

# **The Economic Impact of the Southern Illinois University System**

*September 2024*



**Southern Illinois University System**

ONE SYSTEM | MANY LOCATIONS | STATEWIDE IMPACT

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## Executive Summary

This study provides a view of the university's effects on the state and region. The data used in this study are from fiscal year 2023. The key findings are as follows.

### *Economic Impacts*

SIU substantially impacted the region's and the state's economies while fulfilling its mission of developing human capital, growing ideas and transmitting knowledge to the public. In 2023, the university's operations, student expenditures, visitor spending and alumni income had an economic impact of **\$4.0 billion**, and the university's economic activity helped support **45,075 jobs** in Illinois.

SIU's economic impact reflects day-to-day economic activity on campus and also related activity off-campus, each with its economic impact, as follows:

- SIU's general operation as a university creates an economic impact of **\$2 billion** and supports **16,646 jobs** in Illinois.
- Expenditures by SIU students off-campus contribute to the economy with an economic impact of **\$293 million**, supporting **2,714 jobs**.
- SIU visitors' off-campus spending is another significant economic stimulus with an economic impact of **\$17 million**, supporting **132 jobs**.
- The present value return on investment in education for a graduate from the SIU System ranges between **\$2.74 dollars** to **\$8.61 dollars**, depending on the major and the program.
- State of Illinois taxpayer's return on investment in SIU is **\$1.81** in tax revenue for each dollar of tax the state spends on SIU.
- SIU alumni who work in Illinois leverage their college degrees to achieve higher incomes for themselves and, as a result, support more business activity. Income gains from these alumni have an economic impact of **\$1.7 billion**.

### *Return on Investment*

Students and the State of Illinois invest in SIU, and each receives significant benefits from that investment.

- SIU students receive, on average, a strong return on investment in their university education. The cost of attending a university includes tuition, fees, other related expenses, and interest paid on student loans, all of which are direct costs. The overall price also includes an indirect or opportunity cost of foregone income while attending university. Upon graduation, a student attending an SIU university or school, each invested dollar creates a present value return of **\$2.74 dollars** to **\$8.61 dollars**, depending on the major and the program.

- Taxpayers provide significant funding for SIU's economic activity, and in return, that activity creates new tax income from related activities – including university operations, student spending, visitor spending, and future income gains from higher education for this year's SIU graduates, yielding tax revenues equal to \$352,638,416 in present value terms, which exceeds the state tax dollars currently spent on SIU, equal to \$194,987,600. In other words, the taxpayer's return on investment in SIU is **\$1.81** in tax revenue for each dollar of tax the state spends on SIU.

## Introduction

Illinois is the fifth largest economy in the U.S., home to about 34 Fortune 500 companies. It has the most diverse economy in the nation, an economy known for its innovative ecosystem that increasingly demands a highly skilled and well-educated workforce. The state offers unparalleled access to global markets due to its top-notch transportation infrastructure and central location. Illinois' educational workforce is exceptionally educated, with 37.7 percent of individuals aged between 18 and 64 holding a bachelor's degree or higher qualification<sup>1</sup>. Numerous enterprises choose to establish themselves in Illinois, mainly to tap into the state's abundant labor pool of highly educated professionals.

This study focuses on the multifaceted ways in which the SIU System benefits the state economically, highlighting its role as a catalyst to drive the growth of the region. To do that, this report employs an IMPLAN economic impact model that quantifies the multiplier effect of economic activities, calculating the cumulative impact generated through numerous rounds of spending initiated by expenditures, new incomes or job creation within the region. The total economic impact resulting from operational, research, students, visitors and other auxiliary expenditures of SIU on the region and the state is estimated as the sum of both the initial direct spending and the subsequent ripple effects that spurred throughout the entire supply chain. The economic benefits are categorized into the following impacts: operation spending impact, student spending impact, impact of visitors' spending, and alumni impact in the region. SIU research positively impacts student learning and career prospects and spurs the development of new approaches and technologies that address the needs of the region and the quality of life. Additionally, SIU engages in community-oriented activities that help small business development, entrepreneurial activities and nurturing a skilled workforce in the region.

