



# The Economic Value of Mississippi University for Women to the State of Mississippi



**M**ISSISSIPPI UNIVERSITY FOR WOMEN (MUW) creates value in many ways. The university plays a key role in helping students increase their employability and achieve their individual potential. The university draws visitors and students to the state, generating new dollars and opportunities for Mississippi. MUW provides students with the education, training, and skills they need to have fulfilling and prosperous careers. Its student volunteers support the state economy through the output and employment generated by state businesses and organizations. Furthermore, MUW is a place for students to meet new people, increase their self-confidence, and promote their overall health and well-being.

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

This study measures the economic impacts created by MUW 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) 2021-22. Impacts on the Mississippi 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 Mississippi are reported under the investment analysis.



MISSISSIPPI

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# Economic impact analysis



MUW promotes economic growth in Mississippi through its direct expenditures and the resulting expenditures of visitors, students, and state businesses. The university serves as an employer and buyer of goods and services for its day-to-day and construction operations. The university's reputation and activities attract visitors and students from outside Mississippi, whose expenditures benefit state vendors. MUW encourages its students to volunteer in the community, helping businesses and organizations grow. In addition, MUW is a large source of higher education to Mississippi residents and a supplier of trained workers to state industries, enhancing overall productivity in the state workforce.

## Operations spending impact



MUW adds economic value to Mississippi as an employer of state residents and a large-scale buyer of goods and services. In FY 2021-22, the university employed 417 full-time and part-time faculty and staff, 88% of whom lived in Mississippi. Total payroll at MUW was \$28.2 million, much of which was spent in the state for groceries, mortgage and rent payments, dining out, and other household expenses. In addition, the university spent \$22.7 million on day-to-day expenses related to facilities, supplies, and professional services.

MUW's day-to-day operations spending added \$27.6 million in income to the state during the analysis year. This figure represents the university's payroll, the multiplier effects generated by the in-state spending of the university and its employees, and a downward adjustment to account for funding that the university received from state sources. The \$27.6 million in added income is equivalent to supporting 406 jobs in the state.

## Construction spending impact



MUW invests in construction each year to maintain its facilities, create additional capacities, and meet its growing educational demands. During the year of analysis, MUW began constructing a new Culinary Arts building, made electrical upgrades throughout campus, and completed parking lot improvements. 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 2021-22, MUW's construction spending generated \$2.1 million in added income, which is equivalent to supporting 42 jobs.

### Impacts created by MUW in FY 2021-22



Operations spending impact

**\$27.6 million**

+



Construction spending impact

**\$2.1 million**

+



Visitor spending impact

**\$0.9 million**

+



Student spending impact

**\$2.4 million**

+



Volunteerism impact

**\$6.8 million**

+



Alumni impact

**\$175.5 million**



Total economic impact

**\$215.3 million**

OR

Jobs supported

**3,433**



## Visitor spending impact



Thousands of visitors from outside the state were attracted to MUW during the analysis year to attend commencement, sports events, and other activities sponsored by the university. While in the state, visitors spent money for lodging, food, transportation, and other personal expenses. The off-campus expenditures of the university's out-of-state visitors generated a net impact of \$851.3 thousand in added income for the state economy in FY 2021-22. This \$851.3 thousand in added income is equivalent to supporting 23 jobs.

## Student spending impact



Around 13% of credit students attending MUW originated from outside the state in FY 2021-22, and some of these students relocated to Mississippi to attend MUW. These students may not have come to the state if the university did not exist. In addition, some in-state students, referred to as retained students, would have left Mississippi if not for the existence of MUW. While attending the university, these relocated and retained students spent money on groceries, accommodation, transportation, and other household expenses. This spending generated \$2.4 million in added income for the state economy in FY 2021-22, which supported 51 jobs in Mississippi.

## Volunteerism impact



MUW encourages its students to volunteer in Mississippi, where they can work with businesses and organizations to help meet their goals. The work of these student volunteers allows businesses and organizations to grow, increasing their output and impacting the economy at large. Using the value per volunteer hour for Mississippi,\* the work of MUW student volunteers is equivalent to \$4.2 million in earnings. In terms of actual impact to the Mississippi economy, MUW student volunteers generated an impact of \$6.8 million in added income for the state in FY 2021-22, equivalent to supporting 72 jobs.

## Giving back through MUW's College of Nursing

MUW's College of Nursing was founded in 1971 and has produced thousands of graduates who have successfully moved into the nursing workforce and are impacting the profession of nursing in Mississippi, the United States, and the world. MUW's nursing programs gave back almost 150,000 hours of community involvement including health fairs, clinical hours, hunger prevention, awareness walks, donations, and adoptions here and abroad.

\* By state value per volunteer hour was provided by Independent Sector (see [https://independentsector.org/resource/vovt\\_details/](https://independentsector.org/resource/vovt_details/)).



