

2022

**ECONOMIC
IMPACT STUDY**



TRUMAN
STATE UNIVERSITY

Letter from the President Truman State University



For more than 155 years, Truman State University has been committed to enhancing and advancing our city, our region, and our state.

A recent article in *The Atlantic* aptly titled, “Could Small-Town Harvards Revive Rural Economies?”, addresses two main benefits of rural higher education institutions – attracting students, faculty, and staff who spend substantial dollars that support the local economy and creating local jobs.

Truman has a noteworthy impact in both of these areas. We are proud to call Kirksville home and we are proud of the significant economic impact we have on our beloved hometown. Truman is not Truman without Kirksville, and Kirksville is not Kirksville without Truman.

**Truman is not Truman
without Kirksville.**

Truman’s pursuit of our vision that “graduates will be citizen-leaders committed to service; globally competitive; (and) able to thrive in the complexities of an advanced, technical and multicultural world” results in a tangible and powerful return on investment for our students, our region, and our state. Truman transforms individual lives, enhances prosperity, and increases the quality of life locally and across the state. Our dedication to this vital impact is unwavering as we walk confidently with our local and state partners into a future full of promise.

A handwritten signature in black ink that reads "Susan L. Thomas". The signature is fluid and cursive.

Susan L. Thomas, Ph.D.
President

The Economic Value of Truman State University



MISSOURI

Truman State University (Truman) 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) 2020-21.

Economic impact analysis

In FY 2020-21, Truman added **\$561.7 million** in income to the Missouri economy. Expressed in terms of jobs, Truman's impact supported **6,686 jobs**.

Operations spending impact

- Truman employed 684 full-time and part-time faculty and staff. Payroll amounted to \$62.3 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 \$29.9 million on day-to-day expenses related to facilities, supplies, and professional services.
- The net impact of the university's operations spending added **\$67.8 million** in income to the state economy in FY 2020-21.



Visitor spending impact

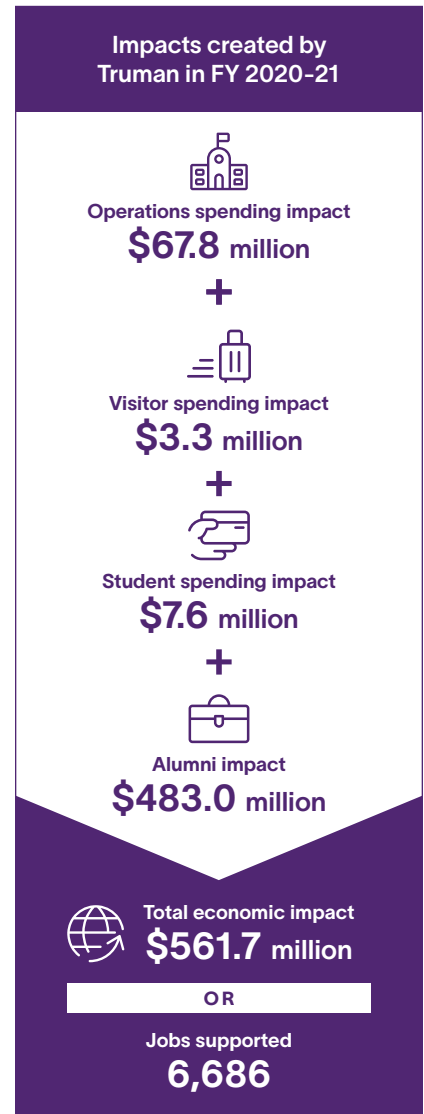
- Out-of-state visitors attracted to Missouri for activities at Truman brought new dollars to the economy through their spending at hotels, restaurants, gas stations, and other state businesses.
- Visitor spending added approximately **\$3.3 million** in income to the Missouri economy.

Student spending impact

- Around 21% of students attending Truman 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 Truman. 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 2020-21 added **\$7.6 million** in income to the Missouri economy.

Alumni impact

- Over the years, students have studied at Truman and entered or re-entered the workforce with newly-acquired knowledge and skills. Today, thousands of these former students are employed in Missouri. Using Lightcast's Alumni Outcomes data, many of the Truman alumni are employed in the state workforce in industry sectors such as Professional & Technical Services, Finance & Insurance, Health Care & Social Assistance, Education, Manufacturing, and Professional & Technical Services with their top occupations being financial managers, personal service managers, accountants and auditors, chief executives, registered nurses, and marketing managers.
- The net impact of Truman's former students currently employed in the state workforce amounted to **\$483 million** in added income in FY 2020-21.



Investment analysis

Student perspective

- Truman's FY 2020-21 students paid a present value of **\$23.8 million** to cover the cost of tuition, fees, supplies, and interest on student loans. They also forwent **\$36.4 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 **\$492.1 million** in increased earnings over their working lives. This translates to a return of **\$8.20** in higher future earnings for every dollar students invest in their education. Students' average annual rate of return is **19.7%**.

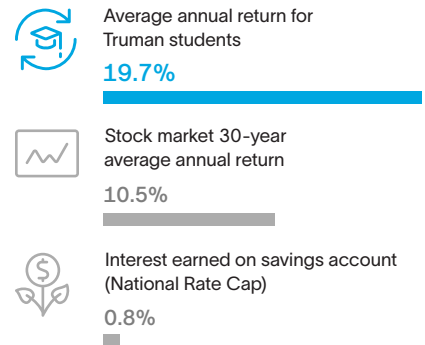
Taxpayer perspective

- Taxpayers provided Truman with **\$41.2 million** of funding in FY 2020-21. In return, they will benefit from added tax revenue, stemming from students' higher lifetime earnings and increased business output, amounting to **\$78.9 million**. A reduced demand for government-funded services in Missouri will add another **\$12.9 million** in benefits to taxpayers.
- For every dollar of public money invested in Truman, taxpayers will receive **\$2.20** in return, over the course of students' working lives. The average annual rate of return for taxpayers is **3.6%**.