The study uses a wide array of data from different departments and sources covering the 2022-2023 academic and financial year and the last decade. Thus, industry and employment data were used from the Bureau of Labor Statistics and Census Bureau, operations data from SIU's fiscal year 2022-23 academic and financial reports, student demographics and statistics from the SIU Interactive Factbooks, and some survey data of visitors. The data were analyzed, and the researchers provided reasonable estimates where the collected data alone were not sufficient to estimate the impact of certain university functions.

This study examines the various ways the SIU System contributes to the state's economy, emphasizing its role as a catalyst for driving the growth of the region. This report utilizes an IMPLAN economic impact modeling technique to measure the multiplier effect of economic activities. It calculates the cumulative impact of multiple rounds of spending triggered by expenditures, new incomes or job creation within the region. Not all activities generate a quantifiable economic ripple effect. Certain activities, like volunteering as a doctor, are crucial in maintaining the community's well-being, yet they are not quantified or evaluated. The economic impact is calculated by adding up the initial direct spending and the subsequent ripple effects throughout the supply chain, including direct, indirect, and induced spending. The economic benefits are classified according to the following effects: 1) the effect of operational expenditures, 2) the influence of student expenditures, 3) the impact of visitor expenditures, and 4) alumni contribution to the region. The research conducted at SIU positively influences student learning and career opportunities. It also stimulates the creation of innovative methods and technologies that cater to the needs of the region and enhance the overall quality of life. In addition, SIU actively participates in community-oriented initiatives that contribute to the growth of small businesses, entrepreneurial endeavors and the development of a highly skilled workforce in the region.

### ***Profile of the SIU System***

SIU provides purposeful and engaging programs and resources to advance the labor force needs for the local economy while helping the region address issues related to systemic racism, economic inequality, and social determinants of health. The university serves as a crucible of knowledge, nurturing critical thinkers and problem solvers by offering access to academically excellent undergraduate, baccalaureate, non-baccalaureate, master's level and doctoral-level education. The SIU has long played a key role in supplying the state of Illinois and Missouri with the vital skilled workforce needed for its thriving industries. In an era marked by increasing income inequality and cost of living, SIU is dedicated to ensuring that affordable, high-quality education is accessible to all, with particular emphasis on reaching underserved populations who have historically faced barriers to higher education. SIU is among the nation's most diverse university systems, with a current student population from about 96 countries and about 36 percent from minority groups in terms of educational, social and economic backgrounds.

While SIU impacts student life in a variety of ways, the economic impact of the university extends far beyond the classroom, creating a ripple effect that benefits not only students and faculty but also the surrounding region and the nation as a whole. The university operations, construction, capital projects and research directly affect the state economy, while student spending, visitor spending and alumni activities support the region's industry. Another quantifiable impact of the university includes its effect on tax receipts and a reduction in public sector costs generated by its students across the state. The role of the SIU System in shaping the region's economic landscape cannot be overemphasized.

SIU embraces a unique tradition of access and opportunity, inclusive excellence, innovation in research and creativity and outstanding teaching focused on nurturing student success. As a nationally ranked public research university and regional economic catalyst, it creates and exchanges knowledge to shape future leaders, improve communities and transform lives. The university produces quality graduates with creative and critical thinking skills, emotional intelligence, ethical reasoning, teamwork experience, fluent communication and compelling technological skills. Graduates demonstrate professional integrity, respect social constructions, and engage diverse individuals and groups.

## Economic Impact Analysis

### *Operations Spending Impact*

Operational spending from the SIU System contributes significantly to the economic activities of the Southern Illinois region and statewide economy.

