

BUILDING LOCAL ECONOMIES OF SCALE:

THE IMPACT OF TRIBAL COLLEGES & UNIVERSITIES IN RURAL AMERICA

American Indian Higher Education Consortium



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AT-A-GLANCE: MICHIGAN TCUS ECONOMIC IMPACT



Impact of Michigan TCUs

Michigan Tribal Colleges & Universities (TCUs) generate more benefits for national taxpayers than the TCUs cost to support. (FY2022-2023 Data)



Michigan TCUs

There are two (3) Tribal Colleges located in the state of Michigan out of 35 total Tribal Colleges & Universities across the nation. Those two colleges include: Bay Mills Community College, Keweenaw Bay Ojibwa Community College, and Saginaw Chippewa Tribal College.



Return on Investment

For <u>every dollar of public money invested</u> in Michigan TCUs, national taxpayers will receive a cumulative value of \$1.40 over the course of the students' working lives. (FY2022-2023 Data)



\$39 Million & 717 Jobs

Michigan TCUs added \$39 million in income to the Michigan economy during the analysis year, equal to the sum of operations and construction spending impacts; the student spending impact; and the alumni impact. The \$39 million impact supported 717 state jobs, using the jobs-to-sales ratios specific to each industry in the state. (FY2022-2023 Data)

EXECUTIVE SUMMARY

Michigan Tribal Colleges and Universities (Michigan TCUs) create value in many ways. The colleges play a key role in helping students increase their employability and achieve their individual potential. The colleges draw students to the state, generating new dollars and opportunities for Michigan. The colleges provide students with the education, training, and skills they need to have fulfilling and prosperous careers. Furthermore, the colleges are places for students to meet new people, increase their self-confidence, and promote their overall health and well-being.

Michigan TCUs influence both the lives of students and the state economy. The colleges support a variety of industries in Michigan, serve state businesses, and benefit society as a whole from an expanded economy and improved quality of life. Additionally, the benefits created by Michigan TCUs extend to the local, state, and federal government through increased tax revenues and public sector savings.

This study measures the economic impacts created by Michigan TCUs on the business community and the benefits the colleges generate in return for the investments made by their 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 colleges, for fiscal year (FY) 2022-23. Impacts on the Michigan 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 are reported under the investment analysis.

MICHIGAN TCUS ECONOMIC IMPACT SUMMARY

Michigan TCUs promote economic growth in Michigan through their direct expenditures and the resulting expenditures of students and state businesses. The colleges serve as employers and buyers of goods and services for their day-to-day and construction operations. The colleges' activities attract students from outside Michigan, whose expenditures benefit state vendors. In addition, the colleges are primary sources of higher education to Michigan residents and suppliers of trained workers to state industries, enhancing overall productivity in the state workforce.

Impacts created by Michigan TCUs

(FY2022-23)

\$11.6 million

Operations Spending Impact

TCU OPERATIONS SPENDING IMPACT

Michigan TCUs add economic value to Michigan as employers of state residents and large-scale buyers of goods and services. In FY 2022-23, the colleges employed 254 full-time and part-time faculty and staff, 95% of whom lived in Michigan. Total payroll at Michigan TCUs was \$11.4 million, much of which was spent in the state on groceries, mortgage and rent payments, dining out, and other household expenses. In addition, the colleges spent \$10.6 million on expenses related to facilities, supplies, and professional services (excluding construction).

The operations spending of Michigan TCUs added \$11.6 million in income to the state during the analysis year. This figure represents the colleges' payroll, the multiplier effects generated by the in-state spending of the colleges and their employees, and a downward adjustment to account for funding that the colleges received from state sources. The \$11.6 million in added income is equivalent to supporting 251 jobs in the state.

\$33.9 thousand

Construction Spending Impact

\$1.1 million

Student Spending Impact

\$26.3 million

Alumni Impact

\$39.0 million

Total Impact

717

Total Jobs Supported

MICHIGAN TCUS ECONOMIC IMPACT SUMMARY

CONSTRUCTION SPENDING IMPACT

Michigan TCUs invest in capital projects each year to maintain facilities, create additional capacities, and meet growing educational demands. While the amount varies from year to year, these quick infusions of income and jobs have a substantial impact on the state economy. In FY 2022-23, the colleges' construction spending generated \$33.9 thousand in added income, which is equivalent to supporting one job.

STUDENT SPENDING IMPACT

Around 10% of students attending Michigan TCUs originated from outside the state in FY 2022-23, and a few of these students relocated to Michigan to attend the colleges. These students may not have come to the state if the colleges did not exist. In addition, some instate students, referred to as retained students, would have left Michigan if not for the existence of Michigan TCUs. While attending the colleges, these relocated and retained students spent money on groceries, accommodation, transportation, and other household expenses. Also attributable to Michigan TCUs is the increased spending of in-state students who would have remained in Michigan even if the colleges had not existed. Because of the federal scholarships and grants these students received, they spend more money in the state while attending college than they would have had they not attended the colleges. In total, Michigan TCU student spending generated \$1.1 million in added income for the state economy in FY 2022-23, which supported 21 jobs in Michigan.