Social perspective

- In FY 2020-21, the people of Missouri invested **\$136.1 million** to support Truman. In turn, the Missouri economy will grow by **\$1.2 billion**, over the course of students' working lives. Society will also benefit from **\$57.1 million** of public and private sector savings.
- For every dollar invested in Truman in FY 2020-21, people in Missouri will receive **\$8.90** in return, for as long as Truman's FY 2020-21 students remain active in the state workforce.

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



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

For every \$1...





The Economic Value of Truman State University



TRUMAN STATE UNIVERSITY (Truman) 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 Missouri. Truman provides students with the education, training, and skills they need to have fulfilling and prosperous careers. Furthermore, Truman is a place for students to meet new people, increase their self-confidence, and promote their overall health and well-being.

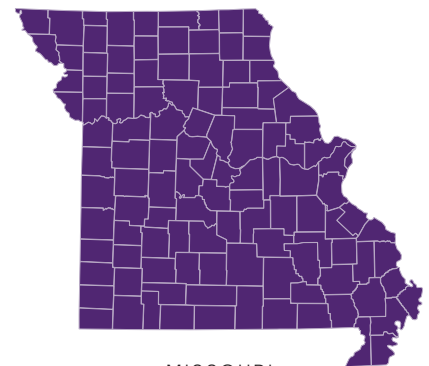
Truman influences both the lives of its students and the state economy. The university supports a variety of industries in Missouri, serves state businesses, and benefits society as a whole in Missouri from an expanded economy and improved quality of life. Additionally, the benefits created by Truman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

This study measures the economic impacts created by Truman 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) 2020-21. 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.



MISSOURI

Truman influences both the **lives of its students** and the **state economy**.



Economic impact analysis



Truman 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 operations. The university's reputation and activities attract visitors and students from outside Missouri, whose expenditures benefit state vendors. In addition, Truman 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.

Operations spending impact



Truman adds economic value to Missouri as an employer of state residents and a large-scale buyer of goods and services. In FY 2020-21, the university employed 684 full-time and part-time faculty and staff, 98% of whom lived in Missouri. Total payroll at Truman was \$62.3 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 \$29.9 million on day-to-day expenses related to facilities, supplies, and professional services.

Truman's day-to-day operations spending added \$67.8 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

Impacts created by
Truman in FY 2020-21



Operations spending impact

\$67.8 million

+



Visitor spending impact

\$3.3 million

+



Student spending impact

\$7.6 million

+



Alumni impact

\$483.0 million



Total economic impact

\$561.7 million

OR

Jobs supported

6,686



sources. The \$67.8 million in added income is equivalent to supporting 702 jobs in the state.

Visitor spending impact



Thousands of visitors from outside the state were attracted to Truman 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 \$3.3 million in added income for the state economy in FY 2020-21. This \$3.3 million in added income is equivalent to supporting 77 jobs.

Student spending impact



Around 21% of students attending Truman originated from outside the state in FY 2020-21, and some of these students relocated to Missouri to attend Truman. 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 Truman. While attending the university, these relocated and retained students spent money on groceries, accommodation, transportation, and other household expenses. This spending generated \$7.6 million in added income for the state economy in FY 2020-21, which supported 148 jobs in Missouri.

Alumni impact



The education and training Truman provides for state residents has the greatest impact. Since the establishment of the university, students have studied at Truman and entered the state workforce with greater knowledge and new skills. Today, thousands of former Truman students are employed in Missouri. Using Lightcast's Alumni Outcomes data, many of the Truman alumni are employed in the state workforce in industry sectors such as Professional & Technical Services, Finance & Insurance, Health Care & Social Assistance, Education, Manufacturing, and Professional &

The Missouri Government Internship Program offers a unique opportunity.

Open to junior and senior students at Truman, the Missouri Government Internship program allows students to live in Jefferson City, Missouri, while serving as an intern with a state legislator, public official or state agency. The program provides an inside look at state government and the political process. Many former interns have gone on to serve as legislative directors, chiefs of staff, judicial clerks, policy analysts, lobbyists and public officials as a direct result of what they learned and the connections they made as interns. The Truman State University Foundation provides selected interns with a \$2,500 living stipend with special support from the Honorable Mary Rhodes Russell ('80), former chief justice of the Supreme Court of Missouri.



Technical Services with their top occupations being financial managers, personal service managers, accountants and auditors, chief executives, registered nurses, and marketing managers. As a result of their education from Truman, the students receive higher earnings and increase the productivity of the businesses that employ them. In FY 2020-21, Truman alumni generated \$483 million in added income for the state economy, which is equivalent to supporting 5,758 jobs.

Total impact

Truman added \$561.7 million in income to the Missouri economy during the analysis year, equal to the sum of the operations spending impact, the visitor and student spending impacts, and the alumni impact.

Truman’s total impact can also be expressed in terms of jobs supported. The \$561.7 million impact supported 6,686 state jobs, using the jobs-to-sales ratios specific to each industry in the state. In addition, the \$561.7 million, or 6,686 supported jobs, stemmed from different industry sectors. Truman’s spending and alumni in the Government, Education industry sector supported 1,207 jobs in FY 2020-21. If the university did not exist, these impacts would not have been generated in Missouri.

Truman impacts by industry (jobs supported)



Greenwood Interprofessional Autism Center will meet regional health and educational needs.

With support from the Missouri General Assembly, local elected officials, The Sunderland Foundation, A.T. Still University and Adair County SB40, Truman is repurposing the historic Greenwood Elementary School into Northeast Missouri’s first interprofessional autism center. This treasured community building will become a comprehensive health services center staffed with licensed professionals in addition to supervised graduate and undergraduate students who will serve those with autism and other neurodevelopmental disorders. Not only will the services fill a need in Northeast Missouri, the center will also serve as a much-needed practicum site for a number of health-related programs and provide a valuable opportunity for students to engage in hands-on, high-impact learning. The Greenwood Interprofessional Autism Center is scheduled to open in the fall of 2023.

