

The Economic Value of Miami Dade College to Miami Dade County





M IAMI DADE COLLEGE (MDC) 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 county, generating new dollars and opportunities for Miami Dade County. MDC provides students with the education, training, and skills they need to have fulfilling and prosperous careers. Furthermore, MDC is a place for students to meet new people, increase their self-confidence, and promote their overall health and well-being.

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

This study measures the economic impacts created by MDC 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:



MDC influences both the **lives of its students** and the **county economy**.

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 Miami Dade 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 Florida are reported under the investment analysis.



Economic impact analysis



MDC promotes economic growth in Miami Dade County through its direct expenditures and the resulting expenditures of students and county 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 Miami Dade County, whose expenditures benefit county vendors. In addition, MDC is one of the primary sources of higher education to Miami Dade County residents and a supplier of trained workers to county industries, enhancing overall productivity in the county workforce.

Operations spending impact



MDC adds economic value to Miami Dade County as an employer of county residents and a large-scale buyer of goods and services. In FY 2022-23, the college employed 5,681 full-time and part-time faculty and staff, 84% of whom lived in Miami Dade County. Total payroll at MDC was \$314.0 million, much of which was spent in the county for groceries, mortgage and rent payments, dining out, and other household expenses. In addition, the college paid \$130.1 million in bills related to day-to-day expenses related to facilities, supplies, and professional services (excluding construction).

MDC's day-to-day operations spending added \$434.1 million in income to the county during the analysis year. This figure represents the college's payroll, the multiplier effects generated by the in-county spending of the college and its employees, and a downward adjustment to account for funding that the college received from county sources. The \$434.1 million in added income is equivalent to supporting 6,904 jobs in the county.

Construction spending impact



MDC 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 county economy. In FY 2022-23, MDC's construction spending generated \$64.6 million in added income, which is equivalent to supporting 1,104 jobs.

Impacts created by
MDC in FY 2022-23



Operations spending impact
\$434.1 million

+



Construction spending impact
\$64.6 million

+



Student spending impact
\$0.8 billion

+



Alumni impact
\$3.7 billion



Total economic impact
\$5.0 billion

OR



Jobs supported
62,393



Student spending impact



Around 24% of students attending MDC originated from outside Miami Dade County in FY 2022-23, and most of these students relocated to Miami Dade County to attend MDC. These students may not have come to the county if the college did not exist. In addition, some in-county students, referred to as retained students, would have left Miami Dade County if not for the existence of MDC. While attending the college, these relocated and retained students spent money on groceries, accommodation, transportation, and other household expenses. This spending generated \$838.6 million in added income for the county economy in FY 2022-23, which supported 11,621 jobs in Miami Dade County.

Alumni impact



The education and training MDC provides for county residents has the greatest impact. Since the establishment of the college, students have studied at MDC and entered the county workforce with greater knowledge and new skills. Today, hundreds of thousands of former MDC students are employed in Miami Dade County. As a result of their education from MDC, the students receive higher earnings and increase the productivity of the businesses that employ them. In FY 2022-23, MDC alumni generated \$3.7 billion in added income for the county economy, which is equivalent to supporting 42,764 jobs.

Total impact

MDC added \$5.0 billion in income to the Miami Dade County 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 \$5.0 billion impact was equal to approximately 2.5% of the total gross regional product (GRP) of Miami Dade County. This contribution that the college provided on its own is nearly twice the size of the entire Arts, Entertainment, and Recreation industry in the county.

MDC's total impact can also be expressed in terms of jobs supported. The \$5.0 billion impact supported 62,393 county jobs, using the jobs-to-sales ratios specific to each industry in the county. This means that one out of every 35 jobs in Miami Dade County is supported by the activities of MDC and its students. In addition, the \$5.0 billion, or 62,393 supported jobs, stemmed from different industry sectors. For instance, among non-education industry sectors, the spending of MDC and its students and the activities of its alumni in the Real Estate & Rental & Leasing industry sector supported 5,412 jobs in FY 2022-23. If the college did not exist, these impacts would not have been generated in Miami Dade County.

MDC impacts by industry (jobs supported)



11,521

Retail Trade



7,771

Accommodation & Food Services



5,412

Real Estate & Rental & Leasing



4,733

Health Care & Social Assistance



3,950

Construction

One out of every 35 jobs in Miami Dade County is supported by the activities of MDC 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 MDC as an investment from the perspectives of students, taxpayers, and society in Florida. As with the economic impact analysis, this analysis considers only FY 2022-23 activities.