Table 1 presents the SIU System’s expenditures on all of its campuses, including research, hospital, construction, operation and maintenance of plants, purchases for supplies and services and all other spending. Also included in *all other expenditures* are expenses associated with grants and scholarships. Many students receive grants and scholarships that exceed the cost of tuition and fees. The universities then dispense this residual financial aid to students, who spend it on living expenses. Some of this spending takes place in the state and is, therefore, an injection of new money into the state economy that would not have happened if the university did not exist. Operational expenditures, both in and out of the state, from the SIU System totaled over **\$952 million** in the 2023 fiscal year. The university purchases supplies and services, and many vendors are in Illinois. These expenditures create a ripple effect that generates more jobs and higher wages throughout the economy. Using the average spending of the universities by geography, we created the in-state and out-of-state expenditures of the system’s operations to estimate economic impacts in this report. In some cases, payments made to local businesses through third-party financial agents were corrected for and attributed to the local economy.

A significant portion of SIU’s expenditures goes toward payroll for faculty and staff employed by the institution. In fiscal year 2023, payroll expenditures were nearly **\$380 million** of the total annual spending. This annual payroll expenditure occurred within the Southern Illinois region. Spending on operation and maintenance equaled **\$41 million**; other spending included construction spending, instruction, research, fellowship, and scholarships, totaling **\$220 million**.

<https://siusystem.edu/about/economic-impact.shtml>

**Table 1: Combined Campus Expenses of the SIU System**

<b>Expense category</b>	<b>In-state expenditures (thousands)</b>	<b>Out-of-state expenditures (thousands)</b>	<b>Total expenditures (thousands)</b>
Employee salaries, wages & benefits	\$379,485,980	\$990,352	\$380,476,333
Operation & maintenance of plant	\$31,632,126	\$9,190,056	\$40,822,182
All other expenditures	\$113,757,943	\$106,225,160	\$219,982,803
<b>Total</b>	<b>\$524,876,049</b>	<b>\$116,405,568</b>	<b>\$641,281,318</b>

SIU has many functional units. For expenditures on its three campuses – SIU Carbondale, Edwardsville, and SIU School of Medicine— we group university spending by function and show the results in table 2. Scholarships and fellowships comprised 9.5% or about **\$90 million** of the total expense, and expenses on instruction comprised another 23% or **\$217 million**. Research spending totaled **\$40,640,360 million** or 4.3%, while public services— which include the normal cost of pensions and fringe benefits provided by the State of Illinois in the form of payments on behalf of the university -- form about 6.5% or **\$62 million**. All other expenditures, including instructional, academic, and student support, constitute about 89%, 26% and 6% of SIU System campus expenses, respectively.

**Table 2: SIU Operational Expenses by Function**

<b>Category</b>	<b>Amount</b>
Instruction	\$216,592,606
Research	\$40,640,360
Public Services	\$62,023,159
Academic Support	\$251,682,434
Student Support	\$60,966,128
Instructional Support	\$76,007,812
Operations & Maintenance	\$105,422,728
Independent Operations	\$48,557,800
Scholarships & Fellowships	\$90,241,358
<b>Total:</b>	<b>\$952,134,385</b>

SIU operations and spending created economic activity within Illinois and the St. Louis Metropolitan Area through direct, indirect and induced routes or channels. Table 3 shows the effects on the state of Illinois economy, including increases in jobs, income and total economic output.

**Table 3: SIU Economic Impacts from University Operations**

<b>Channel</b>	<b>Jobs</b>	<b>Income</b>	<b>Output</b>
Direct	11,694	\$619,779,594	\$963,382,733
Indirect	1,510	\$108,247,505	\$365,168,248
Induced	3,442	\$227,779,512	\$671,246,614
<b>Total</b>	<b>16,646</b>	<b>\$1,045,169,360</b>	<b>\$1,999,797,596</b>

***Student Spending Impact***

SIU student spending off-campus generates significant economic impacts, as shown in table 4.

