



The Economic Value of Southeast Missouri State University to the State of Missouri

SOUTHEAST MISSOURI STATE UNIVERSITY (SEMO) is an engine for economic growth throughout all Missouri through economic engagement efforts, workforce development initiatives, spending practices, arts and cultural events, and its NCAA Division-I athletics program. SEMO creates value in many ways, and it greatly influences both the lives of its students and the state economy. It also draws visitors to the state, generating new dollars and opportunities for Missouri. The university supports a variety of industries, serves state businesses, and benefits society as a whole in Missouri from an expanded economy and improved quality of life.

Founded in 1873 as a teacher's college, SEMO, is a dynamic and competitive comprehensive Master's-level university located in Cape Girardeau, Missouri. The university provides student centered education, with a foundation of liberal arts and sciences, experiential and service-learning opportunities, cutting-edge technology, and exceptional instruction that prepares students for civic responsibility and professional careers. Named among U.S. News' Best 2022 Regional Universities in the Midwest, SEMO has been accredited by the Higher Learning Commission since 1915 and 35 academic programs hold program-specific accreditations and certifications from 30 accrediting agencies.

With 11,838 students from 45 states and more than 60 countries, and campuses in Cape Girardeau, Sikeston, Kennett and a delivery location in Poplar, SEMO makes significant contributions to the workforce needs of Missouri and beyond. SEMO's alumni contribute greatly to Missouri in serving their local communities as educators, businesspeople, entrepreneurs, healthcare professionals, scientists, computer science and cybersecurity professionals, agriculture leaders, public servants, artists, musicians, and more.

This study measures these and other economic impacts created by SEMO 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

Impacts on the Missouri 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 Missouri are reported under the investment analysis. All results reflect employee, student, and financial data, provided by the university, for fiscal year (FY) 2019-20.



MISSOURI



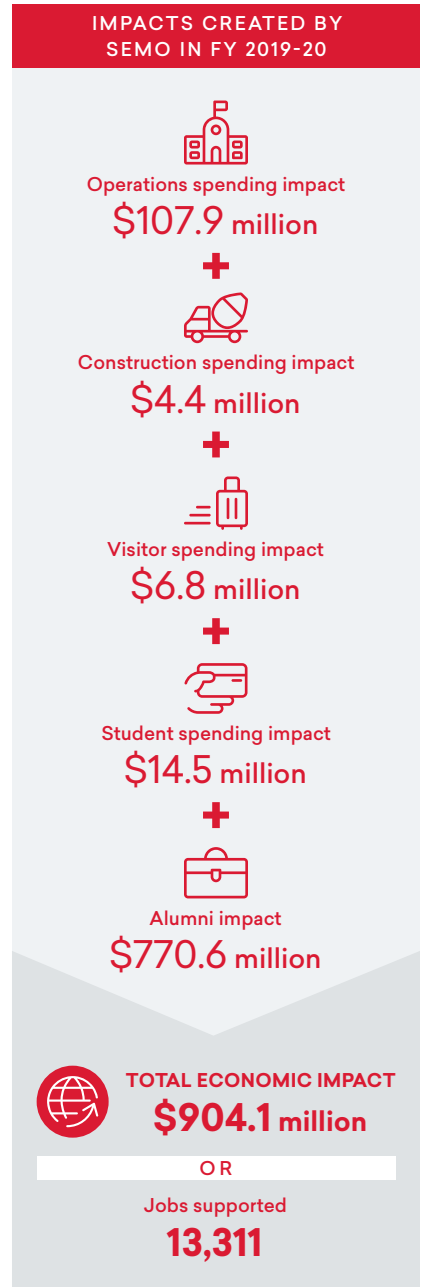
SEMO promotes economic growth in Missouri through its direct expenditures and the resulting expenditures of visitors, students, and state businesses. The university serves as an employer and buyer of goods and services for its day-to-day and construction operations. The university's reputation and activities attract visitors and students from outside Missouri, whose expenditures benefit state vendors. In addition, SEMO is a primary source of higher education to Missouri residents and a supplier of trained workers to state industries, enhancing overall productivity in the state workforce. SEMO's alumni contribute greatly to Missouri in serving their local communities as educators, businesspeople, entrepreneurs, healthcare professionals, scientists, computer science and cybersecurity professionals, agriculture leaders, public servants, artists, musicians, and more.