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 considers Truman as an investment from the perspectives of students, taxpayers, and society in Missouri.

Student perspective



In FY 2020-21, Truman served a total of 5,047 students, of which 4,700 were degree-seeking. 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 Truman's students in FY 2020-21 amounted to a present value of \$60.2 million, equal to \$23.8 million in out-of-pocket expenses (including future principal and interest on student loans) and \$36.4 million in forgone time and money.

In return for their investment, Truman's students will receive a stream of higher future earnings that will continue to grow throughout their working lives. For example, the average Truman bachelor's degree graduate from FY 2020-21 will see annual earnings that are \$30,800 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 \$1.4 million in higher earnings per graduate. The present value of the cumulative higher future earnings that Truman's FY 2020-21 students will receive over their working careers is \$492.1 million.

The students' benefit-cost ratio is 8.2. In other words, for every dollar students invest in Truman in the form of out-of-pocket expenses and forgone time and money, they will receive a cumulative value of \$8.20 in higher future earnings. Annually, the students' investment in Truman has an average annual internal rate of return of 19.7%, 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 Truman



Average annual return for Truman students
19.7%



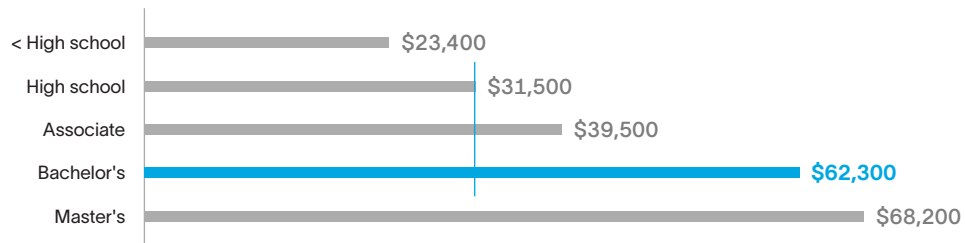
Stock market 30-year average annual return
10.5%



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 Truman will see an increase in earnings of **\$30,800** each year compared to a person with a high school diploma or equivalent working in Missouri.



Source: Data provided by Truman and Lightcast Alumni Outcomes.



Taxpayer perspective



Truman generates more in tax revenue than it takes. These benefits to taxpayers consist primarily of taxes that the state government will collect from the added revenue created in the state. As Truman 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 2020-21 students' working lives, the state government will have collected a present value of \$78.9 million in added taxes.

Benefits to taxpayers will also consist of savings generated by the improved lifestyles of Truman students and the corresponding reduced government services. Education is statistically correlated with a variety of lifestyle changes. The educations that Truman 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. Truman 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 Truman will generate \$12.9 million in savings to state taxpayers.

Total taxpayer benefits amount to \$91.8 million, the present value sum of the added taxes and public sector savings. Taxpayer costs are \$41.2 million, equal to the amount of state government funding Truman received in FY 2020-21. These benefits and costs yield a benefit-cost ratio of 2.2. This means that for every dollar of public money invested in Truman in FY 2020-21, taxpayers will receive a cumulative present value of \$2.20 over the course of the students' working lives. The average annual internal rate of return for taxpayers is 3.6%, which compares favorably to other long-term investments in the public and private sectors.

For every dollar of public money invested in Truman, taxpayers will receive a cumulative value of **\$2.20** over the course of the students' working lives.

Truman continues to expand its entrepreneurship and innovation across campus.

Aided with generous private financial support, Truman continues to expand its entrepreneurship and innovation footprint. Successful serial entrepreneur, Doug Villhard ('94) and his wife Diane ('95) recently made a gift commitment for the naming of the Doug and Diane Villhard Innovation Lab. This new lab space will be housed in Pickler Memorial Library and will open doors for students from every part of campus to come together and explore innovative ideas and entrepreneurial endeavors. The Villhards, who have a passion for investing in the success of Truman students, also provide funding and expertise for Truman's Bulldog B.I.T.E. pitch competition. The competition has provided financial support for nearly 20 winning student pitches since 2016.



Social perspective



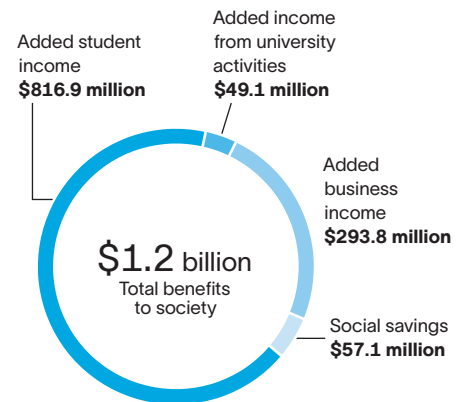
Society as a whole in Missouri benefits from the presence of Truman in two major ways. Primarily, society benefits from an increased economic base in the state. This is attributed to the added income from students' increased lifetime earnings (added student income) and increased business output (added business income), which raise economic prosperity in Missouri.

Benefits to society also consist of the savings generated by the improved lifestyles of Truman 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 Truman equal a present value of \$1.2 billion. These benefits include \$816.9 million in added student income, \$293.8 million in added business income, \$49.1 million in added income from university activities, as well as \$57.1 million in social savings related to health, crime, and income assistance in Missouri. People in Missouri invested a present value total of \$136.1 million in Truman in FY 2020-21. The cost includes all the university and student costs.

The benefit-cost ratio for society is 8.9, equal to the \$1.2 billion in benefits divided by the \$136.1 million in costs. In other words, for every dollar invested in Truman, people in Missouri will receive a cumulative value of \$8.90 in benefits. The benefits of this investment will occur for as long as Truman's FY 2020-21 students remain employed in the state workforce.