Photos courtesy of Bay Mills Community College, Keweenaw Bay Ojibwa Community College, and Saginaw Chippewa Tribal College.

MICHIGAN TCUS ECONOMIC IMPACT SUMMARY

ALUMNI IMPACT

The education and training the colleges provide for state residents has the greatest impact. Since the colleges were established, students have studied at Michigan TCUs and entered the state workforce with greater knowledge and new skills. Today, thousands of former Michigan TCU students are employed in Michigan. As a result of their education from Michigan TCUs, the students receive higher earnings and increase the productivity of the businesses that employ them. In FY 2022-23, Michigan TCU alumni generated \$26.3 million in added income for the state economy, which is equivalent to supporting 445 jobs.



TOTAL TCU Economic Impact in Michigan

Michigan TCUs added \$39.0 million in income to the Michigan economy during the analysis year, equal to the sum of the operations and construction spending impacts; the student spending impact; and the alumni impact. The total impact of Michigan TCUs can also be expressed in terms of jobs supported. The \$39.0 million impact supported 717 state jobs, using the jobs-to-sales ratios specific to each industry in the state. In addition, the \$39.0 million, or 717 supported jobs, stemmed from different industry sectors. For instance, among non-education industry sectors, the spending of Michigan TCUs and their students and the activities of their alumni in the Health Care & Social Assistance industry sector supported 126 jobs in FY 2022-23. If the colleges did not exist, these impacts would not have been generated in Michigan.

IMPACT OF MICHIGAN TCUs by Industry

(Jobs Supported FY2022-2023 Data)

Health Care & Social Assistance

126

Other Services (except Public Administration

57

Retail Trade

31

Professional & Technical Services

25

Accommodation & Food Services

18

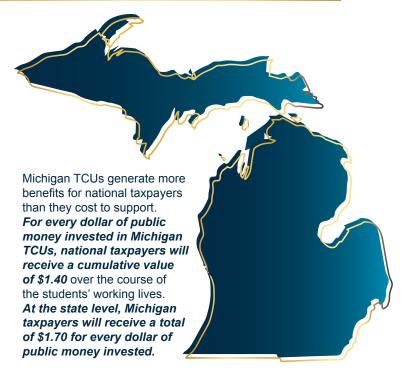
Investment Analysis

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

TAXPAYER PERSPECTIVE

Michigan TCUs generate more in national tax revenue than they receive. These benefits to taxpayers consist primarily of taxes that the government will collect from the added revenue created in the nation and state. As Michigan TCU 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 \$25.2 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 \$2.9 million in added taxes.

Benefits to taxpayers will also consist of savings generated by the improved lifestyles of students attending Michigan TCUs and the corresponding reduced government services. Education is statistically correlated with a variety of lifestyle changes. The education that Michigan TCU 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. Michigan TCU students will be more employable, so their reduced demand for income assistance such as welfare and unemployment benefits will benefit taxpayers. Altogether, the present value of the benefits associated with an education through Michigan TCUs will generate \$2.4 million in savings to national taxpayers. Taxpayers in Michigan will experience \$322.8 thousand in government savings.



Total national taxpayer benefits amount to \$27.7 million, the present value sum of the added tax revenue and public sector savings. Taxpayer costs are \$19.7 million, equal to the amount of government funding Michigan TCUs received in FY 2022-23. These benefits and costs yield a benefit-cost ratio of 1.4. This means that for every dollar of public money invested in Michigan TCUs in FY 2022-23, taxpayers will receive a cumulative present value of \$1.40 over the course of the students' working lives. In other words, Michigan TCUs generate more benefits for national taxpayers than they cost to support.

Although it is not recommended to directly compare benefit-cost ratios between institutions since many factors influence them, any benefit-cost ratio above 1.0 is significant and indicates

Investment Analysis

Taxpayer Perspective (continued)

that the institution generates a surplus of benefits. Additionally, the average annual internal rate of return for national taxpayers is 2.7%, which compares favorably to other long-term investments in the public sector.

From the state perspective, Michigan taxpayer benefits amount to \$3.2 million, which will accrue in the future as long as the FY 2022-23 student

population of Michigan TCUs remains in the state workforce. Taxpayers in Michigan provided Michigan TCUs \$1.8 million of funding in FY 2022-23. For every dollar of public money invested in the colleges, Michigan taxpayers will receive \$1.70 in return over the course of FY 2022-23 students' working lives. The average annual rate of return for state taxpayers is 8.4%.

STUDENT PERSPECTIVE

In FY 2022-23, Michigan TCUs served 1,328 credit and 98 non-credit students. In order to attend the colleges, 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 Michigan TCU students in FY 2022-23 amounted to a present value of \$3.6 million, equal to \$863.8 thousand in out-of-pocket expenses and \$2.7 million in forgone time and money.

