



The Economic Value of Macomb Community College



MACOMB COMMUNITY COLLEGE (Macomb) creates value in many ways. The college's mission is to transform lives and communities through the power of education, enrichment and economic development. The college draws students to the county, generating new dollars and opportunities for Macomb County. Macomb provides students with the education, training and skills they need to have fulfilling and prosperous careers and achieve their individual potential. Furthermore, Macomb is a place for students to meet new people, increase their self-confidence and promote their overall health and well-being.

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

This study measures the economic impacts created by Macomb 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:



MACOMB COUNTY, MI

Macomb influences both the **lives of its students** and the **county economy**.



Investment analysis



Economic impact analysis

All results reflect employee, student, and financial data, provided by the college, for fiscal year (FY) 2021-22. The returns on investment to students, taxpayers and society in Michigan are reported under the investment analysis. Impacts on the Macomb County economy are reported under the economic impact analysis and are measured in terms of added income.



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 evaluates Macomb as an investment from the perspectives of students, taxpayers and society in Michigan.

Student perspective



In FY 2021-22, Macomb served 23,225 credit and 5,206 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 Macomb's students in FY 2021-22 amounted to a present value of \$92 million, equal to \$50.5 million in out-of-pocket expenses (including future principal and interest on student loans) and \$41.5 million in forgone time and money.

In return for their investment, Macomb's students will receive a stream of higher future earnings that will continue to grow throughout their working lives. For example, the average Macomb associate degree graduate from FY 2021-22 will see annual earnings that are \$10,000 higher than a person with a high school diploma or equivalent working in Michigan. Over a working lifetime, the benefits of the associate degree over a high school diploma will amount to an undiscounted value of \$390 thousand in higher earnings per graduate. The present value of the cumulative higher future earnings that Macomb's FY 2021-22 students will receive over their working careers is \$563.6 million.

The students' benefit-cost ratio is 6.1. In other words, for every dollar students invest in Macomb in the form of out-of-pocket expenses and forgone time and money, they will receive a cumulative value of \$6.10 in higher future earnings. Annually, the students'

Students see a high rate of return for their investment in the Macomb



Average annual return for Macomb students
22.1%



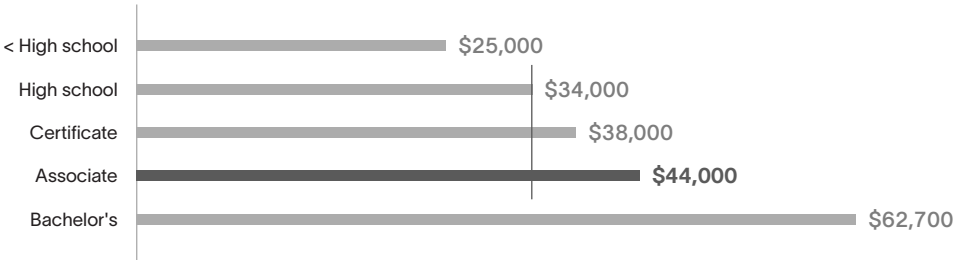
Stock market 30-year average annual return
9.6%



Interest earned on savings account (National Rate Cap)
0.4%

Source: Forbes' S&P 500, 1992-2021. FDIC.gov, 2-2022.

The average associate degree graduate from Macomb will see an increase in earnings of **\$10,000** each year compared to a person with a high school diploma or equivalent working in Michigan.



Source: Lightcast employment data.

investment in Macomb has an average annual internal rate of return of 22.1%, which is impressive compared to the U.S. stock market's 30-year average rate of return of 9.6%.

Taxpayer perspective



Macomb 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 Macomb 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 2021-22 students' working lives, the state and local government will have collected a present value of \$211.3 million in added taxes.

Benefits to taxpayers will also consist of savings generated by the improved lifestyles of Macomb students and the corresponding reduced government services. Education is statistically correlated with a variety of lifestyle changes. The education that Macomb 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 publicly funded health care. In addition, costs related to the justice system will decrease. Macomb 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 Macomb will generate \$16.9 million in savings to state and local taxpayers.

Total taxpayer benefits amount to \$228.1 million, the present value sum of the added taxes and public sector savings. Taxpayer costs are \$86.7 million, equal to the amount of state and local government funding Macomb received in FY 2021-22. These benefits and costs yield a benefit-cost ratio of 2.6. This means that for every dollar of public money invested in Macomb in FY 2021-22, taxpayers will receive a cumulative present value of \$2.60 over the course of the students' working lives. The average annual internal rate of return for taxpayers is 6.6%, which compares favorably to other long-term investments in the public sector.

For every dollar of public money invested in Macomb, taxpayers will receive a cumulative value of **\$2.60** over the course of the students' working lives.

Social perspective



In Michigan, society as a whole benefits from the presence of Macomb 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 Michigan.



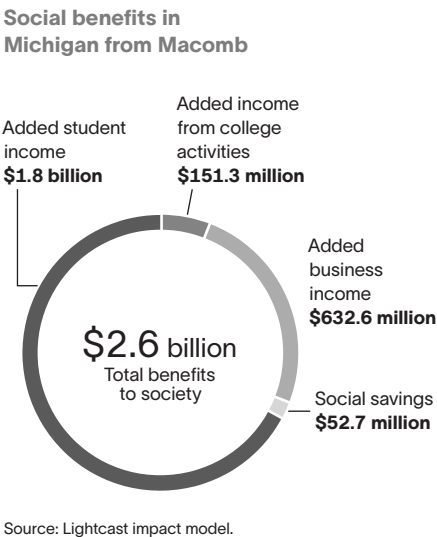
Benefits to society also consist of the savings generated by the improved lifestyles of Macomb students. As discussed in the previous section, education is statistically correlated with a variety of lifestyle changes that generate social savings. Note that these costs are avoided by the consumers but are distinct from the costs avoided by the taxpayers outlined above. Healthcare savings include avoided medical costs associated with smoking, alcohol dependence, obesity, drug use disorder 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 Macomb equal a present value of \$2.6 billion. These benefits include \$1.8 billion in added student income, \$632.6 million in added business income, \$151.3 million in added income from college activities, as well as \$52.7 million in social savings related to health, the justice system, and income assistance in Michigan. People in Michigan invested a present value total of \$222.1 million in Macomb in FY 2021-22. The cost includes all the college and student costs.