Social benefits in Missouri from Truman



Source: Lightcast impact model.

Corporate partnership with Boeing provides leadership development for underrepresented students.

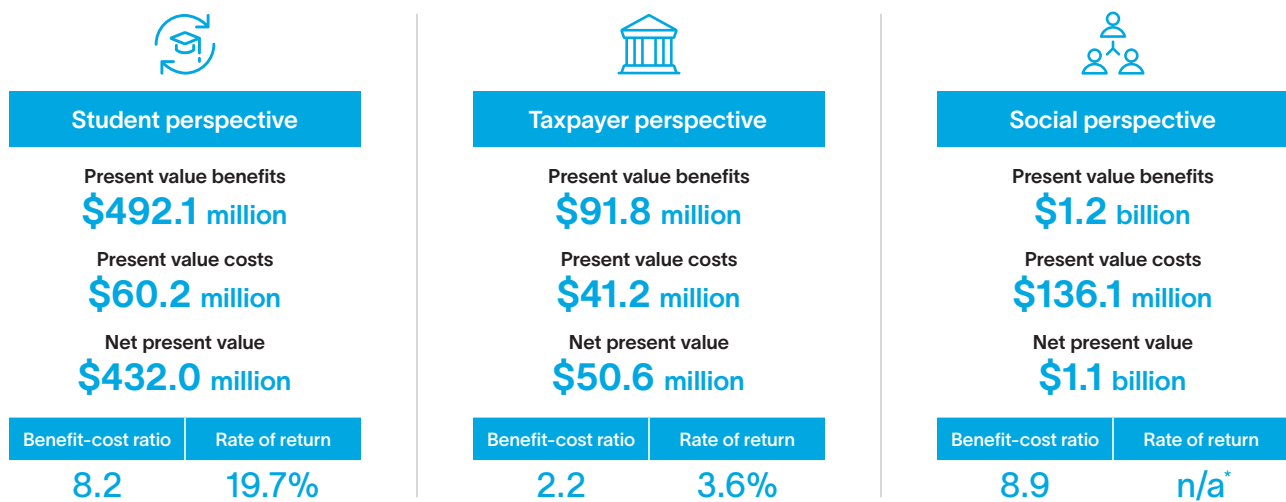
Truman is proud of the strong relationship it has with The Boeing Company. The partnership has been significantly enhanced over the years through the significant efforts of Truman alumni, and Boeing executive, Chuck Woods ('86). For more than twelve years, the Boeing TRU-Leaders: Future Leaders Academy has encouraged collaboration between Boeing Company representatives and Truman students, faculty and administration. As a program for underrepresented students, the Academy provides personal support that is essential to develop and introduce leadership skills. Students discover the importance of effective leadership in the workplace, learn the role and value of service organizations and gain exposure to civic groups. Modeled after the Boeing TRU-Leaders Academy, a new initiative—Boeing TRU-Leaders Next-Gen—was recently launched. Next-Gen aims to create a ladder of opportunity extending from the Boeing Company to primary and secondary school students in underrepresented and underserved communities.

Summary of investment analysis results

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

Truman's MAE program continues legacy of engagement with local schools.

Truman has a long tradition of preparing exceptional teachers. Truman's Master of Arts in Education (MAE) degree gives graduates more opportunity for classroom experience, a solid grounding in their discipline and the liberal arts, additional time to focus on learning how to teach and a more competitive degree when entering the workforce. Each summer, MAE students earn course credit working with seasoned teachers in the local schools. In the summer of 2022, 27 students worked in the Kirksville public elementary and middle schools, planning instruction and teaching with the help of mentors. Dr. John Jones, department chair, and Dr. Jill Arnold ('98), Assistant Professor of Education, provide daily classroom support as well. Many Truman students then stay in the local schools for their teaching internships and beyond. Currently, more than 80 full-time teachers in the Kirksville Public Schools are Truman alumni.



* 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 Truman 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. Truman 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, Truman 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

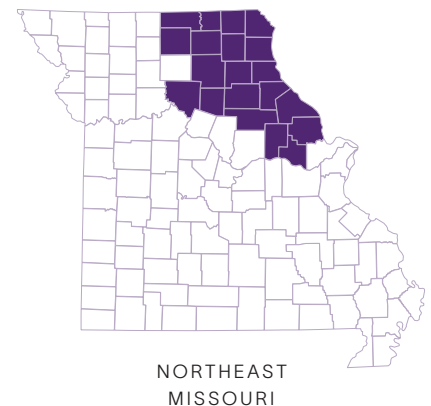
Data and assumptions used in the study are based on several sources, including the FY 2020–21 academic and financial reports from Truman, the university's alumni records matched to Lightcast Alumni Outcomes database, industry and employment data from the U.S. Bureau of Labor Statistics and U.S. Census 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 Truman 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 to learn more or connect with us.

The Economic Value of Truman State University on Northeast Missouri



Truman State University (Truman) 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) 2020-21.

Economic impact analysis

In FY 2020-21, Truman added **\$115.3 million** in income to the Northeast Missouri¹ economy, a value approximately equal to **1.1%** of the region's total gross regional product (GRP). Expressed in terms of jobs, Truman's impact supported **1,654 jobs**. For perspective, the activities of Truman and its students support **one out of every 88 jobs** in Northeast Missouri.

Operations spending impact

- Truman employed 684 full-time and part-time faculty and staff. Payroll amounted to \$62.3 million, much of which was spent in the region for groceries, mortgage and rent payments, dining out, and other household expenses. The university spent another \$29.9 million on day-to-day expenses related to facilities, supplies, and professional services.

¹ For the purposes of this analysis, Northeast Missouri is comprised of: Adair, Audrain, Chariton, Clark, Knox, Lewis, Lincoln, Macon, Marion, Monroe, Montgomery, Pike, Putnam, Ralls, Randolph, Schuyler, Scotland, Shelby, Sullivan, and Warren Counties.