**Table 4: SIU Economic Impacts from Student Spending Off-Campus**

<b>Channel</b>	<b>Jobs</b>	<b>Income</b>	<b>Output</b>
Direct	2,020	\$92,731,725	\$151,846,186
Indirect	187	\$14,873,488	\$42,554,063
Induced	508	\$33,541,483	\$98,763,170
<b>Total</b>	<b>2,714</b>	<b>\$141,146,695</b>	<b>\$293,163,420</b>

These impacts generate more than **2,714** jobs, create more than **\$141 million** in income and **\$293 million** in economic output, and are in addition to the impacts of SIU’s operations.

***Visitor Spending Impact***

SIU visitors spend money in the community, generating economic impacts, as shown in table 5.

**Table 5: SIU Economic Impacts from Visitor Spending**

<b>Channel</b>	<b>Jobs</b>	<b>Income</b>	<b>Output</b>
Direct	95	\$3,690,749	\$9,221,750
Indirect	13	\$1,132,992	\$3,280,585
Induced	23	\$1,513,303	\$4,454,967
<b>Total</b>	<b>132</b>	<b>\$6,337,044</b>	<b>\$16,957,300</b>

***Alumni Impact***

Alumni from SIU Carbondale, SIU Edwardsville and the SIU School of Medicine have a combined present value of increased income of over **\$1.6 billion**, owing to their degrees. Students who attend any of the colleges within the SIU System, complete their education, and pursue a career have improved human capital and opportunities to earn more income. With **181,290** SIU System alumni living in Illinois, and assuming that the alumni participate in the labor force at a rate that



declines linearly toward zero over 40 years, the combined present value of the graduates' increased incomes due to education from SIU System is **\$1,662,944,307**.

### ***Total Economic Impact***

Combining the economic impacts of university operations, student off-campus spending, visitor spending, and alumni incomes, table 6 shows SIU's total economic impact.

**Table 6: SIU's Total Economic Impact**

<b>Source</b>	<b>Impact</b>
Operations	\$1,999,797,596
Student Spend	\$293,163,420
Visitor Spend	\$16,957,300
Alumni Impact	\$1,662,944,307
<b>Total</b>	<b>\$3,972,862,623</b>

### **Public Impacts**

The SIU System's public impacts include community benefits that are not measured in dollars but have human and social value. SIU service to the community has public impacts today, and university research will have public impacts and benefits in the future, as the research helps to shape future opportunities.

#### ***Service***

Each SIU System university and school—SIU Carbondale, SIU Edwardsville, and SIU School of Medicine—engages the community in meaningful ways and provides valuable services. There are too many services to list here, so our [separate reports on each campus describe them](#).

#### ***Research***

The SIU System's Research Centers are engaged in innovative, collaborative projects both on and off campus. They provide educational offerings and opportunities to collaborate with our faculty and students on customized projects.

The system's universities and schools—SIU Carbondale, SIU Edwardsville, and SIU School of Medicine—have unique research centers that benefit their communities in special ways. There are several centers that you can learn more about [in our various SIU economic impact reports](#).

## **SIU Economic and Public Impact Study Team**

This report was prepared for the SIU System President's Office by a research team of SIU faculty and staff led by Jebaraj Asirvatham, Ph.D. in Agricultural and Applied Economics, and Scott Gilbert, Ph.D. in Economics, with the help of economics graduate assistants Stephen Troveh and Haya Akram Khan. For questions, please get in touch with the study authors at jebaraj@siu.edu or gilberts@siu.edu. The following SIU colleagues also contributed to this report.

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## Appendix: Economic and Public Impact Methodology

### ***Economic Impacts***

#### *Direct Impacts*

Economic activities that provide services (such as a college education) or goods (such as cars) benefit the consumers of those services and goods. For example, students benefit from going to college, and drivers benefit from getting around with their vehicles. These consumer benefits are reflected in the dollars consumers pay for their goods and services, and on the other side of the transaction, the resulting revenue dollars are another measure of consumer benefit or economic impact of an activity. These revenue dollars are a measure of the direct benefit of an economic activity.

