



The Economic Value of Marion Technical College

EXECUTIVE SUMMARY



MTC'S SEVEN-COUNTY AREA

MARION Technical College (MTC) 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 MTC's seven-county area.* MTC provides students with the education, training, and skills they need to have fulfilling and prosperous careers. Furthermore, MTC is a place for students to meet new people, increase their self-confidence, and promote their overall health and well-being.

MTC influences both the lives of its students and the regional economy. The college supports a variety of industries in MTC's seven-county area, serves regional businesses, and benefits society as a whole in Ohio from an expanded economy and improved quality of life. The benefits created by MTC even extend to the state government through increased tax revenues and public sector savings.

This study measures the economic impacts created by MTC 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) 2017-18. Impacts on the regional 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 Ohio are reported under the investment analysis.

* For the purposes of this analysis, MTC's seven-county area is comprised of Crawford, Delaware, Hardin, Marion, Morrow, Union, and Wyandot.

*The value of MTC influences both the **lives of its students** and the **regional economy**.*



Economic impact analysis

MTC promotes economic growth in MTC’s seven-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 operations. The college’s activities attract students from outside MTC’s seven-county area, whose expenditures benefit regional vendors. In addition, MTC is a primary source of higher education to regional residents and a supplier of trained workers to regional industries, enhancing overall productivity in the regional workforce.

Operations spending impact



MTC adds economic value to MTC’s seven-county area as an employer of regional residents and a large-scale buyer of goods and services. In FY 2017-18, the college employed 238 full-time and part-time faculty and staff, 79% of whom lived in MTC’s seven-county area. Total payroll at MTC was \$9.8 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 \$5.8 million on day-to-day expenses related to facilities, supplies, and professional services.

MTC’s day-to-day operations spending added \$12.9 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 \$12.9 million in added income is equivalent to supporting 283 jobs in the region.

Construction spending impact



MTC commissioned contractors to renovate its facilities in FY 2017-18. The quick infusion of income and jobs that occurred in the regional economy as a result of this construction spending is considered short-term due to the one-time nature of such projects. Nonetheless, the college’s construction spending had a substantial impact on the regional economy in FY 2017-18, equal to \$1 million in added income and equivalent to supporting 15 jobs.

Student spending impact



Some in-region students, referred to as retained students, would have left MTC’s seven-county area if not for the existence of MTC. While attending the college, these retained students spent money

IMPACTS CREATED
BY MTC IN FY 2017-18



\$12.9 million
Operations Spending Impact



\$1 million
Construction Spending Impact



\$518.5 thousand
Student Spending Impact



\$62.3 million
Alumni Impact



\$76.7 million
TOTAL IMPACT

- OR -

1,092
JOBS SUPPORTED

on groceries, accommodation, transportation, and other household expenses. This spending generated \$518.5 thousand in added income for the regional economy in FY 2017-18, which supported 13 jobs in MTC's seven-county area.

Alumni impact



The education and training MTC provides for regional residents has the greatest impact. Since its establishment, students have studied at MTC and entered the regional workforce with greater knowledge and new skills. Today, thousands of former MTC students are employed in MTC's seven-county area. As a result of their MTC education, the students receive higher earnings and increase the productivity of the businesses that employ them. In FY 2017-18, MTC alumni generated \$62.3 million in added income for the regional economy, which is equivalent to supporting 781 jobs.

Total impact

MTC added \$76.7 million in income to the regional 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 \$76.7 million impact was equal to approximately 0.3% of the total gross regional product (GRP) of MTC's seven-county area. This contribution that the college provided on its own is about half as large as the entire Arts, Entertainment, & Recreation industry in the region.

MTC's total impact can also be expressed in terms of jobs supported. The \$76.7 million impact supported 1,092 regional jobs, using the jobs-to-sales ratios specific to each industry in the region. In addition, the \$76.7 million, or 1,092 supported jobs, impacted regional industries in different ways. Among non-education industry sectors, MTC supported the most jobs in the Health Care & Social Assistance industry sector – supporting 326 jobs in FY 2017-18. These are impacts that would not have been generated without the college's presence in MTC's seven-county area.



Investment analysis

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 MTC as an investment from the perspectives of students, taxpayers, and society in Ohio.

Student perspective



In FY 2017-18, MTC served 3,178 credit and 400 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 MTC's students in FY 2017-18 amounted to a present value of \$14.3 million, equal to \$6 million in out-of-pocket expenses (including future principal and interest on student loans) and \$8.3 million in forgone time and money.

