The Economic Value of Algoma University
AlgoMA University (AU) creates value in many ways. The University plays a key role in helping students increase their employability and achieve their individual potential. It facilitates new research developments and draws visitors and students to the region, generating new dollars and opportunities for Sault Ste. Marie. AU provides students with the education, training, and skills they need to have fulfilling and prosperous careers. Furthermore, AU is a place for students to meet new people, increase their self-confidence, and promote their overall health and well-being.

AU influences both the lives of its students and the regional economy. The University supports a variety of industries in Sault Ste. Marie, serves regional businesses, and benefits the provincial government through increased tax revenues and public sector savings. The benefits created by AU even extend to society as a whole in Ontario, which benefits from an expanded economy and improved quality of life.

This study measures the economic impacts created by AU on the business community and the benefits the University 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 University, for fiscal year (FY) 2020-21. Impacts on the Sault Ste. Marie 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 Ontario are reported under the investment analysis.
AU promotes economic growth in Sault Ste. Marie through its direct expenditures and the resulting expenditures of visitors, students, and regional businesses. The University serves as an employer and buyer of goods and services for its day-to-day and research operations. The University’s reputation and activities attract visitors and students from outside Sault Ste. Marie, whose expenditures benefit regional vendors. In addition, AU is a primary source of postsecondary education to Sault Ste. Marie residents and a supplier of trained workers to regional industries, enhancing overall productivity in the regional workforce.

**Operations spending impact**

AU adds economic value to Sault Ste. Marie as an employer of regional residents and a large-scale buyer of goods and services. In FY 2020-21, the University employed faculty and staff equivalent to 176 full-time employees (excluding research employees), 94% of whom lived in Sault Ste. Marie. Total payroll at AU was $24.5 million (excluding payroll from research employees), much of which was spent in the region for groceries, mortgage and rent payments, dining out, and other household expenses. In addition, the University spent $13.7 million on day-to-day expenses related to facilities, supplies, and professional services (excluding research expenditures).

AU’s day-to-day operations spending added $32.2 million in income to the region during the analysis year. This figure represents the University’s payroll, the multiplier effects generated by the in-region spending of the University and its employees, and a downward adjustment to account for funding that the University received from regional sources. The $32.2 million in added income is equivalent to supporting 300 jobs in the region.

**Research spending impact**

Research activities impact the economy by employing people and requiring the purchase of equipment and other supplies and services. In FY 2020-21, AU spent $350 thousand on payroll to support research activities. This, along with $58.6 thousand in other research spending, created a net total of $469 thousand in added income for the regional economy. This added income is equivalent to supporting four jobs.

AU’s research activities create an economic impact beyond spending. There are impacts created through the entrepreneurial and innovative activities stemming from the University’s research. From exploring geology and geography
and improving current technologies to expanding understanding of plant and soil ecology, AU research faculty are driving progress and innovations that have tremendous value in the regional economy. However, the full scope of these factors is difficult to quantify. Some of this impact may be captured in the alumni impact. The broader spillover effects, however, remain as additional value created beyond this analysis.

**Construction spending impact**

AU spends millions on construction each year to maintain its facilities, create additional capacities, and meet its growing educational demands. While the amount varies from year to year, this spending generates a short-term infusion of spending and jobs in the regional economy. 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 University’s construction spending had a substantial impact on the regional economy in FY 2020-21, equal to $1 million in added income and equivalent to supporting 10 jobs.

**Visitor spending impact**

Thousands of visitors from outside the region were attracted to AU during the analysis year to attend commencement, sports events, and other activities sponsored by the University. While in the region, visitors spent money for lodging, food, transportation, and other personal expenses. The off-campus expenditures of the University’s out-of-region visitors generated a net impact of $394.5 thousand in added income for the regional economy in FY 2020-21. This $394.5 thousand in added income is equivalent to supporting 13 jobs.

