



The Economic Value of Jefferson Community College



JEFFERSON COMMUNITY COLLEGE (Jefferson) 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 Tri-County Area.* Jefferson provides students with the education, training, and skills they need to have fulfilling and prosperous careers. Furthermore, Jefferson is a place for students to meet new people, increase their self-confidence, and promote their overall health and well-being.

Jefferson influences both the lives of its students and the regional economy. The college supports a variety of industries in the Tri-County 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 Jefferson extend to the state and local government through increased tax revenues and public sector savings.

This study measures the economic impacts created by Jefferson 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) 2020-21. Impacts on the Tri-County 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 Tri-County Area is comprised of Jefferson, Lewis, and St. Lawrence Counties in New York.



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



Jefferson promotes economic growth in the Tri-County 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 Tri-County Area, whose expenditures benefit regional vendors. In addition, Jefferson is a primary source of higher education to the Tri-County Area residents and a supplier of trained workers to regional industries, enhancing overall productivity in the regional workforce.

Operations spending impact



Jefferson adds economic value to the Tri-County Area as an employer of regional residents and a large-scale buyer of goods and services. In FY 2020-21, the college employed 300 full-time and part-time faculty and staff, 91% of whom lived in the Tri-County Area. Total payroll at Jefferson was \$19.6 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 \$12.8 million on day-to-day expenses related to facilities, supplies, and professional services.

Jefferson's day-to-day operations spending added \$22.3 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 \$22.3 million in added income is equivalent to supporting 326 jobs in the region.

Construction spending impact



Jefferson 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 regional economy. In FY 2020-21, Jefferson's construction spending generated \$289.9 thousand in added income, which is equivalent to supporting four jobs.

IMPACTS CREATED BY JEFFERSON IN FY 2020-21



Operations spending impact
\$22.3 million



Construction spending impact
\$289.9 thousand



Student spending impact
\$2.2 million



Alumni impact
\$43.6 million



TOTAL ECONOMIC IMPACT
\$68.4 million

OR

Jobs supported
883

Student spending impact



Around 14% of credit students attending Jefferson originated from outside the region in FY 2020-21, and some of these students relocated to the Tri-County Area to attend Jefferson. These students may 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 Tri-County Area if not for the existence of Jefferson. While attending the college, these relocated and retained students spent money on groceries, accommodation, transportation, and other household expenses. This spending generated \$2.2 million in added income for the regional economy in FY 2020-21, which supported 35 jobs in the Tri-County Area.

Alumni impact



The education and training Jefferson provides for regional residents has the greatest impact. Since its establishment, students have studied at Jefferson and entered the regional workforce with greater knowledge and new skills. Today, thousands of former Jefferson students are employed in the Tri-County Area. As a result of their education from Jefferson, the students receive higher earnings and increase the productivity of the businesses that employ them. In FY 2020-21, Jefferson alumni generated \$43.6 million in added income for the regional economy, which is equivalent to supporting 518 jobs.

Total impact

Jefferson added \$68.4 million in income to the Tri-County 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 \$68.4 million impact was equal to approximately 0.5% of the total gross regional product (GRP) of the Tri-County Area. This contribution that the college provided on its own was nearly as large as the entire Management of Companies & Enterprises industry in the region.

Jefferson's total impact can also be expressed in terms of jobs supported. The \$68.4 million impact supported 883 regional jobs, using the jobs-to-sales ratios specific to each industry in the region. In addition, the \$68.4 million, or 883 supported jobs, stemmed from different industry sectors. Among non-education industry sectors, Jefferson's spending and alumni in the Health Care & Social Assistance industry sector supported 113 jobs in FY 2020-21. If the college did not exist, these impacts would not have been generated in the Tri-County Area.

JEFFERSON IMPACTS BY INDUSTRY (JOBS SUPPORTED)





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 Jefferson as an investment from the perspectives of students, taxpayers, and society in New York.

Student perspective



In FY 2020-21, Jefferson served 3,749 credit and 264 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 Jefferson's students in FY 2020-21 amounted to a present value of \$15.4 million, equal to \$7.2 million in out-of-pocket expenses (including future principal and interest on student loans) and \$8.2 million in forgone time and money.

In return for their investment, Jefferson's students will receive a stream of higher future earnings that will continue to grow throughout their working lives. For example, the average Jefferson associate degree graduate from FY 2020-21 will see annual earnings that are \$7,200 higher than a person with a high school diploma or equivalent working in New York. Over a working lifetime, the benefits of the associate degree over a high school diploma will amount to an undiscounted value of \$309.6 thousand in higher earnings per graduate. The present value of the cumulative higher future earnings that Jefferson's FY 2020-21 students will receive over their working careers is \$63.6 million.