Student perspective



In FY 2022-23, MDC served 75,717 credit and 31,295 non-credit students. In order to attend the college, the students paid for tuition, fees, books, and supplies. A small number of students (1,125) also took out loans and will incur interest on those loans. Additionally, students gave up money they would have otherwise earned had they all been working full-time instead of attending college. MDC students often work while pursuing their education. Students frequently have part-time jobs. The total investment made by MDC's students in FY 2022-23 amounted to a present value of \$200.4 million, equal to \$131.6 million in out-of-pocket expenses (including future principal and interest on student loans) and \$68.9 million in forgone time and money.

In return for their investment, MDC's students will receive a stream of higher future earnings that will continue to grow throughout their working lives. For example, based on Lightcast's model generating career midpoint earnings, the average MDC associate degree graduate from FY 2022-23 will see annual earnings that are \$7,900 higher than a person with a high school diploma or equivalent working in Florida. Wage rates in the Lightcast MR-SAM model combine state and federal sources to provide earnings for full- and part-time workers that aim to reflect complete employment in the state, including proprietors, self-employed workers, and others. The Florida Education Training and Placement Information Program (FETPIP) offers another complementary perspective on graduates' post-program earnings. FETPIP produces annual snapshots based on the most recent graduates who are working full-time and captures data at the end of the calendar year in which they complete their degree or certificate. FETPIP's calculation

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



Average annual return for MDC students

29.8%



Stock market 30-year average annual return

10.1%



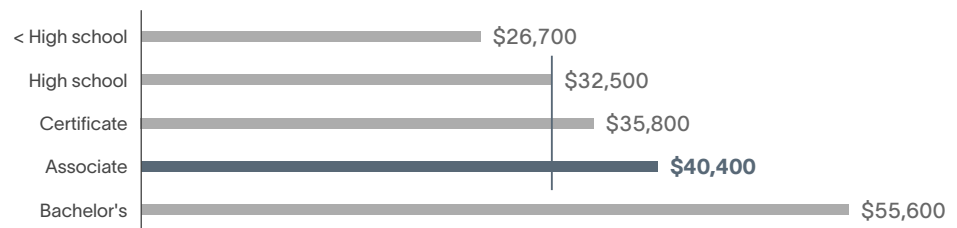
Interest earned on savings account (national deposit rate)

0.5%

Source: Forbes' S&P 500, 1994-2023; FDIC.gov, March 2023

Average earnings by education level at career midpoint

The average associate degree graduate from MDC will see an increase in earnings of **\$7,900** each year compared to a person with a high school diploma or equivalent working in Florida.



Source: Lightcast employment data



methodology focuses on the most recent graduates and shows that the latest group of MDC associate degree completers enjoy higher earnings overall than implied by the Lightcast MR-SAM model and a larger earnings advantage over the most recent high school graduates based on the same measurement time frame.

FETPIP reports 2022-23 MDC associate of science degree graduates' average annualized earnings among full-time workers at \$64,587 and MDC bachelor's degree graduates had average earnings of \$67,529. *Note that annualized earnings are based on Q4 2023 wages for graduates working full-time (e.g., Full-time employment wages at least equal to the minimum quarterly wage of \$6,240 or the annualized minimum wage of \$24,960. The minimum quarterly wage is calculated by multiplying the Q4 2023 minimum wage (\$12.00 in FL) by 13 40-hour work weeks ($\$12.00 \times 40 \times 13 = \$6,240$).*

Over a working lifetime, the benefits of an associate degree over a high school diploma will amount to an undiscounted value of \$331.8 thousand in higher earnings per graduate. The present value of the cumulative higher future earnings that MDC's FY 2022-23 students will receive over their working careers is \$2.2 billion.

The students' benefit-cost ratio is 11.0. In other words, for every dollar students invest in MDC in the form of out-of-pocket expenses and forgone time and money, they will receive a cumulative value of \$11.00 in higher future earnings. Annually, the students' investment in MDC has an average annual internal rate of return of 29.8%, which is impressive compared to the U.S. stock market's 30-year average rate of return of 10.1%.

Taxpayer perspective



MDC generates three times more in tax benefits 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 MDC 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 2022-23 students' working lives, the state and local government will have collected a present value of \$617.1 million in added taxes.

Benefits to taxpayers will also consist of savings generated by the improved lifestyles of MDC students and the corresponding reduced government services. Education is statistically correlated with a variety of lifestyle changes. The education that MDC 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. MDC 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 MDC will generate \$66.3 million in savings to state and local taxpayers.