Operations spending impact



SEMO adds economic value to Missouri as an employer of state residents and a large-scale buyer of goods and services. In FY 2019-20, the university employed 1,422 full-time and part-time faculty and staff, 95% of whom lived in Missouri. Total payroll at SEMO was \$90 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 \$73.3 million on day-to-day expenses related to facilities, supplies, and professional services.

SEMO's day-to-day operations spending added \$107.9 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 \$107.9 million in added income is equivalent to supporting 1,552 jobs in the state.

Construction spending impact



SEMO 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 state economy. In FY 2019-20, SEMO's construction spending generated \$4.4 million in added income, which is equivalent to supporting 67 jobs.

Visitor spending impact



Thousands of visitors from outside the state were attracted to SEMO 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 \$6.8 million in added income for the state economy in FY 2019-20. This \$6.8 million in added income is equivalent to supporting 181 jobs.

Student spending impact



Around 17% of degree-seeking students attending SEMO originated from outside the state in FY 2019-20, and some of these students relocated to Missouri to attend SEMO. 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 Missouri if not for the existence of SEMO. While attending the university, these relocated and retained students spent money on groceries, accommodation, transportation, and other household expenses. This spending generated \$14.5 million in added income for the state economy in FY 2019-20, which supported 332 jobs in Missouri.

Alumni impact



The education and training SEMO provides for state residents has the greatest impact. Since its establishment, students have studied at SEMO and entered the state workforce with greater knowledge and

new skills. Today, thousands of former SEMO students are employed in Missouri. Using Emsi Burning Glass's Alumni Outcomes data, many of the SEMO alumni are employed in the state workforce in industry sectors such as Government, Education, Manufacturing, Professional and Technical Services, Finance and Insurance, and Health Care and Social Assistance, with their top occupations being chief executives, personal service managers, general and operations managers,

postsecondary teachers, and financial managers. As a result of their education from SEMO, the students receive higher earnings and increase the productivity of the businesses that employ them. In FY 2019-20, SEMO alumni generated \$770.6 million in added income for the state economy, which is equivalent to supporting 11,180 jobs.

Total impact

SEMO added \$904.1 million in income to the Missouri economy during the analysis year, equal to the sum of the operations and construction spending impacts, the visitor and student spending impacts, and the alumni impact.

SEMO's total impact can also be expressed in terms of jobs supported. The \$904.1 million impact supported 13,311 state jobs, using the jobs-to-sales ratios specific to each industry in the state. In addition, the \$904.1 million, or 13,311 supported jobs, stemmed from different industry sectors. Among non-education industry sectors, SEMO's spending and alumni in the Health Care & Social Assistance industry sector supported 1,016 jobs in FY 2019-20. If the university did not exist, these impacts would not have been generated in Missouri.

SEMO IMPACTS BY INDUSTRY (JOBS SUPPORTED)





Investment analysis is the process of evaluating total costs and measuring these against total benefits to determine whether or not a proposed venture will be profitable. If benefits outweigh costs, then the investment is worthwhile. If costs outweigh benefits, then the investment will lose money and is thus considered infeasible. The analysis presented here considers SEMO as an investment from the perspectives of students, taxpayers, and society in Missouri.

Student perspective



In FY 2019-20, SEMO served 11,523 degree-seeking and 315 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 SEMO's students in FY 2019-20 amounted to a present value of \$99.4 million, equal to \$59.2 million in out-of-pocket expenses (including future principal and interest on student loans) and \$40.2 million in forgone time and money.

In return for their investment, SEMO's students will receive a stream of higher future earnings that will continue to grow throughout their working lives. For example, the average SEMO bachelor's degree graduate from FY 2019-20 will see annual earnings that are \$28,900 higher than a person with a high school diploma or equivalent working in Missouri. Over a working lifetime, the benefits of the bachelor's degree over a high school diploma will amount to an undiscounted value of \$1.3 million in higher earnings per graduate. The present value of the cumulative higher future earnings that SEMO's FY 2019-20 students will receive over their working careers is \$747.7 million.