- The net impact of the university's operations spending added **\$74.7 million** in income to the regional economy in FY 2020-21.

Visitor spending impact

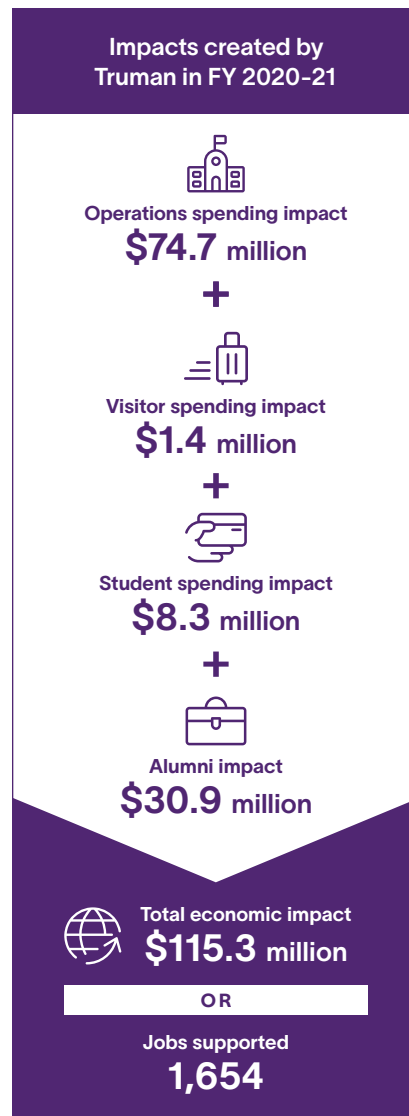
- Out-of-region visitors attracted to Northeast Missouri for activities at Truman brought new dollars to the economy through their spending at hotels, restaurants, gas stations, and other regional businesses.
- Visitor spending added approximately **\$1.4 million** in income to the Northeast Missouri economy.

Student spending impact

- Around 85% of students attending Truman originated from outside the region. Some of these students relocated to Northeast Missouri. In addition, some in-region students, referred to as retained students, would have left Northeast Missouri for other educational opportunities if not for Truman. These relocated and retained students spent money on groceries, mortgage and rent payments, and other living expenses at regional businesses.
- The expenditures of relocated and retained students in FY 2020-21 added **\$8.3 million** in income to the Northeast Missouri economy.

Alumni impact

- Over the years, students have studied at Truman and entered or re-entered the workforce with newly-acquired knowledge and skills. Today, thousands of these former students are employed in Northeast Missouri. Using Lightcast's Alumni Outcomes data, many of the Truman alumni are employed in the regional workforce in industry sectors such as Professional & Technical Services, Education, Health Care & Social Assistance, and Finance & Insurance with their top occupations being personal service managers, registered nurses.
- The net impact of Truman's former students currently employed in the regional workforce amounted to **\$30.9 million** in added income in FY 2020-21.



Investment analysis

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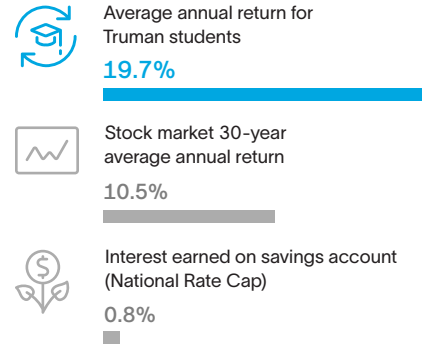
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- Taxpayers provided Truman with **\$41.2 million** of funding in FY 2020-21. In return, they will benefit from added tax revenue, stemming from students' higher lifetime earnings and increased business output, amounting to **\$78.9 million**. A reduced demand for government-funded services in Missouri will add another **\$12.9 million** in benefits to taxpayers.
- For every dollar of public money invested in Truman, taxpayers will receive **\$2.20** in return, over the course of students' working lives. The average annual rate of return for taxpayers is **3.6%**.

Social perspective




- In FY 2020-21, the people of Missouri invested **\$136.1 million** to support Truman. In turn, the Missouri economy will grow by **\$1.2 billion**, over the course of students' working lives. Society will also benefit from **\$57.1 million** of public and private sector savings.
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Students see a high rate of return for their investment in Truman



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

For every \$1...

	Students gain in lifetime earnings \$8.20
	Taxpayers gain in added tax revenue and public sector savings \$2.20
	Society gains in added income and social savings \$8.90





The Economic Value of Truman State University on Northeast Missouri



TRUMAN STATE UNIVERSITY (Truman) creates value in many ways. The university plays a key role in helping students increase their employability and achieve their individual potential. The university facilitates new research developments and draws visitors and students to the region, generating new dollars and opportunities for Northeast Missouri.¹ Truman provides students with the education, training, and skills they need to have fulfilling and prosperous careers. Furthermore, Truman is a place for students to meet new people, increase their self-confidence, and promote their overall health and well-being.

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

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NORTHEAST
MISSOURI

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¹ For the purposes of this analysis, Northeast Missouri is comprised of: Adair, Audrain, Chariton, Clark, Knox, Lewis, Lincoln, Macon, Marion, Monroe, Montgomery, Pike, Putnam, Ralls, Randolph, Schuyler, Scotland, Shelby, Sullivan, and Warren Counties.





