

The Economic Value of Keweenaw Bay Ojibwa Community College





KEWEENAW BAY OJIBWA COMMUNITY COLLEGE (KBOCC) creates value in many ways. The college plays a key role in helping students increase their employability and achieve their individual potential. The college retains students in the region, generating new dollars and opportunities for the L’Anse Indian Reservation & Surrounding Areas.* KBOCC provides students with the education, training, and skills they need to have fulfilling and prosperous careers. Furthermore, KBOCC is a place for students to meet new people, increase their self-confidence, and promote their overall health and well-being.

KBOCC influences both the lives of its students and the regional economy. The college supports a variety of industries in the L’Anse Indian Reservation & Surrounding Areas, serves regional businesses, and benefits society from an expanded economy and improved quality of life. Additionally, the benefits created by KBOCC extend to the federal, state, and local government through increased tax revenues and public sector savings.

This study measures the economic impacts created by KBOCC on the business community and evaluates the return on investment to KBOCC’s key stakeholders—students and society—as well as the benefits received by U.S. and Michigan taxpayers. The following two analyses are presented:



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

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 L’Anse Indian Reservation & Surrounding Areas economy are reported under the economic impact analysis and are measured in terms of added income. The returns on investment to students and society nationwide, along with benefits to taxpayers, are reported under the investment analysis.

* For the purposes of this analysis, the L’Anse Indian Reservation & Surrounding Areas are represented by Baraga County, Michigan.



Economic impact analysis



KBOCC promotes economic growth in the L'Anse Indian Reservation & Surrounding Areas 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 reputation and activities retain students in the L'Anse Indian Reservation & Surrounding Areas, whose expenditures benefit regional vendors. In addition, KBOCC is one of the primary sources of higher education to the L'Anse Indian Reservation & Surrounding Areas residents and a supplier of trained workers to regional industries, enhancing overall productivity in the regional workforce.

Operations spending impact



KBOCC adds economic value to the L'Anse Indian Reservation & Surrounding Areas as an employer of regional residents and a large-scale buyer of goods and services. In FY 2022-23, the college employed 55 full-time and part-time faculty and staff, 76% of whom lived in the L'Anse Indian Reservation & Surrounding Areas. Total payroll at KBOCC was \$2.6 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 \$5.0 million on expenses related to facilities, supplies, and professional services (excluding construction).

KBOCC's operations spending added \$2.8 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 \$2.8 million in added income is equivalent to supporting 52 jobs in the region.

Construction spending impact



KBOCC 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, KBOCC's construction spending generated \$32.7 thousand in added income, which is equivalent to supporting one job.

Impacts created by
KBOCC in FY 2022-23



Operations spending impact

\$2.8 million

+



Construction spending impact

\$32.7 thousand

+



Student spending impact

\$49.1 thousand

+



Alumni impact

\$749.5 thousand



Total economic impact

\$3.7 million

OR



Jobs supported

69



Student spending impact



Some in-region students, referred to as retained students, would have left the L'Anse Indian Reservation & Surrounding Areas if not for the existence of KBOCC. While attending the college, these retained students spent money on groceries, accommodation, transportation, and other household expenses. Also attributable to KBOCC is the increased spending of in-region students who would have remained in the L'Anse Indian Reservation & Surrounding Areas even if the college had not existed. Because of the federal scholarships and grants these students received, they spend more money in the region while attending college than they would have had they not attended the college. In total, KBOCC student spending generated \$49.1 thousand in added income for the regional economy in FY 2022-23, which supported one job in the L'Anse Indian Reservation & Surrounding Areas.

Alumni impact



The education and training KBOCC provides for regional residents represents the economic impact unique to educational institutions. Since the establishment of the college, students have studied at KBOCC and entered the regional workforce with greater knowledge and new skills. Today, many of former KBOCC students are employed in the L'Anse Indian Reservation & Surrounding Areas. As a result of their education from KBOCC, the students receive higher earnings and increase the productivity of the businesses that employ them. In FY 2022-23, KBOCC alumni generated \$749.5 thousand in added income for the regional economy, which is equivalent to supporting 16 jobs.

Total impact

KBOCC added \$3.7 million in income to the L'Anse Indian Reservation & Surrounding Areas 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 \$3.7 million impact was equal to approximately 1.1% of the total gross regional product (GRP) of the L'Anse Indian Reservation & Surrounding Areas. This contribution that the college provided on its own is nearly as large as the entire Accommodation & Food Services industry in the region.