Taxpayers receive a 3x return. For every dollar of public money invested in MDC, taxpayers will receive a cumulative value of **\$3.10** over the course of the students' working lives.



Total taxpayer benefits amount to \$683.4 million, the present value sum of the added tax revenue and public sector savings. Taxpayer costs are \$222.4 million, equal to the amount of state and local government funding MDC received in FY 2022-23. These benefits and costs yield a benefit-cost ratio of 3.1. This means that for every dollar of public money invested in MDC in FY 2022-23, taxpayers will receive a cumulative present value of \$3.10 over the course of the students' working lives. The average annual internal rate of return for taxpayers is 10.1%, which compares favorably to other long-term investments in the public sector.

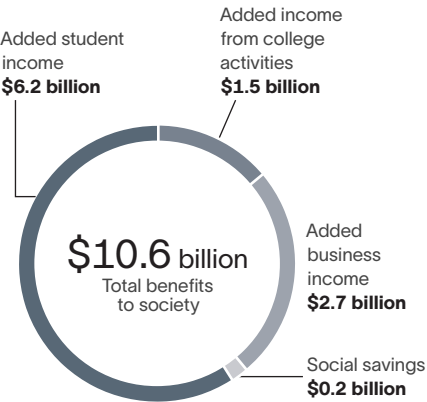
Social perspective



Society as a whole in Florida benefits from the presence of MDC 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 Florida.

Benefits to society also consist of the savings generated by the improved lifestyles of MDC 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, alcohol dependence, obesity, drug 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.

Social benefits in Florida from MDC



Source: Lightcast impact model






Altogether, the social benefits of MDC equal a present value of \$10.6 billion. These benefits include \$6.2 billion in added student income, \$2.7 billion in added business income, \$1.5 billion in added income from college activities, as well as \$157.8 million in social savings related to health, the justice system, and income assistance in Florida. People in Florida invested a present value total of \$707.3 million in MDC in FY 2022-23. The cost includes all the college and student costs.

The benefit-cost ratio for society is 15.0, equal to the \$10.6 billion in benefits divided by the \$707.3 million in costs. In other words, for every dollar invested in MDC, people in Florida will receive a cumulative value of \$15.00 in benefits. The benefits of this investment will occur for as long as MDC's FY 2022-23 students remain employed in the state workforce.

Summary of investment analysis results

The results of the analysis demonstrate that MDC is a strong investment for all three major stakeholder groups—students, taxpayers, and society. As shown, students receive a great return (11 times their investment) from an education from MDC. At the same time, taxpayers' investment in MDC returns (three times) more to government budgets than it costs and creates a wide range of social benefits throughout Florida (15 times the overall costs of MDC and its students)..

Summary of investment analysis results

 Student perspective	 Taxpayer perspective	 Social perspective
<div>Present value benefits</div> <div>\$2.2 billion</div> <div>Present value costs</div> <div>\$0.2 billion</div> <div>Net present value</div> <div>\$2.0 billion</div>	<div>Present value benefits</div> <div>\$0.7 billion</div> <div>Present value costs</div> <div>\$0.2 billion</div> <div>Net present value</div> <div>\$0.5 billion</div>	<div>Present value benefits</div> <div>\$10.6 billion</div> <div>Present value costs</div> <div>\$0.7 billion</div> <div>Net present value</div> <div>\$9.9 billion</div>
<div>Benefit-cost ratio</div> <div>11.0</div> <div>Rate of return</div> <div>29.8%</div>	<div>Benefit-cost ratio</div> <div>3.1</div> <div>Rate of return</div> <div>10.1%</div>	<div>Benefit-cost ratio</div> <div>15.0</div> <div>Rate of return</div> <div>n/a*</div>

* The rate of return is not reported for the social perspective because the beneficiaries are not necessarily the same as the original investors.
Selected values in millions (M) - Student cost: \$200.4 M; Taxpayer benefit: \$683.4 M; Taxpayer cost: \$222.4 M; Taxpayer net present value: \$461.0 M; Social cost: \$707.3 M.

Conclusion

*The results of this study demonstrate that MDC creates value from **multiple perspectives**.*

The college benefits county businesses by increasing consumer spending in the county and supplying a steady flow of qualified, trained workers to the workforce. MDC 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, MDC benefits society as a whole in Florida 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 2022-23 academic and financial reports from MDC, 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.