## Alumni impact



The education and training MUW provides for state residents has the greatest impact. Since the establishment of the university, students have studied at MUW and entered the state workforce with greater knowledge and new skills. Today, thousands of former MUW students are employed in Mississippi. As a result of their education from MUW, the students receive higher earnings and increase the productivity of the businesses that employ them. In FY 2021-22, MUW alumni generated \$175.5 million in added income for the state economy, which is equivalent to supporting 2,840 jobs.

## Total impact

MUW added \$215.3 million in income to the Mississippi economy during the analysis year, equal to the sum of the operations and construction spending impacts; the visitor and student spending impacts; the volunteerism impact; and the alumni impact.

MUW's total impact can also be expressed in terms of jobs supported. The \$215.3 million impact supported 3,433 state jobs, using the jobs-to-sales ratios specific to each industry in the state. In addition, the \$215.3 million, or 3,433 supported jobs, stemmed from different industry sectors. For instance, MUW's activities and alumni in the Health Care & Social Assistance industry sector supported 866 jobs in FY 2021-22. If the university did not exist, these impacts would not have been generated in Mississippi.

### MUW impacts by industry (jobs supported)



866

Health Care & Social Assistance



845

Government, Education



474

Government, Non-Education



190

Other Services (except  
Public Administration)



165

Retail Trade

## A talent pipeline for the Mississippi workforce

MUW educates thousands of students each year. Out of the eight Mississippi public universities, MUW has the highest percentage of graduates who stay to work in the state. As graduates, these students emerge as an educated workforce, capable of earning higher incomes and prepared to make increasingly positive life choices.



# Investment analysis



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 evaluates MUW as an investment from the perspectives of students, taxpayers, and society in Mississippi.

## Student perspective



In FY 2021-22, MUW served 3,240 credit and 556 non-credit students. In order to attend the university, 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 MUW's students in FY 2021-22 amounted to a present value of \$22.4 million, equal to \$15.1 million in out-of-pocket expenses (including future principal and interest on student loans) and \$7.3 million in forgone time and money.

In return for their investment, MUW's students will receive a stream of higher future earnings that will continue to grow throughout their working lives. For example, the average MUW bachelor's degree graduate from FY 2021-22 will see annual earnings that are \$17,400 higher than a person with a high school diploma or equivalent working in Mississippi. Over a working lifetime, the benefits of the bachelor's degree over a high school diploma will amount to an undiscounted value of \$713.4 thousand in higher earnings per graduate. The present value of the cumulative higher future earnings that MUW's FY 2021-22 students will receive over their working careers is \$186.7 million.

The students' benefit-cost ratio is 8.3. In other words, for every dollar students invest in MUW in the form of out-of-pocket expenses and forgone time and money, they will receive a cumulative value of \$8.30 in higher future earnings. Annually, the students' investment in MUW has an average annual internal rate of return of 29.2%, which is impressive compared to the U.S. stock market's 30-year average rate of return of 10.5%.

### Students see a high rate of return for their investment in MUW



Average annual return for MUW students

**29.2%**



Stock market 30-year average annual return

10.5%

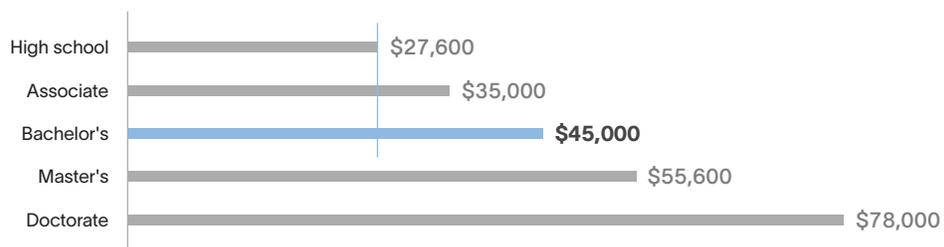


Interest earned on savings account (National Rate Cap)

0.8%

Source: Forbes' S&P 500, 1992-2021. FDIC.gov, 2-2022.

The average bachelor's degree graduate from MUW will see an increase in earnings of **\$17,400** each year compared to a person with a high school diploma or equivalent working in Mississippi.



Source: Lightcast employment data.



## Taxpayer perspective



MUW generates more in tax revenue than it receives. These benefits to taxpayers consist primarily of taxes that the state government will collect from the added revenue created in the state. As MUW 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 2021-22 students' working lives, the state government will have collected a present value of \$47.8 million in added taxes.

Benefits to taxpayers will also consist of savings generated by the improved lifestyles of MUW students and the corresponding reduced government services. Education is statistically correlated with a variety of lifestyle changes. The educations that MUW students receive will generate savings in three main categories: 1) healthcare, 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. MUW 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 education from MUW will generate \$11.8 million in savings to state taxpayers.

Total taxpayer benefits amount to \$59.6 million, the present value sum of the added taxes and public sector savings. Taxpayer costs are \$31.6 million, equal to the amount of state government funding MUW received in FY 2021-22. These benefits and costs yield a benefit-cost ratio of 1.9. This means that for every dollar of public money invested in MUW in FY 2021-22, taxpayers will receive a cumulative present value of \$1.90 over the course of the students' working lives. The average annual internal rate of return for taxpayers is 3.2%, which compares favorably to other long-term investments in the public and private sectors.

