

# The Economic Value of Mississippi State University **FACT SHEET**



Mississippi State University (MSU) creates a significant positive impact on the business community and generates a return on investment to its major stakeholder groups—students, taxpayers, and society. Using a two-pronged approach that involves an economic impact analysis and an investment analysis, this study calculates the benefits received by each of these groups. Results of the analysis reflect fiscal year (FY) 2018-19.



# Economic impact analysis

In FY 2018-19, MSU added **\$1.8 billion** in income to the Mississippi economy, a value approximately equal to **1.6%** of the state's total gross state product (GSP). Expressed in terms of jobs, MSU's impact supported **29,016 jobs**. For perspective, the activities of MSU and its students support **one out of every 55 jobs** in Mississippi.



MSU employed 4,169 full-time and part-time faculty and staff (not including research employees). Payroll amounted to \$307.1 million (excluding



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IMPACTS CREATED BY MSU IN FY 2018-19

\$1.8 billion

- OR -

29,016
JOBS SUPPORTED





\$213.1 million

Research Spending Impact



\$14.8 million

**Construction Spending Impact** 



\$245.3 million

Extension Impact



CAVS-E Impact



\$20.8 million

Start-up & Spin-off Company Impact



\$42.5 million

Visitor Spending Impact



\$45 million Student Spending Impact



payroll from research employees), much of which was spent in the state for groceries, mortgage and rent payments, dining out, and other household expenses. The university spent another \$80.8 million on day-to-day expenses related to facilities, supplies, and professional services (excluding research expenditures).

• The net impact of the university's operations spending added **\$297.3 million** in income to the state economy in FY 2018-19.

#### RESEARCH SPENDING IMPACT

- Research activities at MSU impact the state economy by employing people
  and making purchases for equipment, supplies, and services. They also
  facilitate new knowledge creation in Mississippi through inventions, patent
  applications, and licenses. In FY 2018-19, MSU spent \$141.6 million on
  payroll and \$122.9 million on other expenses to support research activities.
- MSU's research spending generated \$213.1 million in added income for the Mississippi economy in FY 2018-19.

# Mississippi's leading research university

MSU research is an economic development success story. The National Science Foundation ranks MSU among the nation's top 100 research institutions earning designation as a "Very High Research Activity" R1 doctoral university. As the Magnolia State's leading research university, MSU's research expenditures totaled over \$264.5 million in FY 2018-19, accounting for more than half of all R&D expenditures in the state.

## CONSTRUCTION SPENDING IMPACT

- MSU invests in construction each year to maintain its facilities, create additional capacities, and meet its growing educational demands, generating a short-term infusion of spending and jobs in the state economy.
- The net impact of MSU's construction spending in FY 2018-19 was \$14.8 million in added income for Mississippi.

### **EXTENSION IMPACT**

- As a land-grant university, MSU has a long-standing history of using its
  expertise and resources to benefit the people of Mississippi. MSU Extension
  provides direct resources and support in each of the state's 82 counties and
  supports every stage of growth in Mississippi's top industry—agriculture.
- Due to data limitations, only the impact from Extension's Agricultural and Natural Resources units are measured. The increased productivity of Mississippi farmers and ranchers from working with Extension in FY 2018-19 yielded \$245.3 million in added income for the state.
- \* Given the high volatility of construction expenditures from year to year, the average amount MSU spent on construction activities over the past five years was used as a proxy for the construction expenditures in FY 2018-19.

#### CAVS-E IMPACT

- MSU's Center for Advanced Vehicular Systems-Extension (CAVS-E) unit provides Mississippi's manufacturers, healthcare providers, and service providers with technical expertise, professional development, and on-site consultation for product and process improvement. CAVS-E clients report that these services yield increased sales, lower costs, and improved efficiency.
- In FY 2018-19, CAVS-E added \$32.6 million in income to Mississippi.

#### START-UP AND SPIN-OFF COMPANY IMPACT

- MSU creates an exceptional environment that fosters innovation and entrepreneurship, evidenced by the number of start-up and spin-off companies created as a result of the university.
- In FY 2018-19, MSU's start-up and spin-off companies generated \$20.8 million in added income for the Mississippi economy.



Located in the heart of MSU's campus, MSU's Center for Entrepreneurship and Outreach strives to help students, faculty, and staff at MSU start and grow successful companies. The Center for Entrepreneurship and Outreach supports over 100 student start-up teams every year as they work to launch a new business. Through these efforts, MSU aggressively seeks to unify, grow, and foster culture of entrepreneurship at MSU in the local community and throughout the state.