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



Average annual return for SEMO students
22.8%



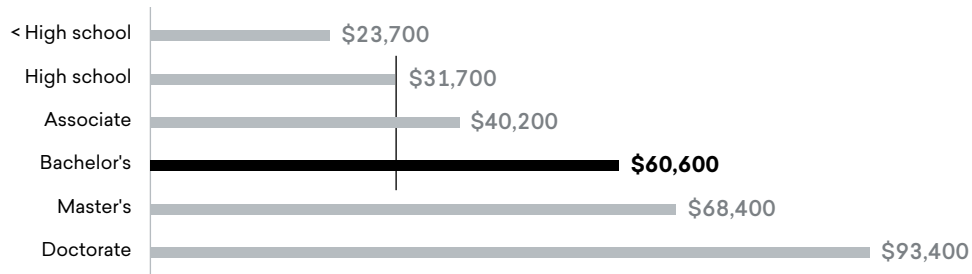
Stock market 30-year average annual return
10.6%



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

Source: Forbes' S&P 500, 1991-2020. FDIC.gov, 6-2021.

The average bachelor's degree graduate from SEMO will see an increase in earnings of **\$28,900** each year compared to a person with a high school diploma or equivalent working in Missouri.



Source: Data provided by SEMO and Emsi Burning Glass Alumni Outcomes.

The students' benefit-cost ratio is 7.5. In other words, for every dollar students invest in SEMO in the form of out-of-pocket expenses and forgone time and money, they will receive a cumulative value of \$7.50 in higher future earnings. Annually, the students' investment in SEMO has an average annual internal rate of return of 22.8%, which is impressive compared to the U.S. stock market's 30-year average rate of return of 10.6%.

Taxpayer perspective



SEMO generates more in tax revenue than it takes. 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 SEMO 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 2019-20 students' working lives, the state and local government will have collected a present value of \$85.9 million in added taxes.

Benefits to taxpayers will also consist of savings generated by the improved lifestyles of SEMO students and the corresponding reduced government services. Education is statistically correlated with a variety of lifestyle changes. The educations that SEMO 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. SEMO 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 a SEMO education will generate \$14.3 million in savings to state and local taxpayers.

Total taxpayer benefits amount to \$100.1 million, the present value sum of the added taxes and public sector savings. Taxpayer costs are \$47.3 million, equal to the amount of state and local government funding SEMO received in FY 2019-20. These benefits and costs yield a benefit-cost ratio of 2.1. This means that for every dollar of public money invested in SEMO in FY 2019-20, taxpayers will receive a cumulative present value of \$2.10 over the course of the students' working lives. The average annual internal rate of return for taxpayers is 4.9%, which compares favorably to other long-term investments in the public and private sectors.

Social perspective



Society as a whole in Missouri benefits from the presence of SEMO 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 Missouri.

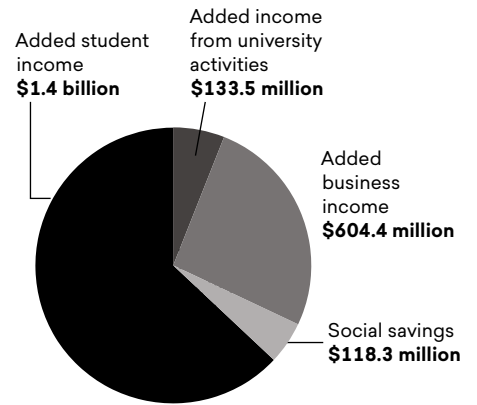
For every dollar of public money invested in SEMO, taxpayers will receive a cumulative value of **\$2.10** over the course of the students' working lives.

Benefits to society also consist of the savings generated by the improved lifestyles of SEMO 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 SEMO equal a present value of \$2.3 billion. These benefits include \$1.4 billion in added student income, \$604.4 million in added business income, \$133.5 million in added income from university activities, as well as \$118.3 million in social savings related to health, crime, and income assistance in Missouri. People in Missouri invested a present value total of \$230 million in SEMO in FY 2019-20. The cost includes all the university and student costs.