KBOCC's total impact can also be expressed in terms of jobs supported. The \$3.7 million impact supported 69 regional jobs, using the jobs-to-sales ratios specific to each industry in the region. This means that one out of every 56 jobs in the L'Anse Indian Reservation & Surrounding Areas is supported by the activities of KBOCC and its students. In addition, the \$3.7 million, or 69 supported jobs, stemmed from different industry sectors.

For instance, among non-education industry sectors, the spending of KBOCC and its students and the activities of its alumni in the Health Care & Social Assistance industry sector supported seven jobs in FY 2022-23. If the college did not exist, these impacts would not have been generated in the L'Anse Indian Reservation & Surrounding Areas.

KBOCC impacts by industry (jobs supported)



7

Health Care & Social Assistance



4

Government, Non-Education



1

Other Services (except Public Administration)



1

Accommodation & Food Services



1

Construction

One out of every 56 jobs in the L'Anse Indian Reservation & Surrounding Areas is supported by the activities of KBOCC and its students.




Investment analysis



An investment analysis evaluates the costs associated with a proposed venture against its expected benefits. The analysis presented here evaluates KBOCC as an investment from the perspectives of students and society. In addition, the benefits received by U.S. and Michigan taxpayers are measured. As with the economic impact analysis, this analysis considers only FY 2022-23 activities.

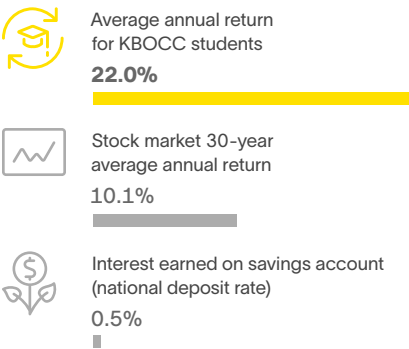
Student perspective

 In FY 2022-23, KBOCC served 302 credit and 94 non-credit students. In order to attend the college, the students paid for tuition, fees, books, and supplies. They also gave up money they would have otherwise earned had they been working instead of attending college. The total investment made by KBOCC's students in FY 2022-23 amounted to a present value of \$875.4 thousand, equal to \$156.2 thousand in out-of-pocket expenses and \$719.3 thousand in forgone time and money.

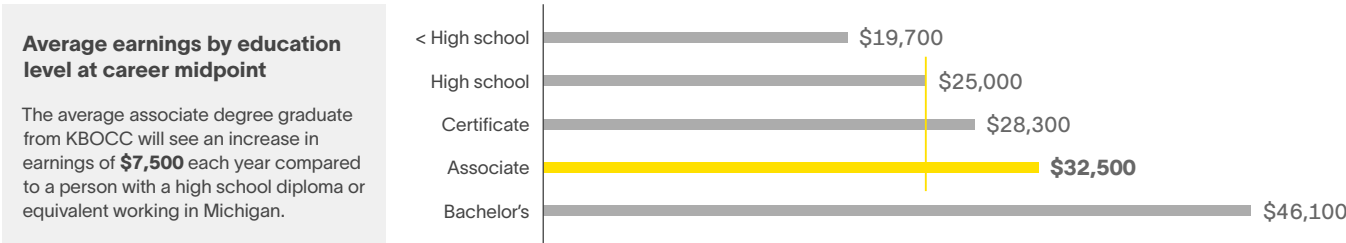
In return for their investment, KBOCC's students will receive a stream of higher future earnings that will continue to grow throughout their working lives. For example, the average KBOCC associate degree graduate from FY 2022-23 will see annual earnings that are \$7,500 higher than a person with a high school diploma or equivalent working in Michigan. Over a working lifetime, the benefits of an associate degree over a high school diploma will amount to an undiscounted value of \$232,500 in higher earnings per graduate. The present value of the cumulative higher future earnings that KBOCC's FY 2022-23 students will receive over their working careers is \$4.3 million.

The students' benefit-cost ratio is 4.9. In other words, for every dollar students invest in KBOCC in the form of out-of-pocket expenses and forgone time and money, they will receive a cumulative value of \$4.90 in higher future earnings. Annually, the students' investment in KBOCC has an average annual internal rate of return of 22.0%, 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 KBOCC



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



Source: Lightcast employment data

Average earnings by education level at career midpoint

The average associate degree graduate from KBOCC will see an increase in earnings of **\$7,500** each year compared to a person with a high school diploma or equivalent working in Michigan.