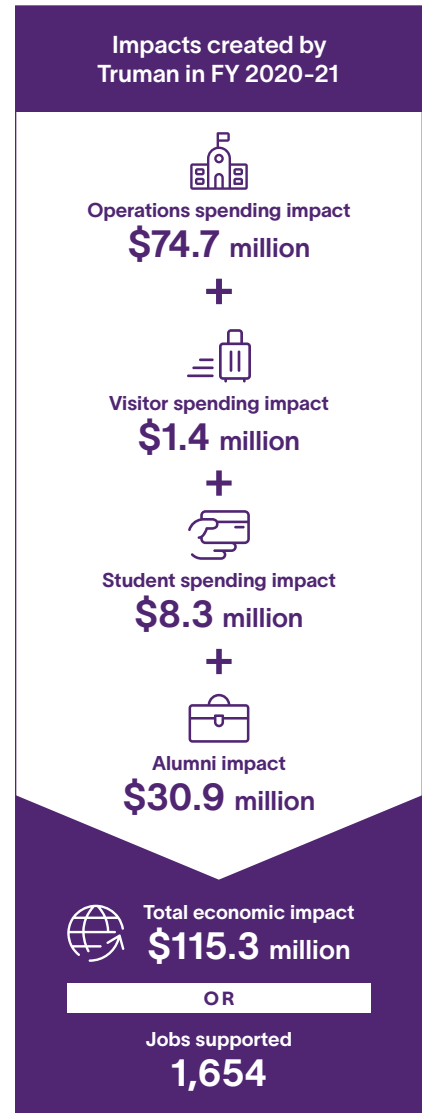
Truman promotes economic growth in Northeast Missouri through its direct expenditures and the resulting expenditures of visitors, students, and regional businesses. The university serves as an employer and buyer of goods and services for its day-to-day operations. The university's reputation and activities attract visitors and students from outside Northeast Missouri, whose expenditures benefit regional vendors. In addition, Truman is a primary source of higher education to Northeast Missouri residents and a supplier of trained workers to regional industries, enhancing overall productivity in the regional workforce.

Operations spending impact



Truman adds economic value to Northeast Missouri as an employer of regional residents and a large-scale buyer of goods and services. In FY 2020-21, the university employed 684 full-time and part-time faculty and staff, 98% of whom lived in Northeast Missouri. Total payroll at Truman was \$62.3 million, much of which was spent in the region for groceries, mortgage and rent payments, dining out, and other household expenses. In addition, the university spent \$29.9 million on day-to-day expenses related to facilities, supplies, and professional services.

Truman's day-to-day operations spending added \$74.7 million in income to the region during the analysis year. This figure represents the university's payroll, the multiplier effects generated by the in-region spending of the university and its employees, and a downward adjustment to account for funding that the university received from



regional sources. The \$74.7 million in added income is equivalent to supporting 833 jobs in the region.

Visitor spending impact



Thousands of visitors from outside the region were attracted to Truman during the analysis year to attend commencement, sports events, and other activities sponsored by the university. While in the region, visitors spent money for lodging, food, transportation, and other personal expenses. The off-campus expenditures of the university's out-of-region visitors generated a net impact of \$1.4 million in added income for the regional economy in FY 2020-21. This \$1.4 million in added income is equivalent to supporting 40 jobs.

Student spending impact



Around 85% of students attending Truman originated from outside the region in FY 2020-21, and some of these students relocated to Northeast Missouri to attend Truman. These students may not have come to the region if the university did not exist. In addition, some in-region students, referred to as retained students, would have left Northeast Missouri if not for the existence of Truman. While attending the university, these relocated and retained students spent money on groceries, accommodation, transportation, and other household expenses. This spending generated \$8.3 million in added income for the regional economy in FY 2020-21, which supported 189 jobs in Northeast Missouri.

Alumni impact



The education and training Truman provides for regional residents has the greatest impact. Since the establishment of the university, students have studied at Truman and entered the regional workforce with greater knowledge and new skills. Today, thousands of these former students are employed in Northeast Missouri. Using Lightcast's Alumni Outcomes data, many of the Truman alumni are employed in the regional workforce in industry sectors such as Professional & Technical Services, Education, Health Care & Social Assistance, and Finance & Insurance with

Rising needs for Data Science professionals drives innovation and support.

Truman recently launched a Master of Science in Data Science and Analytical Storytelling as well as a Graduate Certificate in Data Science. Seeing a growing need for data science professionals who can gather, interpret and communicate data effectively and efficiently, Shelter Insurance and their President and CEO, Randa Rawlins ('79), have provided resources to create the Shelter Insurance Data Science Scholarship to support students who are pursuing degrees in this relevant and growing field. The partnership also offers a new internship opportunity for Data Science students, under the supervision of Michael Terry ('93, '96), Director of Data Strategy and Business Analytics for Shelter Insurance.



their top occupations being personal service managers, registered nurses, chief executives, educational, guidance, and career counselors, and advisors, and general and operations managers. As a result of their education from Truman, the students receive higher earnings and increase the productivity of the businesses that employ them. In FY 2020-21, Truman alumni generated \$30.9 million in added income for the regional economy, which is equivalent to supporting 592 jobs.

Total impact

Truman added \$115.3 million in income to the Northeast Missouri economy during the analysis year, equal to the sum of the operations spending impacts, the visitor and student spending impacts, and the alumni impact.

Truman's total impact can also be expressed in terms of jobs supported. The \$115.3 million impact supported 1,654 regional jobs, using the jobs-to-sales ratios specific to each industry in the region. This means that one out of every 88 jobs in Northeast Missouri is supported by the activities of Truman and its students. In addition, the \$115.3 million, or 1,654 supported jobs, stemmed from different industry sectors. Truman's spending and alumni in the Government, Education industry sector supported 818 jobs in FY 2020-21. If the university did not exist, these impacts would not have been generated in Northeast Missouri.

One out of every 88 jobs in Northeast Missouri is supported by the activities of Truman and its students.

Truman impacts by industry (jobs supported)



Partnership with A.T. Still University enhances educational experiences for students.

Kirkville, Missouri is the birthplace of Osteopathic Medicine and home of A.T. Still University (ATSU), the world's first osteopathic medical school, which affords incredible resources to Truman students. Truman's human anatomy class gives students the opportunity to use the medical school's hands-on human cadaver lab, an experience available in fewer than 5% of undergraduate programs. The partnership continues with work opportunities for a select few Truman students as well, such as research with medical school professors. Additionally, Truman and ATSU co-host the ATSU-Truman Healthcare Academy for high school students each summer. This week-long program exposes students to a variety of health professions, including, but not limited to: osteopathic medicine, nursing, exercise science, audiology/speech pathology, athletic training, physical and occupational therapy and nutrition.



