

The Economic Value of Western Kentucky University to the Bowling Green Service Area





The Bowling Green Service Area, Kentucky

Western Kentucky University (WKU) 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) 2022-23.

Economic impact analysis

In FY 2022-23, WKU added **\$528.4 million** in income to the Bowling Green Service Area¹ economy, a value approximately equal to **4.3%** of the region's total gross regional product (GRP). Expressed in terms of jobs, WKU's impact supported **9,404 jobs**. For perspective, the activities of WKU and its students support **one out of every 17 jobs** in the Bowling Green Service Area.

Operations spending impact

- WKU employed 2,501 full-time and part-time faculty and staff. Payroll amounted to \$135.4 million, much of which was spent in the region for groceries, mortgage and rent payments, dining out, and other household expenses. The university
- 1 For the purposes of this analysis, the Bowling Green Service Area is comprised of Allen, Barren, Butler, Edmonson, Logan, Simpson, and Warren Counties.

spent another \$138.6 million on its day-to-day and construction expenses related to facilities, supplies, and professional services.²

The net impact of the university's operations spending added **\$160.4 million** in income to the regional economy in FY 2022-23.

Research spending impact

- Research activities at WKU impact the regional economy by employing people and making purchases for equipment, supplies, and services. They also facilitate new knowledge creation in the Bowling Green Service Area. In FY 2022-23, WKU spent \$4.3 million on payroll and \$3.7 million on other expenses³ to support research activities.
- WKU's research spending generated \$6.4 million in added income for the Bowling Green Service Area economy in FY 2022-23.

Visitor spending impact

- Tens of thousands of out-of-region visitors attracted to the Bowling Green Service Area for activities at WKU brought new dollars to the economy through their spending at hotels, restaurants, gas stations, and other regional businesses.
- Visitor spending added approximately \$3.6 million in income to the Bowling Green Service Area economy.

Student spending impact

- Around 60% of students attending WKU originated from outside the region. Some of these students relocated to the Bowling Green Service Area. In addition, some in-region students, referred to as retained students, would have left the Bowling Green Service Area for other educational opportunities if not for WKU. 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 2022-23 added \$29.8 million in income to the Bowling Green Service Area economy.

Volunteerism impact

- The work of WKU's student and employee volunteers allows businesses and organizations to grow, increasing their output and impacting the economy at large. Using the value per volunteer hour for Kentucky, the work of WKU student and employee volunteers is equivalent to \$11.2 million in earnings.
- In terms of actual impact to the regional economy, WKU student and employee volunteers generated an impact of **\$6.6 million** in added income in FY 2022-23.

Impacts created by WKU in FY 2022-23



Operations spending impact

\$160.4 million





Research spending impact

\$6.4 million





Visitor spending impact

\$3.6 million



Student spending impact

\$29.8 million





Volunteerism impact

\$6.6 million



Alumni impact \$321.6 million



Total economic impact \$528.4 million

OR

Jobs supported

9,404



² Research employees and their payroll as well as non-pay expenses for research are excluded from this impact as they are measured in the following impact.

³ Excludes indirect costs because indirect costs are not necessarily spent during the analysis year.

Alumni impact

- Over the years, students have studied at WKU and entered or re-entered the workforce with newly acquired knowledge and skills. Today, thousands of these former students are employed in the Bowling Green Service Area.
- The net impact of WKU's former students currently employed in the regional workforce amounted to \$321.6 million in added income in FY 2022-23.

Investment analysis

Student perspective

- WKU's FY 2022-23 students paid a present value of \$103.8 million to cover the cost of tuition, fees, supplies, and interest on student loans. They also forwent a value of \$142.5 million in time and money had they been working instead of attending college.
- In return for their investment, students will receive a cumulative present value of \$951.3 million in increased earnings over their working lives. This translates to a return of \$3.90 in higher future earnings for every dollar students invest in their education. Students' average annual rate of return is 14.7%.

Taxpayer perspective

- Taxpayers provided WKU with \$119.3 million of funding in FY 2022-23. In return, they will benefit from added tax revenue, stemming from students' higher lifetime earnings and increased business output, amounting to \$206.5 million. A reduced demand for government-funded services in Kentucky will add another \$51.5 million in benefits to taxpayers.
- Total taxpayer benefits amount to \$258.0 million, the present value sum of the added tax revenue and public sector savings. For every dollar of public money invested in WKU, taxpayers will receive \$2.20 in return over the course of students' working lives. The average annual rate of return for taxpayers is 5.1%.

Social perspective

- In FY 2022-23, Kentucky invested \$452.5 million to support WKU. In turn, the Kentucky economy will grow by \$2.5 billion, over the course of students' working lives. Society will also benefit from \$210.3 million of public and private sector savings.
- For every dollar invested in WKU in FY 2022-23, people in Kentucky will receive \$5.90 in return, for as long as WKU's FY 2022-23 students remain active in the state workforce.

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



Average annual return for WKU students

14.7%



Stock market 30-vear average annual return

10.1%



Interest earned on savings account (national deposit rate)

0.5%

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

For every \$1...



Students gain in lifetime earnings

\$3.90



Taxpayers gain in added tax revenue and public sector savings

\$2.20



Society gains in added income and social savings

\$5.90