Taxpayer perspective



KBOCC generates substantial benefits for taxpayers in the U.S. and Michigan.

These benefits to taxpayers consist primarily of taxes that the government will collect from the added revenue created in the nation and state. As KBOCC 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. At the national level, the government will have collected a present value of \$4.2 million in added taxes by the end of the FY 2022-23 students' working lives. At the state level, Michigan will have collected a present value of \$1.3 million in added taxes.

Benefits to taxpayers will also consist of savings generated by the improved lifestyles of KBOCC students and the corresponding reduced government services. Education is statistically correlated with a variety of lifestyle changes. The education that KBOCC 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. KBOCC 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 KBOCC will generate \$367.3 thousand in savings to U.S. taxpayers and \$204.0 thousand to Michigan taxpayers.

Total taxpayer benefits at the national level amount to \$4.5 million, the present value sum of the added taxes and public sector savings; and Michigan taxpayer benefits amount to \$1.5 million.

Throughout students' working lives, taxpayers in the U.S. will receive a total of **\$4.5 million** in benefits. At the state level, Michigan taxpayers will receive a total of **\$1.5 million** in benefits.

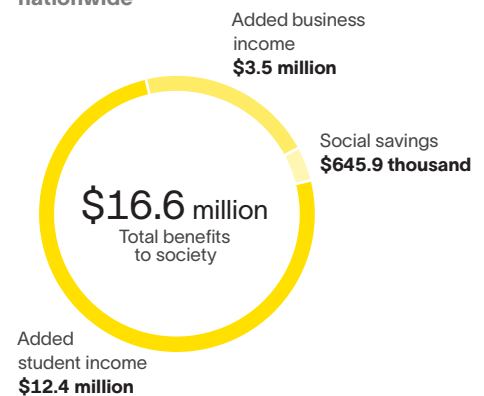
Social perspective



Society benefits from the presence of KBOCC in two major ways. Primarily, society benefits from an increased economic base in the nation. 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 the U.S.

Benefits to society also consist of the savings generated by the improved lifestyles of KBOCC 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.

Social benefits from KBOCC nationwide



Source: Lightcast impact model

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 KBOCC equal a present value of \$16.6 million to the U.S. These benefits include \$12.4 million in added student income, \$3.5 million in added business income, as well as \$645.9 thousand in social savings related to health, the justice system, and income assistance. People in the U.S. invested a present value total of \$8.2 million in KBOCC in FY 2022-23. The cost includes all government funding and student costs.

The benefit-cost ratio for society is 2.0, equal to the \$16.6 million in benefits divided by the \$8.2 million in costs. In other words, for every dollar invested in KBOCC, people across the nation will receive a cumulative value of \$2.00 in benefits. This means that the benefits not only cover the cost of society's funding but also generate a surplus of benefits for people in the U.S. The benefits of this investment will occur for as long as KBOCC's FY 2022-23 students remain employed in the workforce.



Summary of investment analysis results

The results of the analysis demonstrate that KBOCC is a strong investment for students and society. As shown, students receive a great return for their investments in an education from KBOCC. In addition, the benefits generated by KBOCC and its students recover a substantial portion of the costs borne by taxpayers and create a wide range of social benefits throughout the nation.

Summary of investment analysis results



Student perspective

Present value benefits

\$4.3 million

Present value costs

\$0.9 million

Net present value

\$3.4 million

Benefit-cost ratio	Rate of return
4.9	22.0%



Taxpayer perspective

Present value benefits for taxpayers in the U.S.

\$4.5 million

Present value benefits for taxpayers in Michigan

\$1.5 million



Social perspective

Present value benefits

\$16.6 million

Present value costs

\$8.2 million

Net present value

\$8.4 million

Benefit-cost ratio	Rate of return
2.0	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 KBOCC creates value from **multiple perspectives**.*

The college benefits local businesses by increasing consumer spending in the region and supplying a steady flow of qualified, trained workers to the workforce. KBOCC enriches the lives of students by raising their lifetime earnings and helping them achieve their individual potential. The college benefits federal, state, and local taxpayers through increased tax receipts and a reduced demand for government-supported social services. Finally, KBOCC benefits society as a whole in the U.S. 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 KBOCC, 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 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.