**Student spending impact**

Around 56% of students attending AU originated from outside the region in FY 2020-21, and some of these students relocated to Sault Ste. Marie to attend AU. These students may not have come to the region if the University did not exist. In addition, some in-region students,

**Impact of international students**

International students are an important part of the AU community. In FY 2020-21, AU served 482 international students, all of whom relocated to Sault Ste. Marie. These students brought new money to the regional economy through their spending on housing, food, and other living expenses. International student spending in FY 2020-21 generated $370.5 thousand in added income for the regional economy.

It is estimated that 20% of international students remain in the region after finishing their time at AU. Today, thousands of these students are employed in Sault Ste. Marie, receiving higher earnings and increasing the productivity of the businesses that employ them. In FY 2020-21, these active alumni generated $4.9 million in added income for the economy.
referred to as retained students, would have left Sault Ste. Marie if not for the existence of AU. While attending the University, these relocated and retained students spent money on groceries, accommodation, transportation, and other household expenses. This spending generated $1.1 million in added income for the regional economy in FY 2020-21, which supported 24 jobs in Sault Ste. Marie.

**Alumni impact**

The education and training AU provides for regional residents has the greatest impact. Since its establishment, students have studied at AU and entered the regional workforce with greater knowledge and new skills. Today, thousands of former AU students are employed in Sault Ste. Marie. As a result of their AU educations, the students receive higher earnings and increase the productivity of the businesses that employ them. In FY 2020-21, AU alumni generated $63.8 million in added income for the regional economy, which is equivalent to supporting 852 jobs.

**Total impact**

AU added $99 million in income to the Sault Ste. Marie economy during the analysis year, equal to the sum of the operations, research, and construction spending impacts; the visitor and student spending impacts; and the alumni impact. For context, the $99 million impact was equal to approximately 3.4% of the total gross regional product (GRP) of Sault Ste. Marie. This contribution that the University provided on its own is larger than the entire Wholesale Trade industry in the region.

AU’s total impact can also be expressed in terms of jobs supported. The $99 million impact supported 1,204 regional jobs, using the jobs-to-sales ratios specific to each industry in the region. This means that one out of every 28 jobs in Sault Ste. Marie is supported by the activities of AU and its students. In addition, the $99 million, or 1,204 supported jobs, stemmed from different industry sectors. Among non-education industry sectors, AU’s activity and alumni in the Health Care & Social Assistance industry sector supported 221 jobs in FY 2020-21. These are impacts that would not have been generated without the University’s presence in Sault Ste. Marie.
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 AU as an investment from the perspectives of students, taxpayers, and society in Ontario.

**Student perspective**

In FY 2020-21, AU served 1,569 credit and 28 non-credit students. In order to attend the University, the students paid for tuition, fees, books, and supplies. Additionally, students gave up money they would have otherwise earned had they been working instead of attending university. The total investment made by AU’s students in FY 2020-21 amounted to a present value of $42.4 million, equal to $25 million in out-of-pocket expenses and $17.4 million in forgone time and money.

In return for their investment, AU’s students will receive a stream of higher future earnings that will continue to grow throughout their working lives. For example, the average AU bachelor’s degree graduate from FY 2020-21 will see an increase in earnings of $26,100 each year compared to a person with a high school diploma or equivalent working in Ontario. Over a working lifetime, the benefits of the bachelor’s degree over a high school diploma will amount to an undiscounted value of $2.8 million in higher earnings per graduate. Altogether, AU’s FY 2020-21 students will receive $64.2 million in higher future earnings over their working lives, as a result of their education and training at AU.

The students’ benefit-cost ratio is 1.5. In other words, for every dollar students invest in AU, in the form of out-of-pocket expenses and forgone time and money, they will receive a cumulative value of $1.50 in higher future earnings. Annually, the students’ investment in AU has an average annual internal rate of return of 10.0%.

