



# The Economic Value of Allegany College of Maryland



**A** LLEGANY COLLEGE OF MARYLAND (ACM) 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 the ACM Service Area.\* ACM provides students with the education, training, and skills they need to have fulfilling and prosperous careers. Furthermore, ACM is a place for students to meet new people, increase their self-confidence, and promote their overall health and well-being.

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

This study measures the economic impacts created by ACM 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:



ACM 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) 2018-19. The FY 2018-19 was chosen as the analysis year for this study as it is representative of the pre-Covid operations of the college. Impacts on the ACM Service Area 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 Maryland are reported under the investment analysis.

\* For the purposes of this analysis, the ACM Service Area is comprised of Allegany and Bedford Counties.



ACM promotes economic growth in the ACM Service 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 and construction activities. The college's activities attract students from outside the ACM Service Area, whose expenditures benefit regional vendors. In addition, ACM is a primary source of higher education to the ACM Service Area residents and a supplier of trained workers to regional industries, enhancing overall productivity in the regional workforce.

## Operations spending impact



ACM adds economic value to the ACM Service Area as an employer of regional residents and a large-scale buyer of goods and services. In FY 2018-19, the college employed 533 full-time and part-time faculty and staff, 72% of whom lived in the ACM Service Area. Total payroll at ACM was \$21.9 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 \$9.1 million on day-to-day expenses related to facilities, supplies, and professional services.

ACM's day-to-day operations spending added \$24.3 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 \$24.3 million in added income is equivalent to supporting 561 jobs in the region.

## Construction spending impact



ACM invests in construction 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 2018-19, ACM's construction spending generated \$891.5 thousand in added income, which is equivalent to supporting 15 jobs.

### IMPACTS CREATED BY ACM IN FY 2018-19



Operations spending impact

**\$24.3 million**



Construction spending impact

**\$891.5 thousand**



Student spending impact

**\$4.2 million**



Alumni impact

**\$77.3 million**



TOTAL ECONOMIC IMPACT

**\$106.7 million**

OR

Jobs supported

**1,844**

## Student spending impact



Around 43% of credit students attending ACM originated from outside the region in FY 2018-19, and some of these students relocated to the ACM Service Area to attend ACM. These students may not have come to the region if the college did not exist. In addition, some in-region students, referred to as retained students, would have left the ACM Service Area if not for the existence of ACM. While attending the college, these relocated and retained students spent money on groceries, accommodation, transportation, and other household expenses. This spending generated \$4.2 million in added income for the regional economy in FY 2018-19, which supported 99 jobs in the ACM Service Area.

## Alumni impact



The education and training ACM provides for regional residents has the greatest impact. Since its establishment, students have studied at ACM and entered the regional workforce with greater knowledge and new skills. Today, thousands of former ACM students are employed in the ACM Service Area. As a result of their ACM educations, the students receive higher earnings and increase the productivity of the businesses that employ them. In FY 2018-19, ACM alumni generated \$77.3 million in added income for the regional economy, which is equivalent to supporting 1,169 jobs.

## Total impact

ACM added \$106.7 million in income to the ACM Service Area 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 \$106.7 million impact was equal to approximately 2.5% of the total gross regional product (GRP) of the ACM Service Area. This contribution that the college provided on its own was larger than the entire Wholesale Trade industry in the region.

ACM's total impact can also be expressed in terms of jobs supported. The \$106.7 million impact supported 1,844 regional jobs, using the jobs-to-sales ratios specific to each industry in the region. This means that one out of every 30 jobs in the ACM Service Area is supported by the activities of ACM and its students. In addition, the \$106.7 million, or 1,844 supported jobs, stemmed from different industry sectors. Among non-education industry sectors, ACM's spending and alumni in the Health Care & Social Assistance industry sector supported 428 jobs in FY 2018-19. These are impacts that would not have been generated without the college's presence in the ACM Service Area.

### ACM IMPACTS BY INDUSTRY (JOBS SUPPORTED)



**One out of every 30 jobs** in the ACM Service Area is supported by the activities of ACM and its students.



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 ACM as an investment from the perspectives of students, taxpayers, and society in Maryland.

## Student perspective



In FY 2018-19, ACM served 3,172 credit and 6,505 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 ACM's students in FY 2018-19 amounted to a present value of \$27.3 million, equal to \$6.6 million in out-of-pocket expenses (including future principal and interest on student loans) and \$20.7 million in forgone time and money.

In return for their investment, ACM's students will receive a stream of higher future earnings that will continue to grow throughout their working lives. For example, the average ACM associate degree graduate from FY 2018-19 will see annual earnings that are \$8,300 higher than a person with a high school diploma or equivalent working in Maryland. Over a working lifetime, the benefits of the associate degree over a high school diploma will amount to an undiscounted value of \$282.2 thousand in higher earnings per graduate. The present value of the cumulative higher future earnings that ACM's FY 2018-19 students will receive over their working careers is \$101.1 million.

The students' benefit-cost ratio is 3.7. In other words, for every dollar students invest in ACM, in the form of out-of-pocket expenses and forgone time and money, they will receive a cumulative value of \$3.70 in higher future earnings.