The benefit-cost ratio for society is 10.0, equal to the \$2.3 billion in benefits divided by the \$230 million in costs. In other words, for every dollar invested in SEMO, people in Missouri will receive a cumulative value of \$10.00 in benefits. The benefits of this investment will occur for as long as SEMO's FY 2019-20 students remain employed in the state workforce.

SOCIAL BENEFITS IN MISSOURI FROM SEMO



Source: Emsi Burning Glass impact model.

Summary of investment analysis results

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

STUDENT PERSPECTIVE		TAXPAYER PERSPECTIVE		SOCIAL PERSPECTIVE	
Present value benefits	\$747.7 million	Present value benefits	\$100.1 million	Present value benefits	\$2.3 billion
Present value costs	\$99.4 million	Present value costs	\$47.3 million	Present value costs	\$230 million
Net present value	\$648.3 million	Net present value	\$52.8 million	Net present value	\$2.1 billion
Benefit-cost ratio	7.5	Benefit-cost ratio	2.1	Benefit-cost ratio	10.0
Rate of return	22.8%	Rate of return	4.9%	Rate of return	n/a*

* 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 SEMO 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. SEMO enriches the lives of students by raising their lifetime earnings and helping them achieve their individual potential. The university benefits state and local taxpayers through increased tax receipts and a reduced demand for government-supported social services. Finally, SEMO benefits society as a whole in Missouri 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 2019-20 academic and financial reports from SEMO, the university's alumni records matched to Emsi Burning Glass Alumni Outcomes database, 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 university for a copy of the main report.

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



Emsi Burning Glass 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 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 to learn more or connect with us.

The Economic Value of Southeast Missouri State University to the State of Missouri



Southeast Missouri State University (SEMO) creates a significant positive impact on the business community and generates a return on investment to its major stakeholder groups—students, taxpayers, and society. The university supports a variety of industries in Missouri, serves state businesses, and benefits society as a whole in Missouri from an expanded economy and improved quality of life. Additionally, the benefits created by SEMO extend to the state and local government through increased tax revenues and public sector savings. 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) 2019-20.



ECONOMIC IMPACT ANALYSIS

In FY 2019-20, SEMO added **\$904.1 million** in income to the Missouri economy. Expressed in terms of jobs, SEMO's impact supported **13,311 jobs**.

OPERATIONS SPENDING IMPACT

- SEMO employed 1,422 full-time and part-time faculty and staff. Payroll amounted to \$90 million, much of which was spent in the state for groceries, mortgage and rent payments, dining out, and other household expenses. The university spent another \$73.3 million on day-to-day expenses related to facilities, supplies, and professional services.

- The net impact of the university's operations spending added **\$107.9 million** in income to the state economy in FY 2019-20.

CONSTRUCTION SPENDING IMPACT

- SEMO 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 SEMO's construction spending in FY 2019-20 was **\$4.4 million** in added income for Missouri.