Source: Derived from data supplied by Statistics Canada and the Emsi Burning Glass CRIO model.
**Taxpayer perspective**

AU generates more in tax revenue than it takes. These benefits to taxpayers consist primarily of taxes that the provincial government will collect from the added revenue created in the province. As AU students 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 provincial government will have collected a present value of $43.8 million in added tax revenue.

Benefits to taxpayers also consist of savings generated by the improved lifestyles of AU students and the corresponding reduced government services. Education is statistically correlated with a variety of lifestyle changes. Students’ AU educations will generate savings in three main categories: 1) healthcare, 2) crime, and 3) income assistance. Improved health will lower students’ demand for 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 reduced victim costs. AU 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 University for a copy of the main report. Altogether, the present value of the benefits associated with an AU education will generate $919.8 thousand in savings to provincial taxpayers.

Total taxpayer benefits amount to $44.7 million, the present value sum of the added taxes and public sector savings. Taxpayer costs are $19 million, equal to the amount of provincial government funding AU received in FY 2020-21. These benefits and costs yield a benefit-cost ratio of 2.4. This means that for every dollar of public money invested in AU in FY 2020-21, taxpayers will receive a cumulative value of $2.40 over the course of the students’ working lives. The average annual internal rate of return for taxpayers is 10.8%, which compares favorably to other long-term investments in the public and private sectors.

**Social perspective**

Society as a whole in Ontario benefits from the presence of AU in two major ways. Primarily, society benefits from an increased economic base in the province. This is attributed to higher student earnings and increased business output, which raise economic prosperity in Ontario.

Benefits to society also consist of the savings generated by the improved lifestyles of AU 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, and mental illness. Crime savings include reduced criminal justice system expenditures, lower victim costs, and increased productivity of individuals who are working rather than spending time in custody. Income assistance savings include the reduced demand for employment insurance benefits and employment-related social assistance. For a list of study references, contact the University for a copy of the main report.

Altogether, the social benefits of AU equal a present value of $275.7 million. These benefits include $273.5 million in added income through students’ increased lifetime earnings and increased business output, as well as $2.2 million in social savings related to health, crime, and income assistance in Ontario. People in Ontario invested a present value total of $57.6 million in AU in FY 2020-21. These costs include all University and student costs.

The benefit-cost ratio for society is 4.8, equal to the $275.7 million in benefits divided by the $57.6 million in costs. In other words, for every dollar invested in AU, people in Ontario will receive a cumulative value of $4.80 in benefits. The benefits of this investment will occur for as long as AU’s FY 2020-21 students remain employed in the provincial workforce.

**Summary of investment analysis results**

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

<table>
<thead>
<tr>
<th><strong>STUDENT PERSPECTIVE</strong></th>
<th><strong>TAXPAYER PERSPECTIVE</strong></th>
<th><strong>SOCIAL PERSPECTIVE</strong></th>
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</thead>
<tbody>
<tr>
<td>Present value benefits</td>
<td>$64.2 million</td>
<td>$275.7 million</td>
</tr>
<tr>
<td>Present value costs</td>
<td>$42.4 million</td>
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<tr>
<td>Net present value</td>
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<td>Benefit-cost ratio</td>
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<td>Rate of return</td>
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</tbody>
</table>

* 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 AU creates value from multiple perspectives. The University benefits regional businesses by increasing consumer spending in the region and supplying a steady flow of qualified, trained workers to the workforce. AU enriches the lives of students by raising their lifetime earnings and helping them achieve their individual potential. The University benefits provincial taxpayers through increased tax receipts and a reduced demand for government-supported social services. Finally, AU benefits society as a whole in Ontario 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 AU, industry and employment data from Statistics Canada, outputs of Emsi Burning Glass’s Canadian Regional Input-Output model, and a variety of studies and surveys relating education to social behaviour. The study applies a conservative methodology and follows standard practice using only the most recognized indicators of investment effectiveness and economic impact. For a full description of the data and approach used in the study, please contact AU for a copy of the main report.

Emsi Burning Glass provides colleges and universities with labour 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.