In return for their investment, Michigan TCU students will receive a stream of higher future earnings that will continue to grow throughout their working lives. For example, the average Michigan TCU associate degree graduate from FY 2022-23 will see annual earnings \$9,100 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 \$309,400 in higher earnings per graduate. The present value of the cumulative higher future earnings that Michigan

TCU FY 2022-23 students will receive over their working careers is \$26.0 million.

The students' benefit-cost ratio is 7.3. In other words, for every dollar students invest in an education at Michigan TCUs in the form of out-of-pocket expenses and forgone time and money, they will receive a cumulative value of \$7.30 in higher future earnings. Annually, the students' investment in Michigan TCUs has an average annual internal rate of return of 26.8%, which is impressive compared to the U.S. stock market's 30-year average rate of return of 10.1%.

<High School | \$23,900

High School | \$30,400

Certificate | \$34,300

Associate | \$39,500

Bachelor's | \$56,100

Investment Analysis

STUDENT PERSPECTIVE

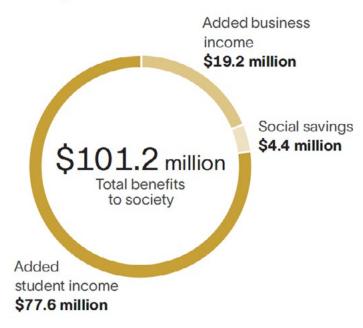
Society as a whole benefits from the presence of Michigan TCUs in two major ways. Primarily, society benefits from an increased economic base in the nation. This is attributed to the added income from students' increased lifetime earnings (added student income) and increased business output (added business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

Benefits to society also consist of the savings generated by the improved lifestyles of Michigan TCU 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 assistance savings include reduced welfare and unemployment claims.

Altogether, the social benefits of Michigan TCUs equal a present value of \$101.2 million. These benefits include \$77.6 million in added student income, \$19.2 million in added business income, as well as \$4.4 million in social savings related to health, the justice system, and income assistance in the U.S. People in the U.S. invested a present value total of \$24.4 million in Michigan TCUs in FY 2022-23. The cost includes all government funding and student costs.

Social Benefits from Michigan TCUs Nationwide

Social benefits from Michigan TCUs nationwide

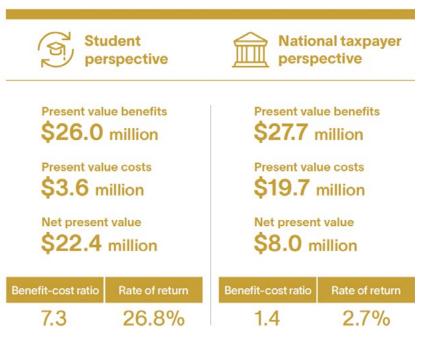


The benefit-cost ratio for society is 4.1, equal to the \$101.2 million in benefits divided by the \$24.4 million in costs. In other words, for every dollar invested in Michigan TCUs, people in the U.S. will receive a cumulative value of \$4.10 in benefits. The benefits of this investment will occur for as long as Michigan TCU FY 2022-23 students remain employed in the workforce.

INVESTMENT ANALYSIS

Summary of Investment Analysis Results

The results of the analysis demonstrate that Michigan TCUs are a strong investment for all major stakeholder groups—students, taxpayers, and society. As shown, students receive a great return for their investments in an education through Michigan TCUs. At the same time, taxpayers' investment in Michigan TCUs returns more to state and federal government budgets than it costs and creates a wide range of social benefits throughout the U.S.





Conclusion

The results of this study demonstrate that Michigan TCUs create value from multiple perspectives. The colleges benefit state businesses by increasing consumer spending in the state and supplying a steady flow of qualified, trained workers to the workforce. Michigan TCUs enrich the lives of students by raising their lifetime earnings and helping them achieve their individual potential. The colleges benefit taxpayers through increased tax receipts and a reduced demand for government-supported social services. Finally, Michigan TCUs benefit society as a whole by creating a more prosperous economy and generating a variety of savings through the improved lifestyles of students.



ABOUT THE STUDY

This study is part of a series of Economic Impact Studies conducted in partnership with the American Indian Higher Education Consortium (AIHEC) and Lightcast. Lightcast provides colleges and universities with labor market data that helps 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 resumes. Visit lightcast.io/ solutions/education to learn more or connect with us.

Data and assumptions used in the study are based on several sources, including the FY 2022-23

academic and financial reports from Michigan TCUs, 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 American Indian Higher Education Consortium for a copy of the main report.

Michigan Tribal Colleges & Universities Economic Impact Study



Building Local Economies of Scale:

THE IMPACT OF TRIBAL COLLEGES & UNIVERSITIES IN RURAL AMERICA