Direct impacts sometimes go beyond the revenues associated with some activity. For example, part of the cost of a college education may be funded by the government, in which case a college or university's total expenditure on providing education is a measure of the benefit of that education to students, as it covers both the revenue and government funding of education services. In these situations, total expenditure or outlay is a good measure of direct impacts.

#### *Indirect Impacts*

To provide a college education, a car, or some other consumable service or good, the businesses and producers use resources that include inputs or intermediate goods. A college uses resources like paper and electricity, and car manufacturers use metal. The revenue or expenditures associated with these intermediate goods indirectly affect a given activity, such as a university's provision of education services during a year. Indirect impacts are another benefit of economic activity, increasing the total economic impact.

Economic analysis is useful for measuring indirect impacts, via the Nobel prize-winning research of Wassily Leontief on input-output economics. In Leontief's input-output economic model<sup>1</sup>, outputs in a given industry are paired with inputs or intermediate from other industries. With industry data available from the U.S. and state governments, economists apply the Leontief model to measure the indirect effects of economic activity,<sup>2</sup> typically using statistical apps like IMPLAN<sup>3</sup> (used in the present study) or RIMS.

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<sup>1</sup> Leontief wrote and contributed to a series of writings about input-output economics, including the following seminal book which he edited: *Input-Output Economics, Second Edition* published by Oxford University Press in 1986.

<sup>2</sup> For more on the sorts of U.S. government data associated with input-output modelling, see the U.S. Bureau of Economic Analysis online -- including the article: "Improved Estimates of the Industry Economic Accounts: Results of the 2018 Comprehensive Update", in *SCB Survey of Current Business*, Volume 98, Number 12.

<sup>3</sup> IMPLAN is commercial software provided by the IMPLAN company, and is an economic input output modeling application that comes with relevant economic data obtained from government sources and elsewhere. For more on IMPLAN see [www.implan.com](http://www.implan.com) online.

Apps like IMPLAN are also useful for adjusting the core or basic Leontief input-output model because economic activity is often regional and relies on some intermediate goods produced elsewhere. For example, a school may get its paper from a supplier in another state. Using regional data that tracks the location where goods are made, IMPLAN adjusts for out-of-region inputs when computing the regional impact of an activity like education at a university.

#### *Induced Impacts*

For a given economic activity, the people who work to provide that activity receive income and use it to buy consumer goods and services. The dollar value of these additional goods and services is called an induced effect, increasing the total economic impact. Apps like IMPLAN compute direct, indirect, and induced effects, the sum of which is the total impact.

#### *Student Spending and Visitor Impacts*

For a college or university with a student population that includes those living near campus who have traveled from outside the area to attend college, those students' off-campus spending contributes to the local economy with a total economic impact computable via apps like IMPLAN. Similarly, non-student visitors to events on campus create their computable economic impact, and both impacts contribute positively to the local economy, above and beyond the total economic impacts of university expenditure.

#### *Tax Revenue Impacts*

For a region where economic activity occurs, tax revenue generated by the activity positively impacts the local and state governments that rely on tax revenue to serve the public. Tax revenue comes from transactions linked to total economic impact. Apps like IMPLAN compute tax revenue impacts by including data on tax rates in the economic analysis.

#### *Impact Adjustment: Accounting for Competing Opportunities*

In application to the economic activity associated with a particular university's provision of education, research, and creative works, some who benefit from it may find those opportunities provided by another college or university as a substitute. With substitute or competing opportunities sometimes available, it is helpful to reduce or discount the dollar values of economic loss to get an adjusted dollar value that reflects the benefits from a university's operation that are unique to that university. This study adjusts economic impacts via a 10 percent discount or reduction in dollar values, similar to the adjustment in the recent economic impact study of the University of Illinois System.<sup>4</sup>

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<sup>4</sup> See the following report, available from the University of Illinois System online: *Analysis of the Economic Impact and Return on Investment of Education: The Economic Value of the University of Illinois System* (June 2022). This report, prepared by the company EMSI - Burning Glass, is very similar methodologically to following one prepared

## *Alumni Impacts*

A college education provides many benefits, including an increase in a person’s knowledge and valuable training for future work, also called human capital. An increase in human capital offers opportunities to earn more money in the workplace, and that increased income has a positive economic impact. By tracking the number of graduates or alumni from a specific college or university, the human capital impact for those living in a given region includes all of their income increases, and their total economic impact is computable via apps like IMPLAN.