For every dollar of public money invested in MUW, taxpayers will receive a cumulative value of **\$1.90** over the course of the students' working lives.

## Social perspective



Society as a whole in Mississippi benefits from the presence of MUW 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 Mississippi.

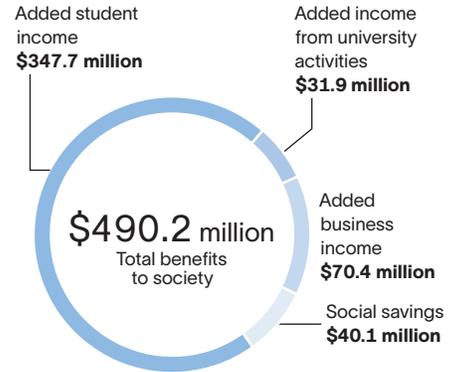
Benefits to society also consist of the savings generated by the improved lifestyles of MUW students. As discussed in the previous section, education is statistically correlated with a variety of lifestyle changes that generate social savings. Note that these costs are avoided by the consumers but are distinct from the costs avoided by the taxpayers

outlined above. Healthcare savings include avoided medical costs associated with smoking, alcohol dependence, obesity, 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 university for a copy of the main report.

Altogether, the social benefits of MUW equal a present value of \$490.2 million. These benefits include \$347.7 million in added student income, \$70.4 million in added business income, \$31.9 million in added income from university activities, as well as \$40.1 million in social savings related to health, the justice system, and income assistance in Mississippi. People in Mississippi invested a present value total of \$74.5 million in MUW in FY 2021-22. The cost includes all the university and student costs.

The benefit-cost ratio for society is 6.6, equal to the \$490.2 million in benefits divided by the \$74.5 million in costs. In other words, for every dollar invested in MUW, people in Mississippi will receive a cumulative value of \$6.60 in benefits. The benefits of this investment will occur for as long as MUW's FY 2021-22 students remain employed in the state workforce.

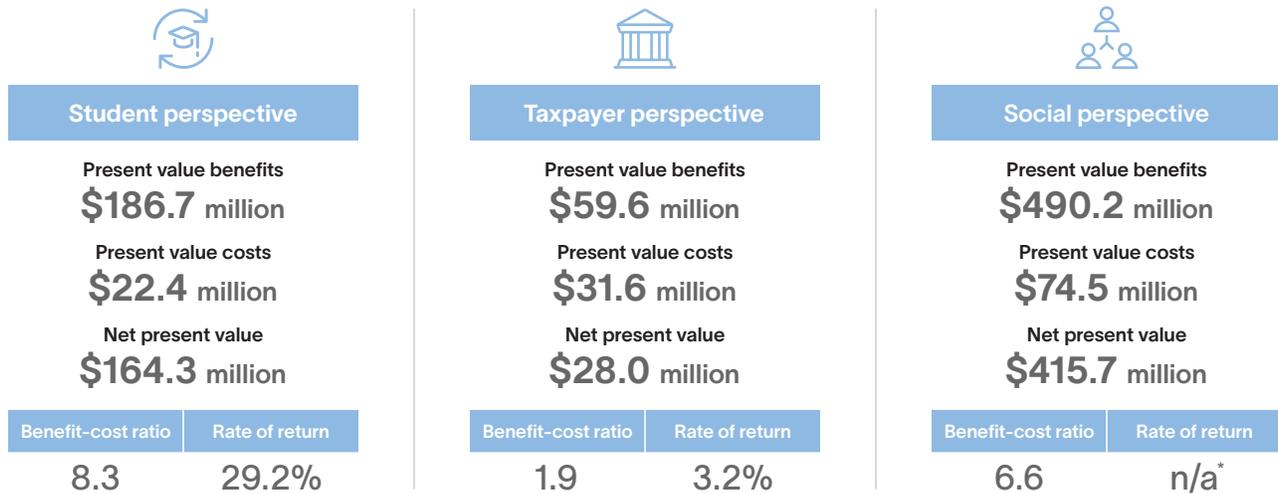
### Social benefits in Mississippi from MUW



Source: Lightcast impact model.

## Summary of investment analysis results

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



\* 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 MUW creates value from multiple perspectives. The university benefits state businesses by increasing consumer spending in the state and supplying a steady flow of qualified, trained workers to the workforce. MUW enriches the lives of students by raising their lifetime earnings and helping them achieve their individual potential. The university benefits state taxpayers through increased tax receipts and a reduced demand for government-supported social services. Finally, MUW benefits society as a whole in Mississippi 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 2021-22 academic and financial reports from MUW, 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 university for a copy of the main report.

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



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](https://lightcast.io/solutions/education) to learn more or connect with us.