### STUDENTS SEE A HIGH RATE OF RETURN FOR THEIR INVESTMENT IN ACM



Average annual return for ACM students  
**22.9%**



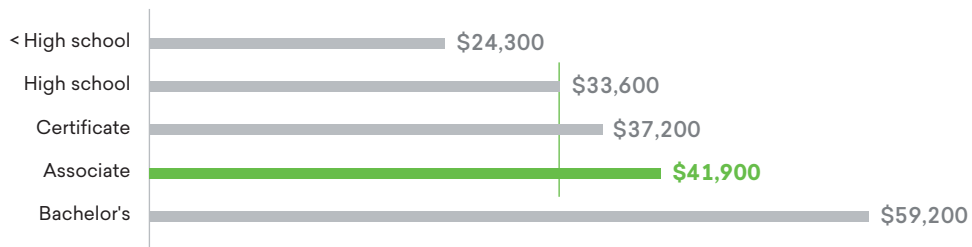
Stock market 30-year average annual return  
**9.9%**



Interest earned on savings account (National Rate Cap)  
**0.8%**

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

The average associate degree graduate from ACM will see an increase in earnings of **\$8,300** each year compared to a person with a high school diploma or equivalent working in Maryland.



Source: Emsi Burning Glass employment data.

Annually, the students' investment in ACM has an average annual internal rate of return of 22.9%, which is impressive compared to the U.S. stock market's 30-year average rate of return of 9.9%.

### Taxpayer perspective



ACM generates substantial benefits for taxpayers. 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 ACM 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 2018-19 students' working lives, the state and local government will have collected a present value of \$12.3 million in added taxes.

Benefits to taxpayers will also consist of savings generated by the improved lifestyles of ACM students and the corresponding reduced government services. Education is statistically correlated with a variety of lifestyle changes. Students' ACM 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. ACM 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 ACM education will generate \$1.3 million in savings to state and local taxpayers.

Total taxpayer benefits amount to \$13.6 million, the present value sum of the added taxes and public sector savings. Taxpayer costs are \$20 million, equal to the amount of state and local government funding ACM received in FY 2018-19.

Total taxpayer benefits amount to **\$13.6 million**, the present value sum of the added tax revenues and public sector savings.

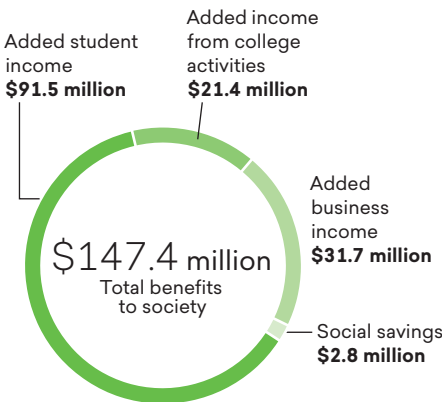
### Social perspective



Society as a whole in Maryland benefits from the presence of ACM 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 Maryland.

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

SOCIAL BENEFITS IN MARYLAND FROM ACM



Source: Emsi Burning Glass impact model.

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 ACM equal a present value of \$147.4 million. These benefits include \$91.5 million in added student income, \$31.7 million in added business income, \$21.4 million in added income from college activities, as well as \$2.8 million in social savings related to health, crime, and income assistance in Maryland. People in Maryland invested a present value total of \$56.5 million in ACM in FY 2018-19. The cost includes all the college and student costs.

The benefit-cost ratio for society is 2.6, equal to the \$147.4 million in benefits divided by the \$56.5 million in costs. In other words, for every dollar invested in ACM, people in Maryland will receive a cumulative value of \$2.60 in benefits. The benefits of this investment will occur for as long as ACM's FY 2018-19 students remain employed in the state workforce.

## Summary of investment analysis results

The results of the analysis demonstrate that ACM is a strong investment for students and society. As shown, students receive a great return for their investments in an ACM education. From the taxpayers' perspective, the benefits generated by the college and its students recover a significant portion of the costs borne by taxpayers and creates a wide range of social benefits throughout Maryland.



### STUDENT PERSPECTIVE

Present value benefits

**\$101.1 million**

Present value costs

**\$27.3 million**

Net present value

**\$73.7 million**

| Benefit-cost ratio | Rate of return |
|--------------------|----------------|
| <b>3.7</b>         | <b>22.9%</b>   |



### TAXPAYER PERSPECTIVE

Present value benefits

**\$13.6 million**

Present value costs

**\$20 million**



### SOCIAL PERSPECTIVE

Present value benefits

**\$147.4 million**

Present value costs

**\$56.5 million**

Net present value

**\$90.9 million**

| Benefit-cost ratio | Rate of return |
|--------------------|----------------|
| <b>2.6</b>         | <b>n/a*</b>    |

\* 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 ACM 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. ACM 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, ACM benefits society as a whole in Maryland 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 2018-19 academic and financial reports from ACM, industry and employment data from the U.S. Bureau of Labor Statistics and U.S. Census Bureau, outputs of Emsi Burning Glass'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 ACM creates value from **multiple perspectives.**



Emsi Burning Glass 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 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](http://economicmodeling.com/higher-education) to learn more or connect with us.