Alumni impacts are a positive result of a university’s operation. To identify the impact of the university on a student’s human capital, in addition to the human capital gained before going to college, it is essential to measure the income *increases* associated with going to college. These increases reflect the difference between a college graduate’s earnings and those of people who have not completed college. Also, for a specific college or university, some of its alumni may have had the opportunity to get a comparable college degree elsewhere. For those students, there is no unique or specific increase in human capital from attending a particular college. To adjust for these college opportunities<sup>5</sup>, the following formula is helpful and applied in the present study:

*Alumni impact = (number of working alumni) x (average income increase) x factor.*

“Factor” is a number in the form of a product AxB, with A the proportion of all working alumni who did not have a significant opportunity to complete their college degree within the region during their college years, and B is a multiplier that reflects indirect and induced effects<sup>6</sup>.

To compute alumni impacts for a specific college or university, using the formula just discussed, the economist gets data on the number of working alumni and the average income increase<sup>7</sup> from a college education. The economist also makes a suitable assumption about the proportion (denoted “A” earlier) of all working alumni who did not have a significant opportunity to complete their college degree within the region under study.

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by the company Lightcast: *The Economic Value of Iowa’s Regent Universities* (January 2023), reflecting a recent merger between the companies. For these past studies, the companies apply their own in-house input-output application of input-output economic modelling. The present study of Southern Illinois University uses the IMPLAN app for input-output modelling, as do recent studies by Tripp Umbach: *Economic and Community Impacts of the University of Missouri System* (January 2022) and ICF: *The Impact of California State University* (2020), and a past study by Subhash Sharma, Aboubacar Diaby and Kyle Harst: *The Economic Impact of Southern Illinois University Carbondale in the Region and the State of Illinois* (August 2011).

<sup>5</sup> Such opportunities are also called economic substitutes.

<sup>6</sup> Such multipliers are available from Apps like IMPLAN.

<sup>7</sup> To measure current and future increases in income associated with completing a bachelor’s degree from a particular university, current pay levels are reported via the U.S. Bureau of Labor Statistics’ College Scorecard online, and a regional measure of pay for those without a college degree is available from the U.S. Bureau of Labor Statistics and online job market and recruiting websites – including ZipRecruiter, Glassdoor, and Indeed. To compute inflation-related increases in future income, forecasts of wage inflation are available from the following publication and its supplements: *Annual Report of the Board of Trustees of the Federal Old-Age and Survivors Insurance and Federal Disability Insurance Trust Funds*.

### *Student Return on Investment*

College students and their families invest in college education. Part of this investment is the cost of attending college, which includes the spending and any interest paid on student loans. Another cost is the student's time and the income they could have earned with that time if they had not attended college but instead joined the workforce full-time. These costs allow the student to invest in their human capital and gain access to the labor market for college-educated workers with a higher average income. The income gains throughout a person's work life are the rewards of investing in college, and the present dollar value of those future gains is the return on investment in college. By comparing the total cost of attending college to the present value of income gains, prospective college students and their families can gauge the dollar return on investment in a college education.

To compute students' return on investment for a specific college or university, the relevant inputs are data on the university's average cost of attendance<sup>8</sup>, the amount of interest typically paid on student loans<sup>9</sup>, the income available to workers in the region without a college degree, the additional expected income from attending the university, the market discount rate<sup>10</sup> for computing the present value of future expected income, and the number of post-college years during which alumni work<sup>11</sup>.