In return for their investment, MTC's students will receive a stream of higher future earnings that will continue to grow throughout their working lives. For example, the average MTC associate degree graduate from FY 2017-18 will see an increase in earnings of \$10,300 each year compared to a person with a high school diploma or equivalent working in Ohio. Over a working lifetime, the benefits of the associate degree over a high school diploma will amount to an undiscounted value of \$432.6 thousand in higher earnings per graduate. The present value of the cumulative higher future earnings that MTC's FY 2017-18 students will receive over their working careers is \$93.5 million.

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



21.7%

Average annual return for MTC students



9.9%

Stock market 30-year average annual return



0.8%

Interest earned on savings account (National Rate Cap)

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

The average associate degree graduate from MTC will see an increase in earnings of **\$10,300** each year compared to a person with a high school diploma or equivalent working in Ohio.



Source: Emsi complete employment data.

The students' benefit-cost ratio is 6.6. In other words, for every dollar students invest in MTC, in the form of out-of-pocket expenses and forgone time and money, they will receive a cumulative value of \$6.60 in higher future earnings. Annually, the students' investment in MTC has an average annual internal rate of return of 21.7%, which is impressive compared to the U.S. stock market's 30-year average rate of return of 9.9%.

Taxpayer perspective



MTC generates more in tax revenue than it takes. These benefits to taxpayers consist primarily of taxes that the state government will collect from the added revenue created in the state. As MTC 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 2017-18 students' working lives, the state government will have collected a present value of \$25.7 million in added taxes.

Benefits to taxpayers will also consist of savings generated by the improved lifestyles of MTC students and the corresponding reduced government services. Education is statistically correlated with a variety of lifestyle changes. Students' MTC 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. MTC 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 MTC education will generate \$2.5 million in savings to state taxpayers.

Total taxpayer benefits amount to \$28.1 million, the present value sum of the added taxes and public sector savings. Taxpayer costs are \$8.4 million, equal to the amount of state government funding MTC received in FY 2017-18. These benefits and costs yield a benefit-cost ratio of 3.3. This means that for every dollar of public money invested

*For every dollar of public money invested in MTC, taxpayers will receive a cumulative value of **\$3.30** over the course of the students' working lives.*



STUDENT PERSPECTIVE

\$93.5 million
Present value benefits

\$14.3 million
Present value costs

\$79.3 million
Net present value

Benefit-cost Ratio	Rate of Return
6.6	21.7%



TAXPAYER PERSPECTIVE

\$28.1 million
Present value benefits

\$8.4 million
Present value costs

\$19.7 million
Net present value

Benefit-cost Ratio	Rate of Return
3.3	8.6%



SOCIAL PERSPECTIVE

\$345.8 million
Present value benefits

\$28.4 million
Present value costs

\$317.4 million
Net present value

Benefit-cost Ratio	Rate of Return
12.2	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.

in MTC in FY 2017-18, taxpayers will receive a cumulative value of \$3.30 over the course of the students' working lives. The average annual internal rate of return for taxpayers is 8.6%.

Social perspective



Society as a whole in Ohio benefits from the presence of MTC 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 Ohio.

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

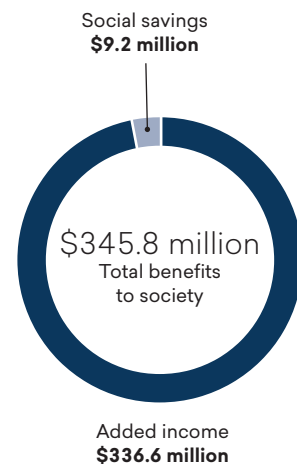
Altogether, the social benefits of MTC equal a present value of \$345.8 million. These benefits include \$336.6 million in added income through students' increased lifetime earnings and increased business output, as well as \$9.2 million in social savings related to health, crime, and income assistance in Ohio. People in Ohio invested a present value total of \$28.4 million in MTC in FY 2017-18. The cost includes all the college and student costs, as noted in the operations spending impact and the student perspective investment analysis sections.

The benefit-cost ratio for society is 12.2, equal to the \$345.8 million in benefits divided by the \$28.4 million in costs. In other words, for every dollar invested in MTC, people in Ohio will receive a cumulative value of \$12.20 in benefits. The benefits of this investment will occur for as long as MTC's FY 2017-18 students remain employed in the state workforce.

Summary of investment analysis results

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

SOCIAL BENEFITS IN OHIO FROM MTC



Conclusion

The results of this study demonstrate that MTC 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. MTC enriches the lives of students by raising their lifetime earnings and helping them achieve their individual potential. The college benefits state taxpayers through increased tax receipts and a reduced demand for government-supported social services. Finally, MTC benefits society as a whole in Ohio 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 2017-18 academic and financial reports from MTC, 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.

*These results indicate that MTC is an attractive investment with rates of return that exceed alternative investment opportunities, with a **21.7%** rate of return for students and an **8.6%** rate of return for taxpayers.*



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