The students' benefit-cost ratio is 4.1. In other words, for every dollar students invest in Jefferson in the form of out-of-pocket expenses and forgone time and money, they will receive a cumulative value of \$4.10 in higher future earnings.

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



Average annual return for Jefferson students

16.9%



Stock market 30-year average annual return

10.6%



Interest earned on savings account (National Rate Cap)

0.8%

Source: Forbes' S&P 500, 1991-2020. FDIC.gov, 6-2021.

The average associate degree graduate from Jefferson will see an increase in earnings of **\$7,200** each year compared to a person with a high school diploma or equivalent working in New York.



Source: Emsi Burning Glass employment data.

Annually, the students' investment in Jefferson has an average annual internal rate of return of 16.9%, which is impressive compared to the U.S. stock market's 30-year average rate of return of 10.6%.

Taxpayer perspective



Jefferson 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 Jefferson 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 2020-21 students' working lives, the state and local government will have collected a present value of \$20.7 million in added taxes.

Benefits to taxpayers will also consist of savings generated by the improved lifestyles of Jefferson students and the corresponding reduced government services. Education is statistically correlated with a variety of lifestyle changes. The educations that Jefferson students receive will generate savings in three main categories: 1) healthcare, 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. Jefferson 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 Jefferson will generate \$2.4 million in savings to state and local taxpayers.

Total taxpayer benefits amount to \$23.1 million, the present value sum of the added taxes and public sector savings. Taxpayer costs are \$14.5 million, equal to the amount of state and local government funding Jefferson received in FY 2020-21. These benefits and costs yield a benefit-cost ratio of 1.6. This means that for every dollar of public money invested in Jefferson in FY 2020-21, taxpayers will receive a cumulative present value of \$1.60 over the course of the students' working lives. The average annual internal rate of return for taxpayers is 3.1%, which compares favorably to other long-term investments in the public and private sectors.

Social perspective



Society as a whole in New York benefits from the presence of Jefferson 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 Jefferson students. As discussed in the previous section, education

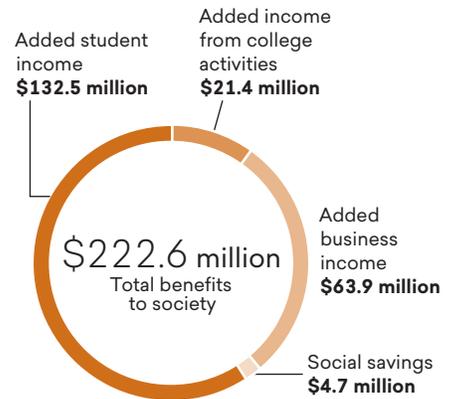
For every dollar of public money invested in Jefferson, taxpayers will receive a cumulative value of **\$1.60** over the course of the students' working lives.

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. Justice system savings include avoided costs to the government and society due to less judicial activity. 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.

Altogether, the social benefits of Jefferson equal a present value of \$222.6 million. These benefits include \$132.5 million in added student income, \$63.9 million in added business income, \$21.4 million in added income from college activities, as well as \$4.7 million in social savings related to health, crime, and income assistance in New York. People in New York invested a present value total of \$45.5 million in Jefferson in FY 2020-21. The cost includes all the college and student costs.

The benefit-cost ratio for society is 4.9, equal to the \$222.6 million in benefits divided by the \$45.5 million in costs. In other words, for every dollar invested in Jefferson, people in New York will receive a cumulative value of \$4.90 in benefits. The benefits of this investment will occur for as long as Jefferson’s FY 2020-21 students remain employed in the state workforce.

SOCIAL BENEFITS IN NEW YORK FROM JEFFERSON



Source: Emsi Burning Glass impact model.

Summary of investment analysis results

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

STUDENT PERSPECTIVE		TAXPAYER PERSPECTIVE		SOCIAL PERSPECTIVE	
Present value benefits	\$63.6 million	Present value benefits	\$23.1 million	Present value benefits	\$222.6 million
Present value costs	\$15.4 million	Present value costs	\$14.5 million	Present value costs	\$45.5 million
Net present value	\$48.2 million	Net present value	\$8.5 million	Net present value	\$177.1 million
Benefit-cost ratio	4.1	Benefit-cost ratio	1.6	Benefit-cost ratio	4.9
Rate of return	16.9%	Rate of return	3.1%	Rate of return	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 Jefferson creates value from multiple perspectives. The college benefits regional businesses by increasing consumer spending in the region and supplying a steady flow of qualified, trained workers to the workforce. Jefferson 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, Jefferson 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 2020-21 academic and financial reports from Jefferson, industry and employment data from the U.S. Bureau of Labor Statistics and U.S. Census Bureau, outputs of Emsi Burning Glass'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 Jefferson creates value from **multiple perspectives**.



Emsi Burning Glass 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 Emsi Burning Glass 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 economicmodeling.com/higher-education to learn more or connect with us.