### *Taxpayer Return on Investment*

Taxpayers pay taxes to a state government that, in turn, provides essential funding for the operation of a college or university. In essence, taxpayers fund economic activity that generates current and future tax revenues from college graduates' elevated incomes and enhanced business activity. The present value of the added current and future tax revenue is a return on taxpayers' investment in a university.

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<sup>8</sup> Average annual cost of attendance, for attending a specific U.S. college or university, is available from the U.S. Department of Education online via their College Scorecard program, and via their Institute of Education Sciences' IPEDS Data Feedback Reports.

<sup>9</sup> The median total debt after graduation, for students graduating from a specific U.S. college or university, is available from the U.S. Department of Education online via their College Scorecard program. Also, interest rates on federal student loans are available from the U.S. Department of Education online via their Federal Student Aid website. Most student loans are repaid within ten years or so, and the dollar amount of interest for a ten-year loan is a function of the amount to be repaid and the interest rate.

<sup>10</sup> In the market for student loans, the interest rate represents the discount rate that lenders associate with their investment of funds in college education, and is also a relevant discount rate for students when valuing future income associated with going to college. Data on federal student loan interest rates is available from the U.S. Department of Education's Federal Student Aid information set: from this source a current market interest rate for student loans is 5.5 percent.

<sup>11</sup> The worklife expectancy, measured by the number of additional years of expected time in the U.S. labor force for college graduates, is about 40 years, as in the following study: "The Markov Model of Labor Force Activity 2012-17: Extended Tables of Central Tendency, Shape, Percentile Points, and Bootstrap Standard Errors", by Gary R. Skoog, James E. Ciecka, and Kurt V. Krueger, in *Journal of Forensic Economics*, Volume 28, Number 1, year 2019.

To compute taxpayers' return on investment associated with a university's operation, relevant inputs include the dollar amount of taxpayer support for the university,<sup>12</sup> the current tax revenues generated by that support<sup>13</sup>, and the income taxes associated with the additional future income and business activity associated with alumni work and spending after college<sup>14</sup>.

### *Public Impact*

A college or university provides education that enriches college students, while expenditures by a university and its students contribute dollars to the local or regional economy. These dollars and those generated by visitor spending measure a university's economic impact. A university also provides a monetary return on investment to its students and to taxpayers who, via government spending, invest their money in the university. Other positive impacts of a university's operations include benefits to society that are not measurable in dollars but hold social or public value. These public impacts<sup>15</sup> arise when a university's research and service to the community improves or enhances the quality of life of people outside the university.

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<sup>1</sup> <https://fred.stlouisfed.org/series/GCT1502IL>

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<sup>12</sup> For the Southern Illinois University System, the total dollars of taxpayer spending – also called state appropriation – is information available online at [www.siusystem.edu](http://www.siusystem.edu) via the Annual Report of the Board of Trustees, Southern Illinois University. More information on SIU System campuses is available via the SIUC Chancellors Report and the

<sup>13</sup> Apps like IMPLAN compute the amount of state and local tax dollars generated from specific economic activities – including the general operations of a university, spending in the local community by students that attend the university but are from outside the region, and visitor spending.

<sup>14</sup> To compute these additional future tax revenues, for alumnis' increased income the relevant income tax rate in Illinois is 4.95 percent, information on tax rates are available from the Illinois Department of Revenue online. See earlier discussion (Alumni Return on Investment) about computing income increases themselves. For business activity and tax generated by those future income increases, apps like IMPLAN are useful.

<sup>15</sup> Public impacts are distinct from economic impacts, and include benefits from an economic activity that are qualitative and lack a direct quantitative measurement. Public impacts are also called social impacts – as in the following economic impact study prepared by Harvard University in year 2022: *Harvard in Massachusetts: Facts and Impact*, or community impacts, as in the following study prepared by the company Tripp Umbach: *Economic and Community Impacts of the University of Missouri System* (January 2022).