

The Economic Value of Montgomery College





MONTGOMERY COLLEGE (MC) 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 Montgomery County. MC provides students with the education, training, and skills they need to have fulfilling and prosperous careers. Furthermore, MC is a place for students to meet new people, increase their self-confidence, and promote their overall health and well-being.

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

This study measures the economic impacts created by MC 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) 2022-23. Impacts on the Montgomery County 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.



MC influences both the **lives of its students** and the **regional economy**.



Economic impact analysis

MC promotes economic growth in Montgomery County 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 Montgomery County, whose expenditures benefit regional vendors. In addition, MC is one of the primary sources of higher education to the Montgomery County residents and a supplier of trained workers to regional industries, enhancing overall productivity in the regional workforce.

Operations spending impact



MC adds economic value to Montgomery County as an employer of regional residents and a large-scale buyer of goods and services. In FY2023, the college employed 4,036 full-time and part-time faculty and staff, 69% of whom lived in Montgomery County. Total payroll at MC was \$246.2 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 \$62.4 million on expenses related to facilities, supplies, and professional services.

MC's operations spending added \$243.7 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 \$243.7 million in added income is equivalent to supporting 4,033 jobs in the region.

Student spending impact



Around 11% of students attending MC originated from outside the region in FY2023, and some of these students relocated to Montgomery County to attend MC. 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 Montgomery County if not for the existence of MC. While attending the college, these relocated and retained students spent money on groceries, accommodation, transportation, and other household expenses. This spending generated \$49.5 million in added income for the regional economy in FY2023, which supported 675 jobs in Montgomery County.

Impacts created by
MC in FY 2022-23



Operations spending impact

\$243.7 million

+



Student spending impact

\$49.5 million

+



Alumni impact

\$1.1 billion



Total economic impact

\$1.4 billion

OR



Jobs supported

14,998



Alumni impact



The education and training MC provides for regional residents has the greatest impact. Since the establishment of the college, students have studied at MC and entered the regional workforce with greater knowledge and new skills. Today, hundreds of thousands of former MC students are employed in Montgomery County. As a result of their education from MC, the students receive higher earnings and increase the productivity of the businesses that employ them. In FY2023, MC alumni generated an estimated \$1.1 billion in added income for the regional economy, which is equivalent to supporting 10,290 jobs.

Total impact

MC added \$1.4 billion in income to the Montgomery County economy during the analysis year, equal to the sum of the operations spending impact, the student spending impact, and the alumni impact. For context, the \$1.4 billion impact was equal to approximately 1.4% of the total gross regional product (GRP) of Montgomery County. This contribution that the college provided on its own is nearly as large as the entire Management of Companies & Enterprises industry in the region.

MC's total impact can also be expressed in terms of jobs supported. The \$1.4 billion impact supported 14,998 regional jobs, using the jobs-to-sales ratios specific to each industry in the region. This means that one out of every 51 jobs in Montgomery County is supported by the activities of MC and its students. In addition, the \$1.4 billion, or 14,998 supported jobs, stemmed from different industry sectors. For instance, among non-education industry sectors, the spending of MC and its students and the activities of its alumni in the Professional & Technical Services industry sector supported 2,045 jobs in FY2023. If the college did not exist, these impacts would not have been generated in Montgomery County.

MC impacts by industry (jobs supported)



One out of every 51 jobs in Montgomery County is supported by the activities of MC and its students.



Investment analysis



An investment analysis evaluates the costs associated with a proposed venture against its expected benefits. The analysis presented here evaluates MC as an investment from the perspectives of students, taxpayers, and society in Maryland. As with the economic impact analysis, this analysis considers only FY2023 activities.

Student perspective



In FY2023, MC served 23,916 credit and 16,426 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 MC's students in FY2023 amounted to a present value of \$206.1 million, equal to \$66.4 million in out-of-pocket expenses (including future principal and interest on student loans) and \$139.7 million in forgone time and money.

In return for their investment, MC's students will receive a stream of higher future earnings that will continue to grow throughout their working lives. For example, the average MC associate degree graduate from FY2023 will see annual earnings that are \$11,000 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 \$429,000 in higher earnings per graduate. The present value of the cumulative higher future earnings that MC's FY2023 students will receive over their working careers is \$964.6 million.