VISITOR SPENDING IMPACT

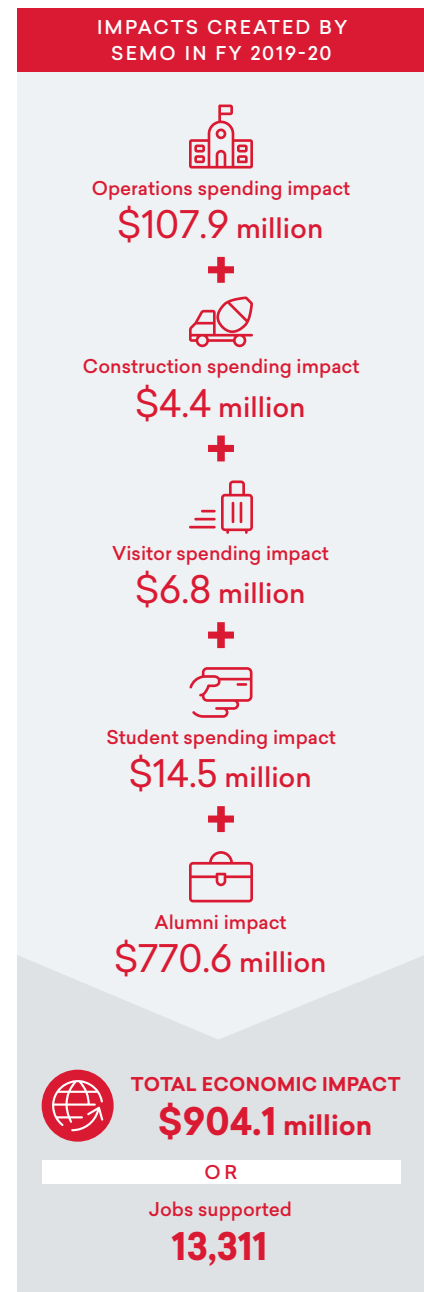
- Out-of-state visitors attracted to Missouri for activities at SEMO brought new dollars to the economy through their spending at hotels, restaurants, gas stations, and other state businesses.
- Visitor spending added approximately **\$6.8 million** in income to the Missouri economy.

STUDENT SPENDING IMPACT

- Around 17% of degree-seeking students attending SEMO originated from outside the state. Some of these students relocated to Missouri. In addition, some in-state students, referred to as retained students, would have left Missouri for other educational opportunities if not for SEMO. 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 2019-20 added **\$14.5 million** in income to the Missouri economy.

ALUMNI IMPACT

- Over the years, students have studied at SEMO and entered or re-entered the workforce with newly-acquired knowledge and skills. Today, thousands of these former students are employed in Missouri. Using Emsi Burning Glass's Alumni Outcomes data, many of the SEMO alumni are employed in the state workforce in industry sectors such as Government, Education, Manufacturing, Professional and Technical Services, Finance and Insurance, and Health Care and Social Assistance, with their top occupations being chief executives, personal service managers, general and operations managers, postsecondary teachers, and financial managers.
- The net impact of SEMO's former students currently employed in the state workforce amounted to **\$770.6 million** in added income in FY 2019-20.





INVESTMENT ANALYSIS

STUDENT PERSPECTIVE

- SEMO's FY 2019-20 students paid a present value of **\$59.2 million** to cover the cost of tuition, fees, supplies, and interest on student loans. They also forwent **\$40.2 million** in money that they would have earned had they been working instead of attending college.
- In return for their investment, students will receive a cumulative present value of **\$747.7 million** in increased earnings over their working lives. This translates to a return of **\$7.50** in higher future earnings for every dollar students invest in their education. Students' average annual rate of return is **22.8%**.

TAXPAYER PERSPECTIVE

- Taxpayers provided SEMO with **\$47.3 million** of funding in FY 2019-20. In return, they will benefit from added tax revenue, stemming from students' higher lifetime earnings and increased business output, amounting to **\$85.9 million**. A reduced demand for government-funded services in Missouri will add another **\$14.3 million** in benefits to taxpayers.
- For every dollar of public money invested in SEMO, taxpayers will receive **\$2.10** in return, over the course of students' working lives. The average annual rate of return for taxpayers is **4.9%**.

SOCIAL PERSPECTIVE

- In FY 2019-20, Missouri invested **\$230 million** to support SEMO. In turn, the Missouri economy will grow by **\$2.2 billion**, over the course of students' working lives. Society will also benefit from **\$118.3 million** of public and private sector savings.
- For every dollar invested in SEMO in FY 2019-20, people in Missouri will receive **\$10.00** in return, for as long as SEMO's FY 2019-20 students remain active in the state workforce.

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



Average annual return for SEMO students
22.8%



Stock market 30-year average annual return
10.6%



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

Source: Forbes' S&P 500, 1991-2020. FDIC.gov, 6-2021.

For every \$1...



Students gain in lifetime earnings
\$7.50



Taxpayers gain in added tax revenue and public sector savings
\$2.10



Society gains in added income and social savings
\$10.00