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 considers Truman as an investment from the perspectives of students, taxpayers, and society in Missouri.

Student perspective



In FY 2020-21, Truman served a total of 5,047 students, of which 4,700 were degree-seeking. 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 Truman's students in FY 2020-21 amounted to a present value of \$60.2 million, equal to \$23.8 million in out-of-pocket expenses (including future principal and interest on student loans) and \$36.4 million in forgone time and money.

In return for their investment, Truman's students will receive a stream of higher future earnings that will continue to grow throughout their working lives. For example, the average Truman bachelor's degree graduate from FY 2020-21 will see annual earnings that are \$30,800 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 \$1.4 million in higher

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



Average annual return for Truman students

19.7%



Stock market 30-year average annual return

10.5%



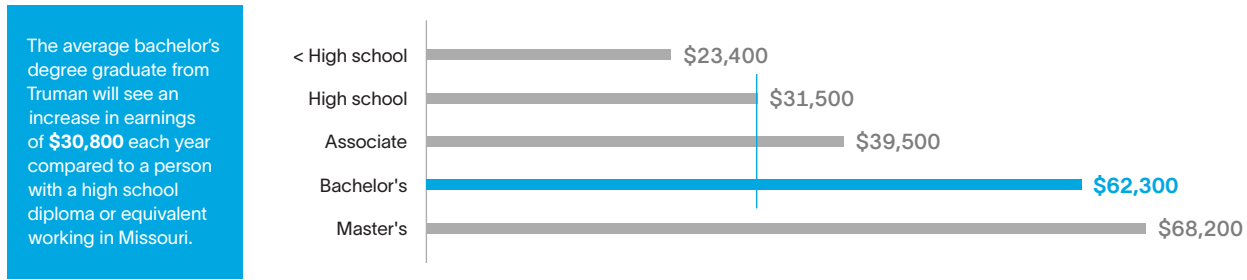
Interest earned on savings account (National Rate Cap)

0.8%

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



earnings per graduate. The present value of the cumulative higher future earnings that Truman's FY 2020-21 students will receive over their working careers is \$492.1 million.



Source: Data provided by Truman and Lightcast Alumni Outcomes.

The students' benefit-cost ratio is 8.2. In other words, for every dollar students invest in Truman in the form of out-of-pocket expenses and forgone time and money, they will receive a cumulative value of \$8.20 in higher future earnings. Annually, the students' investment in Truman has an average annual internal rate of return of 19.7%, which is impressive compared to the U.S. stock market's 30-year average rate of return of 10.5%.

Taxpayer perspective



Truman generates more in tax revenue than it takes. These benefits to taxpayers consist primarily of taxes that the state government will collect from the added revenue created in the state. As Truman 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 2020-21 students' working lives, the state government will have collected a present value of \$78.9 million in added taxes.

Benefits to taxpayers will also consist of savings generated by the improved lifestyles of Truman students and the corresponding reduced government services. Education is statistically correlated with a variety of lifestyle changes. The educations that Truman 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. Truman 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 Truman will generate \$12.9 million in savings to state taxpayers.

For every dollar of public money invested in Truman, taxpayers will receive a cumulative value of **\$2.20** over the course of the students' working lives.

Total taxpayer benefits amount to \$91.8 million, the present value sum of the added taxes and public sector savings. Taxpayer costs are \$41.2 million, equal to the amount

of state government funding Truman received in FY 2020-21. These benefits and costs yield a benefit-cost ratio of 2.2. This means that for every dollar of public money invested in Truman in FY 2020-21, taxpayers will receive a cumulative present value of \$2.20 over the course of the students' working lives. The average annual internal rate of return for taxpayers is 3.6%, which compares favorably to other long-term investments in the public and private sectors.

Social perspective

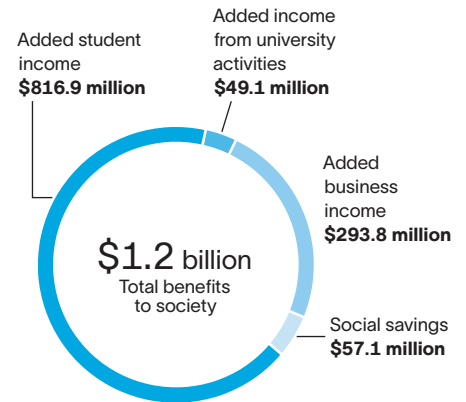


Society as a whole in Missouri benefits from the presence of Truman in two major ways. Primarily, society benefits from an increased economic base in the state. This is attributed to the added income from students' increased lifetime earnings (added student income) and increased business output (added business income), which raise economic prosperity in Missouri.

Benefits to society also consist of the savings generated by the improved lifestyles of Truman 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 Truman equal a present value of \$1.2 billion. These benefits include \$816.9 million in added student income, \$293.8 million in added business income, \$49.1 million in added income from university activities, as well as \$57.1 million in social savings related to health, crime, and income assistance in Missouri. People in Missouri invested a present value total of \$136.1 million in Truman in FY 2020-21. The cost includes all the university and student costs.

Social benefits in Missouri from Truman



Source: Lightcast impact model.