The benefit-cost ratio for society is 11.7, equal to the \$2.6 billion in benefits divided by the \$222.1 million in costs. In other words, for every dollar invested in Macomb, people in Michigan will receive a cumulative value of \$11.70 in benefits. The benefits of this investment will occur for as long as Macomb's FY 2021-22 students remain employed in the state workforce.


Summary of investment analysis results

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



| | |
|---|----------------|
|  | |
| Student perspective | |
| Present value benefits | |
| \$563.6 million | |
| Present value costs | |
| \$92 million | |
| Net present value | |
| \$471.7 million | |
| Benefit-cost ratio | Rate of return |
| 6.1 | 22.1% |

| | |
|---|----------------|
|  | |
| Taxpayer perspective | |
| Present value benefits | |
| \$228.1 million | |
| Present value costs | |
| \$86.7 million | |
| Net present value | |
| \$141.5 million | |
| Benefit-cost ratio | Rate of return |
| 2.6 | 6.6% |

| | |
|---|----------------|
|  | |
| Social perspective | |
| Present value benefits | |
| \$2.6 billion | |
| Present value costs | |
| \$0.2 billion | |
| Net present value | |
| \$2.4 billion | |
| Benefit-cost ratio | Rate of return |
| 11.7 | 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.

Economic impact analysis



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

Operations spending impact



Macomb adds economic value to Macomb County as an employer of county residents and a large-scale buyer of goods and services. In FY 2021-22, the college employed 1,503 full-time and part-time faculty and staff, 61% of whom lived in Macomb County. Total payroll at Macomb was \$100.5 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 \$49.9 million on day-to-day expenses related to facilities, supplies and professional services (excluding construction expenditures).

Macomb's day-to-day operations spending added \$116.9 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 local property taxes. The \$116.9 million in added income is equivalent to supporting 1,663 jobs in the county.

Construction spending impact



Macomb invests in construction each year to maintain its facilities, create additional capacities and address evolving educational needs. 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 2021-22, Macomb's construction spending generated \$6.9 million in added income, which is equivalent to supporting 92 jobs.

Student spending impact



Around 22% of students attending Macomb originated from outside the county in FY 2021-22, and some of these students relocated to Macomb County to attend Macomb. These students may not have come to the county if the college did

Impacts created by Macomb in FY 2021-22



Operations spending impact

\$116.9 million

+



Construction spending impact

\$6.9 million

+



Student spending impact

\$12.3 million

+



Alumni impact

\$750.7 million



Total economic impact

\$886.7 million

OR

Jobs supported

11,784



not exist. In addition, some in-county students, referred to as retained students, would have left Macomb County if not for the existence of Macomb. While attending the college, these relocated and retained students spent money on groceries, accommodation, transportation and other household expenses. This spending generated \$12.3 million in added income for the county economy in FY 2021-22, which supported 226 jobs in Macomb County.

Alumni impact



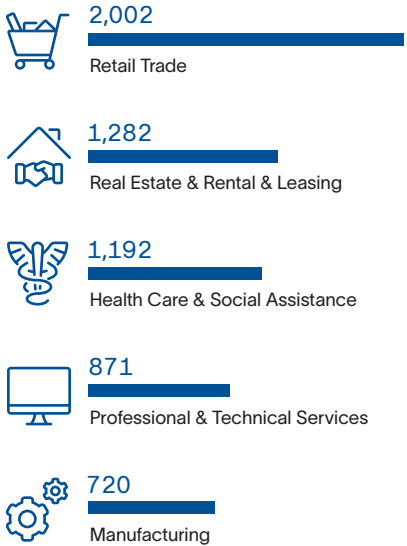
The education and training Macomb provides for county residents has the greatest impact. Since the establishment of the college, students have studied at Macomb and entered the county workforce with greater knowledge and new skills. Today, hundreds of thousands of former Macomb students are employed in Macomb County. As a result of their education from Macomb, the students receive higher earnings and increase the productivity of the businesses that employ them. In FY 2021-22, Macomb alumni generated \$750.7 million in added income for the county economy, which is equivalent to supporting 9,804 jobs.

Total impact

Macomb added \$886.7 million in income to the Macomb 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 \$886.7 million impact was equal to approximately 1.8% of the total gross regional product (GRP) of Macomb County.

Macomb's total impact can also be expressed in terms of jobs supported. The \$886.7 million impact supported 11,784 county jobs, using the jobs-to-sales ratios specific to each industry in the county. This means that one out of every 40 jobs in Macomb County is supported by the activities of Macomb and its students. In addition, the \$886.7 million, or 11,784 supported jobs, stemmed from different industry sectors. For instance, among non-education industry sectors, the spending of Macomb and its students and the activities of its alumni in the Retail Trade industry sector supported 2,002 jobs in FY 2021-22. If the college did not exist, these impacts would not have been generated in Macomb County.

Macomb impacts by industry (jobs supported)



One out of every 40 jobs in Macomb County is supported by the activities of Macomb and its students.

Conclusion

The results of this study demonstrate that Macomb 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. Macomb 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, Macomb benefits society as a whole in Michigan 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 2021-22 academic and financial reports from Macomb, 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.

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



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.