The students' benefit-cost ratio is 4.7. In other words, for every dollar students invest in MC in the form of out-of-pocket expenses and forgone time and money, they will receive a cumulative value of \$4.70 in higher future earnings. Annually, the students'

Students see a high rate of return for their investment in MC



Average annual return for MC students
18.3%



Stock market 30-year average annual return
10.1%

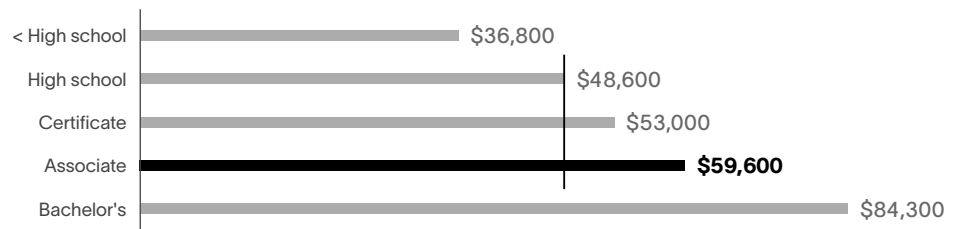


Interest earned on savings account (national deposit rate)
0.5%

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

Average earnings by education level at career midpoint

The average associate degree graduate from MC will see an increase in earnings of **\$11,000** each year compared to a person with a high school diploma or equivalent working in Maryland.



Source: Lightcast employment data

investment in MC has an average annual internal rate of return of 18.3%, which is impressive compared to the U.S. stock market's 30-year average rate of return of 10.1%.

Taxpayer perspective



MC 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 MC 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 FY2023 students' working lives, the state and local government will have collected a present value of \$278.2 million in added taxes.

Benefits to taxpayers will also consist of savings generated by the improved lifestyles of MC students and the corresponding reduced government services. Education is statistically correlated with a variety of lifestyle changes. The education that MC 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. MC 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 MC will generate \$44.7 million in savings to state and local taxpayers.

Total taxpayer benefits amount to \$322.9 million, the present value sum of the added tax revenue and public sector savings. Taxpayer costs are \$278.7 million, equal to the amount of state and local government funding MC received in FY2023. These benefits and costs yield a benefit-cost ratio of 1.2. This means that for every dollar of public money invested in MC in FY2023, taxpayers will receive a cumulative present value of \$1.20 over the course of the students' working lives. The average annual internal rate of return for taxpayers is 1.6%, which compares favorably to other long-term investments in the public sector.

For every dollar of public money invested in MC, taxpayers will receive a cumulative value of **\$1.20** over the course of the students' working lives.

Social perspective



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

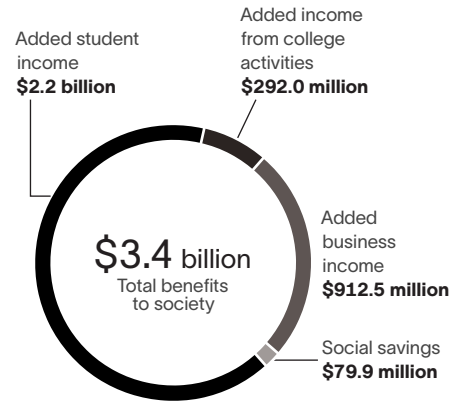
Benefits to society also consist of the savings generated by the improved lifestyles of MC students. As discussed in the previous section, education is statistically correlated with a variety of lifestyle changes that generate social savings. Note that these costs are avoided by the consumers but are 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. For a list of study references, contact the college for a copy of the main report.

Altogether, the social benefits of MC equal a present value of \$3.4 billion. These benefits include \$2.2 billion in added student income, \$912.5 million in added business income, \$292.0 million in added income from college activities, as well as \$79.9 million in social savings related to health, the justice system, and income assistance in Maryland. In FY2023, MC and its students experienced costs totaling \$466.7 million. The cost includes all the college and student costs.

The benefit-cost ratio for society is 7.4, equal to the \$3.4 billion in benefits divided by the \$466.7 million in costs. In other words, for every dollar invested in MC, people in Maryland will receive a cumulative value of \$7.40 in benefits. The benefits of this investment will occur for as long as MC's FY2023 students remain employed in the state workforce.

Social benefits in Maryland from MC






Source: Lightcast impact model

Summary of investment analysis results

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

Summary of investment analysis results

 Student perspective		 Taxpayer perspective		 Social perspective	
Present value benefits		Present value benefits		Present value benefits	
\$964.6 million		\$322.9 million		\$3.4 billion	
Present value costs		Present value costs		Present value costs	
\$206.1 million		\$278.7 million		\$466.7 million	
Net present value		Net present value		Net present value	
\$758.4 million		\$44.3 million		\$3.0 billion	
Benefit-cost ratio	Rate of return	Benefit-cost ratio	Rate of return	Benefit-cost ratio	Rate of return
4.7	18.3%	1.2	1.6%	7.4	n/a*

* The rate of return is not reported for the social perspective because the beneficiaries are not necessarily the same as the original investors.

Conclusion

*The results of this study demonstrate that MC 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. MC 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, MC 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 FY2023 academic and financial reports from MC, 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.



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.