry in the region.

JCC's total impact can also be expressed in terms of jobs supported.

The \$163.1 million impact supported 2,136 regional jobs, using the jobs-to-sales ratios specific to each industry in the region. This means that one out of every 55 jobs in the JCC Service Area is supported by the activities of JCC and its students. In addition, the \$163.1 million, or 2,136 supported jobs, stemmed from different industry sectors. For instance, among non-education industry sectors, the spending of JCC and its students and the activities of its alumni in the Health Care & Social Assistance industry sector supported 319 jobs in FY 2022-23. If the College did not exist, these impacts would have been absent from the JCC Service Area.

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Investment analysis



An investment analysis evaluates the costs associated with a proposed venture against its expected benefits. The analysis presented here evaluates JCC as an investment from the perspectives of students, taxpayers, and society in New York. As with the economic impact analysis, this analysis considers only FY 2022-23 activities.

Student perspective

In FY 2022-23, JCC served 4,591 credit and 1,006 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 JCC's students in FY 2022-23 amounted to a present value of \$12.5 million, equal to \$9.9 million in out-of-pocket expenses (including future principal and interest on student loans) but \$2.6 million in forgone time and money.

In return for their investment, JCC's students will receive a stream of higher future earnings that will continue to grow throughout their working lives. For example, the average JCC associate degree graduate from FY 2022-23 will see annual earnings that are \$6,800 higher than a person with a high school diploma or equivalent working in New York. Over a working lifetime, the benefits of an associate degree over a high school diploma will amount to an undiscounted value of \$306,000 in higher earnings per graduate. The present value of the cumulative higher future earnings that JCC's FY 2022-23 students will receive over their working careers is \$60.7 million.

The students' benefit-cost ratio is 4.8. In other words, for every dollar students invest in JCC in the form of out-of-pocket expenses and forgone time and money, they will receive a cumulative value of \$4.80 in higher future earnings. Annually, the students' investment in JCC has an average annual internal rate of return of 16.5%, which is impressive compared to the U.S. stock market's 30-year average rate of return of 10.1%.

Students see a high rate of return for their investment in JCC



Average annual return for JCC students

16.5%



Stock market 30-year average annual return

10.1%



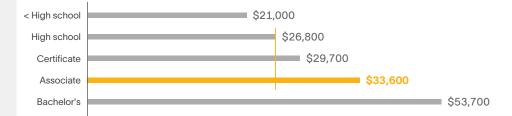
Interest earned on savings account (national deposit rate)
0.5%

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Source: Forbes' S&P 500, 1994-2023; FDIC.gov, March 2023

Average earnings by education level at career midpoint

The average associate degree graduate from JCC will see an increase in earnings of **\$6,800** each year compared to a person with a high school diploma or equivalent working in New York.



Source: Lightcast employment data



Taxpayer perspective

JCC generates more in tax revenue than it receives. 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 JCC 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 2022-23 students' working lives, the state and local government will have collected a present value of \$20.3 million in added taxes.

Benefits to taxpayers will also consist of savings generated by the improved lifestyles of JCC students and the corresponding reduced government services. Education is statistically correlated with a variety of lifestyle changes. The education that JCC students receive will

generate savings in three main categories: 1) health care, 2) justice system, and 3) income assistance. Improved health will lower students' demand for national health care services. In addition, costs related to the justice system will decrease. JCC 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 an education from JCC will generate \$4.4 million in savings to state and local taxpayers.

Total taxpayer benefits amount to \$24.7 million, the present value sum of the added tax revenue and public sector savings. Taxpayer costs are \$23.3 million, equal to the amount of state and local government funding JCC received in FY 2022-23. These benefits and costs yield a benefit-cost ratio of 1.1. This means that for every dollar of public money invested in JCC in FY 2022-23, taxpayers will receive a cumulative present value of \$1.10 over the course of the students' working lives. The average annual internal rate of return for taxpayers is 1.0%, which compares favorably to other long-term investments in the public sector.

Social perspective

Society as a whole in New York benefits from the presence of JCC in two major ways. Primarily, society benefits from an increased economic base in the state. This is attributed to the added income from students' increased lifetime earnings (added student income) and increased business output (added business income), which raise economic prosperity in New York.

Benefits to society also consist of the savings generated by the improved lifestyles of JCC 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. Health care savings include avoided medical costs associated with smoking, obesity, substance abuse, and depression. Justice system savings include avoided costs to the government and society due to less judicial activity. Income

For every dollar of public money invested in JCC, taxpayers will receive a cumulative value of \$1.10 over the course of the students' working lives.

assistance savings include reduced welfare and unemployment claims. For a list of study references, contact the college for a copy of the main report.

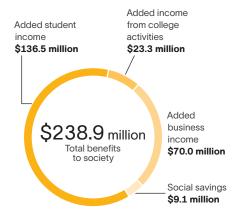
Altogether, the social benefits of JCC equal a present value of \$238.9 million. These benefits include \$136.5 million in added student income, \$70.0 million in added business income, \$23.3 million in added income from college activities, as well as \$9.1 million in social savings related to health, the justice system, and income assistance in New York. People in New York invested a present value total of \$48.1 million in JCC in FY 2022-23. The cost includes all the college and student costs.

The benefit-cost ratio for society is 5.0, equal to the \$238.9 million in benefits divided by the \$48.1 million in costs. In other words, for every dollar invested in JCC, people in New York will receive a cumulative value of \$5.00 in benefits. The benefits of this investment will occur for as long as JCC's FY 2022-23 students remain employed in the state workforce.

Summary of investment analysis results

The results of the analysis demonstrate that JCC 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 an education from JCC. At the same time, taxpayers' investment in JCC returns more to government budgets than it costs and creates a wide range of social benefits throughout New York.

Social benefits in New York from JCC



Source: Lightcast impact model

Summary of investment analysis results

Student perspec	ctive	盦	Taxpayer p	perspective	٤	Social pe	erspective	
Present value benefits \$60.7 million		Present value benefits \$24.7 million				Present value benefits \$238.9 million		
Present value costs \$12.5 million		Present value costs \$23.3 million				Present value costs \$48.1 million		
Net present value \$48.2 million		Net present value \$1.4 million				Net present value \$190.8 million		
Benefit-cost ratio Rate	e of return	Benefit-	cost ratio	Rate of return	В	enefit-cost ratio	Rate of return	
4.8 16	6.5%	1	.1	1.0%		5.0	n/a*	

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

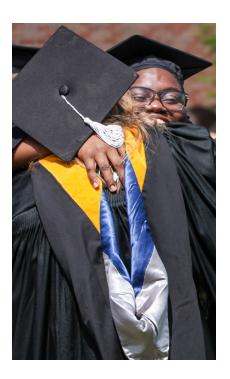
Conclusion

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

The College benefits regional businesses and attract assets by increasing consumer spending in the region and supplying a steady flow of qualified, trained workers to the workforce. JCC 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, JCC benefits society as a whole in New York 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 2022-23 academic and financial reports from JCC, industry and employment data from the U.S. Bureau of Labor Statistics and U.S. Census Bureau, outputs of Lightcast'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.



Lightcast

Lightcast provides colleges and universities with labor market data that help create better outcomes for students, businesses, and communities. Our data, which cover more than 99% of the U.S. workforce, are compiled from a wide variety of government sources, job postings, and online profiles and résumés. Hundreds of institutions use Lightcast to align programs with regional needs, drive enrollment, connect students with in-demand careers, track their alumni's employment outcomes, and demonstrate their institution's economic impact on their region. Visit lightcast.io/solutions/education to learn more or connect with us.