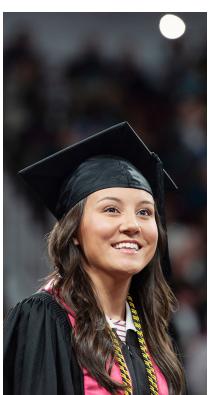
#### VISITOR SPENDING IMPACT

- Hundreds of thousands of out-of-state visitors attracted to Mississippi
  for activities at MSU brought new dollars to the economy through their
  spending at hotels, restaurants, gas stations, and other state businesses.
- Visitor spending added approximately \$42.5 million in income to the Mississippi economy.

#### STUDENT SPENDING IMPACT

- Around 26% of students attending MSU originated from outside the state.
   Some of these students relocated to Mississippi. In addition, some in-state students, referred to as retained students, would have left Mississippi for other educational opportunities if not for MSU. These relocated and retained students spent money on groceries, mortgage and rent payments, and other living expenses at state businesses.
- The expenditures of relocated and retained students in FY 2018-19 added
   \$45 million in income to the Mississippi economy.





#### ALUMNI IMPACT

- Over the years, students have studied at MSU and entered or re-entered the workforce with newly-acquired knowledge and skills. Today, thousands of these former students are employed in Mississippi.
- The net impact of MSU's former students currently employed in the state workforce amounted to \$935.8 million in added income in FY 2018-19.

# Actively meeting the state workforce demands

Seeking to close the skills gap for qualified software development programmers in the state, MSU is partnering with telecommunications company C Spire to create hundreds of new student academic and computer science career opportunities.

With Mississippi's only accredited programs in veterinary medicine and architecture, MSU is the state's primary source of professionals in these fields. MSU is also a leading source of individuals with degrees in agriculture and engineering.

MSU also offers the state's only petroleum engineering degree program in response to a high demand from industry for graduates with experience in drilling, production, petroleum economics, and reservoir engineering.

# A community campus for veterans

MSU is consistently recognized for its commitment to supporting veterans of the U.S. Armed Forces, current service members, and their dependents. In the Military Times' Best for Vets: Colleges 2020 rankings, MSU is listed 21st among four-year schools, the highest ranking of any Southeastern Conference university. The publication's annual ranking is an editorially independent news project that evaluates a variety of factors that make colleges and universities a good fit for service members and their families. Building on historical military roots, the veteran community at MSU now comprises 2,977 students.



# Investment analysis

#### STUDENT PERSPECTIVE

- MSU's FY 2018-19 students paid a present value of \$205.4 million to cover the cost of tuition, fees, supplies, and interest on student loans. They also forwent \$244.3 million in money that they would have earned had they been working instead of attending college.
- In return for their investment, students will receive \$1.5 billion in increased earnings over their working lives. This translates to a return of \$3.30 in higher future earnings for every dollar students invest in their education. Students' average annual rate of return is 13.8%.

#### TAXPAYER PERSPECTIVE

• Taxpayers provided MSU with \$212.1 million of funding in FY 2018-19. In return, they will benefit from added tax revenue, stemming from students' higher lifetime earnings and increased business output, amounting to \$393.6 million. A reduced demand for government-funded services in Mississippi will add another \$99.8 million in benefits to taxpayers.

STUDENTS SEE A HIGH RATE OF RETURN FOR THEIR INVESTMENT IN MSU



13.8%

Average annual return for MSU students



9.9%

Stock market 30-year average annual return



0.8%

Interest earned on savings account (National Rate Cap)

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

 For every dollar of public money invested in MSU, taxpayers will receive \$2.30 in return, over the course of students' working lives. The average annual rate of return for taxpayers is 7.2%.

#### SOCIAL PERSPECTIVE

- In FY 2018-19, Mississippi invested \$996.4 million to support MSU. In turn, the Mississippi economy will grow by \$3.9 billion, over the course of students' working lives. Society will also benefit from \$348.4 million of public and private sector savings.
- For every dollar invested in MSU in FY 2018-19, people in Mississippi will
  receive \$4.30 in return, for as long as MSU's FY 2018-19 students remain
  active in the state workforce.

# MSU's benefits beyond the state

Not quantitatively measured in this analysis but nonetheless important is MSU's work on solving hunger and poverty. MSU researchers are using unmanned aerial systems, advanced irrigation techniques, and other technologies to help Mississippi farmers increase crop yields.

Scientists in MSU's Fish Innovation Lab continue to work with partners in developing countries on projects to empower communities, improve the aquaculture sector, and make food systems more resilient and productive.

MSU is also actively supporting the production of poultry and timber, the state's top two agricultural products, through research and advisory roles. MSU Extension specialists are a key resource for poultry producers as they step up production to meet increased demand and keep grocery stores stocked. For the timber industry, Extension is retooling the Professional Logging Manager courses for online delivery so loggers can keep their training current and continue operating.





\$3.30 in lifetime earnings



\$2.30 in added tax revenue and public sector savings



\$4.30 in added income and social savings