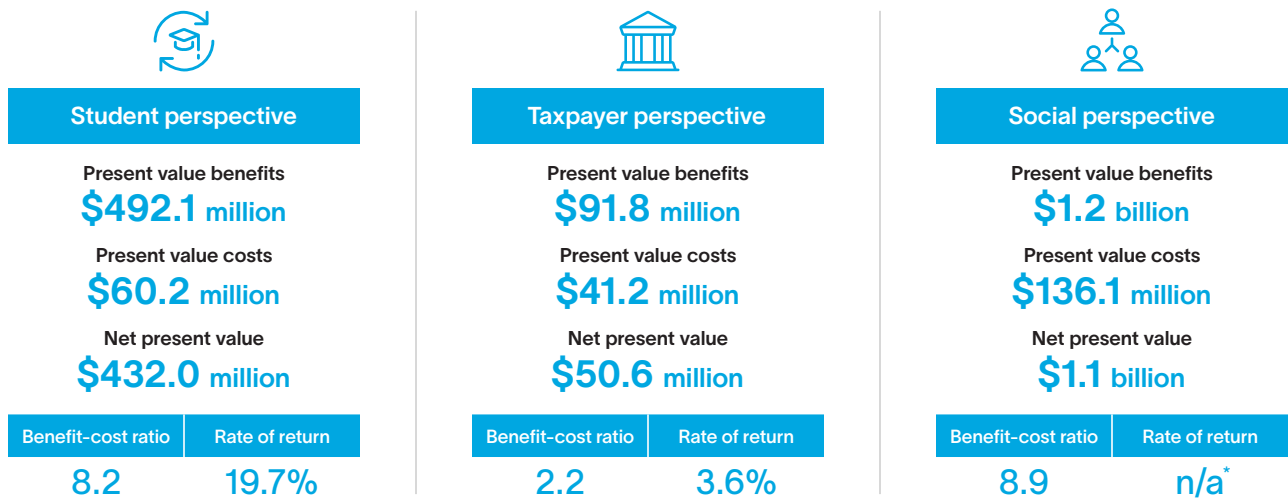
Truman's Art Gallery continues to expand horizons and spur artistic inquiry.

Truman's Art Gallery serves the university community and northeast Missouri. Free and open to the public, the gallery hosts exhibitions of faculty and student art, historical art, and regional contemporary art. Exhibitions have ranged from 5,000-year-old Egyptian pottery to renowned contemporary photography. Donations to the Friends of the Art Gallery support hosting visiting artists, borrowing and staging exhibitions, as well as providing support for the programming and educational outreach. The Schools in the Gallery program reaches about 200-400 local students each year, through either bringing them to campus or bringing artists to their schools. Beyond showing student work, the gallery also allows Truman art and museum studies students opportunities for hands-on experience in researching and curating exhibitions and the gallery collaborates with Masters of Education students each year to create curriculum to accompany shows.

The benefit-cost ratio for society is 8.9, equal to the \$1.2 billion in benefits divided by the \$136.1 million in costs. In other words, for every dollar invested in Truman, people in Missouri will receive a cumulative value of \$8.90 in benefits. The benefits of this investment will occur for as long as Truman's FY 2020-21 students remain employed in the state workforce.

Summary of investment analysis results

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



* 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 Truman creates value from multiple perspectives. The university benefits regional businesses by increasing consumer spending in the region and supplying a steady flow of qualified, trained workers to the workforce. Truman 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, Truman 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 2020-21 academic and financial reports from Truman, the university's alumni records matched to Lightcast Alumni Outcomes database, 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 Truman 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 to learn more or connect with us.



The Economic Value of Truman State University

About Truman

5,047
Students

684
Employees



Missouri

Economic impact analysis



Alumni impact
Impact of the increased earnings of Truman alumni and the businesses they work for

\$483 million
Added income

5,758 Jobs supported



An economic boost similar to hosting the World Series
81x

OR



Operations spending impact
Impact of annual payroll and other spending

\$67.8 million
Added income

702
Jobs supported



Enough to buy **2,020** new cars

OR



Student spending impact
Impact of the daily spending of Truman students attracted to or retained in the state

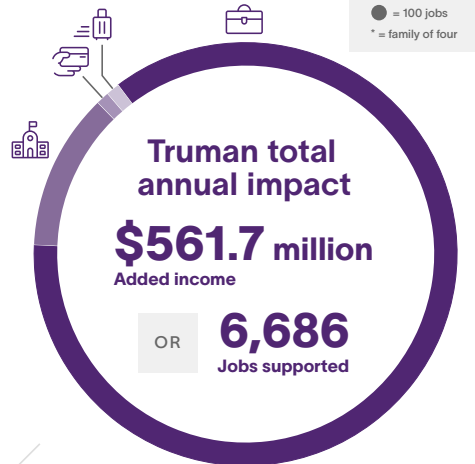
\$7.6 million
Added income



Enough to buy **609** families* a year's worth of groceries

OR

148 Jobs supported



Visitor spending impact
Impact of visitors attracted to Missouri for events hosted by Truman

\$3.3 million
Added income

OR

77 Jobs supported

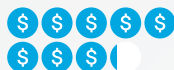
Investment analysis



For every \$1...



Students gain **\$8.20** in lifetime earnings



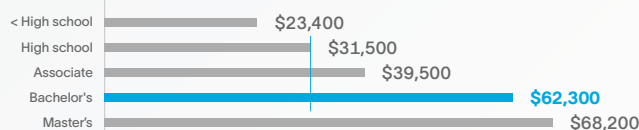
Taxpayers gain **\$2.20** in added tax revenue and public sector savings



Society gains **\$8.90** in added income and social savings



The average bachelor's degree graduate from Truman will see an increase in earnings of **\$30,800** each year compared to someone with a high school diploma working in Missouri.



Sources: Lightcast Economic Impact Study; <http://www.chicagotribune.com/news/opinion/commentary/ct-world-series-host-cities-economy-20151103-story.html>; <http://www.usatoday.com/story/money/cars/2015/05/04/new-car-transaction-price-3-kbb-kelley-blue-book/26690191/>; <http://www.usatoday.com/story/news/nation/2013/05/01/grocery-costs-for-family/2104165/>

For more information on Truman State University's

Economic Impact Study

visit: economicimpact.truman.edu/



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