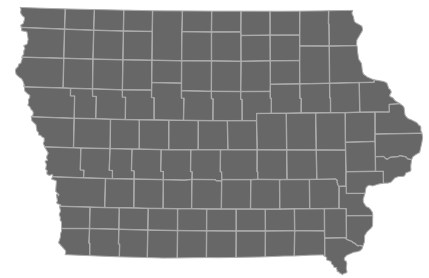


# The Economic Value of Iowa State University of Science and Technology



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Iowa State University of Science and Technology (ISU), as part of fulfilling its land-grant university mission of education, research, and Extension and Outreach for the state of Iowa, 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) 2021-22.

## Economic impact analysis

In FY 2021-22, ISU added **\$5 billion** in income to the Iowa economy, a value approximately equal to **2.4%** of the state's total gross state product (GSP). Expressed in terms of jobs, ISU's impact supported **57,142 jobs**. For perspective, the activities of ISU and its students support **one out of every 36 jobs** in Iowa.

### Operations spending impact

- ISU employed 12,624 full-time and part-time faculty and staff (including graduate assistants and student employees but excluding research employees). Payroll amounted to \$640.5 million<sup>1</sup> (excluding payroll from research employees), much

<sup>1</sup> Includes royalty payments to inventors related to ISU who still live in Iowa.

of which was spent in the state for groceries, mortgage and rent payments, dining out, and other household expenses. The university spent another \$296.5 million on day-to-day expenses related to facilities, supplies, and professional services (excluding construction and research expenditures).

- The net impact of the university's operations spending added **\$751.2 million** in income to the state economy in FY 2021-22.

### Construction spending impact

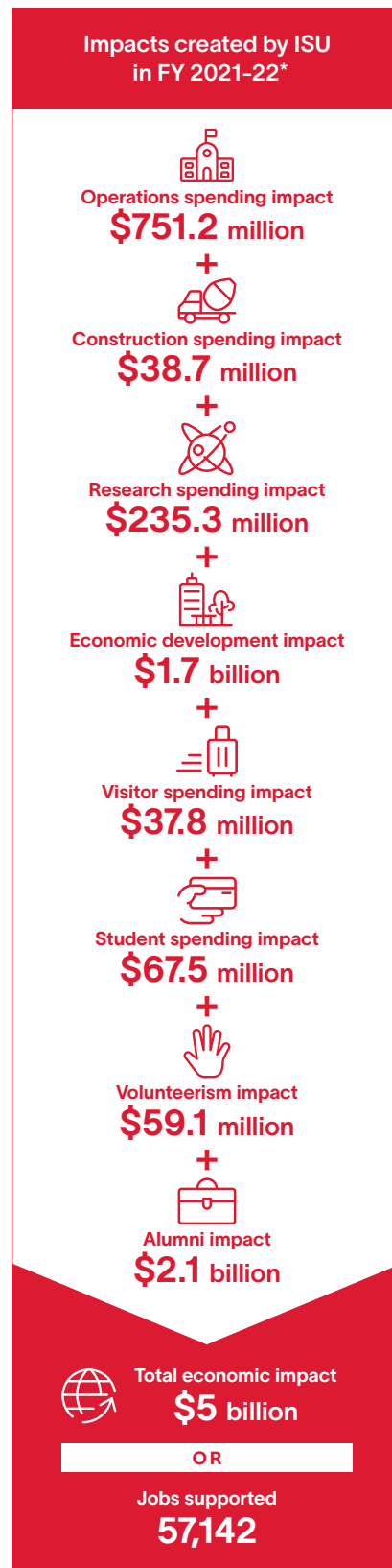
- ISU invests in construction each year to maintain its facilities, create additional capacities, and meet its growing educational demands, generating a short-term infusion of spending and jobs in the state economy.
- The net impact of ISU's construction spending in FY 2021-22 was **\$38.7 million** in added income for Iowa.

### Research spending impact

- Research activities at ISU are closely integrated with student education and delivery of science-based Extension and Outreach. They also impact the state economy by employing people and making purchases for equipment, supplies, and services. They also facilitate new knowledge creation in Iowa through inventions, patent applications, and licenses. In FY 2020-21, ISU spent \$116.3 million on payroll and \$175.4 million on other expenses<sup>2</sup> to support research activities.
- ISU's research spending generated **\$235.3 million** in added income for the Iowa economy. Note that at the time of this study, FY 2021-22 research expenditure data were being verified, so FY 2020-21 research expenditure data were used as the reference. Actual FY 2021-22 research awards are equal to or higher than FY 2020-21.

### Value of Extension and Outreach

- ISU Extension and Outreach strengthens communities and their local economies by enhancing leadership structures, broadening engagement, teaching best practices, and providing hands-on assistance. Across the state, ISU has 100 extension offices and specialists on and off campus. In FY 2021-22, ISU Extension and Outreach delivered over 800,000 educational contacts.
- In FY 2021-22, ISU Extension and Outreach helped **2,756 companies** receive certification to conduct business and assisted **256 organizations** across the state. In addition, ISU Extension and Outreach helped **16,785 Iowa farmers** obtain the certification needed to apply pesticides and manure safely. With that said, even though the quantitative impact of these activities is not measured, the value that Extension and Outreach provides on a daily basis for state and local communities is significant and should be acknowledged.



\* This table does not include the positive impacts of ISU Extension and Outreach activities.

<sup>2</sup> Excludes indirect costs because indirect costs are not necessarily spent during the analysis year.

### Economic development impact

- ISU creates an exceptional environment that fosters innovation and entrepreneurship, evidenced by the number of start-up and spin-off companies created as a result of the university and companies that have grown in the state with the support of ISU.
- In FY 2021-22, ISU's start-up and spin-off companies generated **\$1.7 billion** in added income for the Iowa economy.<sup>3</sup> This impact includes the positive effect ISU's Small Business Development Center and businesses assisted through the Center for Industrial Research and Service (CIRAS) have on Iowa.

### Visitor spending impact

- Out-of-state visitors attracted to Iowa for activities at ISU brought new dollars to the economy through their spending at hotels, restaurants, gas stations, and other state businesses.
- Visitor spending added approximately **\$37.8 million** in income to the Iowa economy.

### Student spending impact

- Around 44% of students attending ISU originated from outside the state. Some of these students relocated to Iowa. In addition, some in-state students, referred to as retained students, would have left Iowa for other educational opportunities if not for ISU. 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 2021-22 added **\$67.5 million** in income to the Iowa economy.

### Volunteerism impact

- The work of ISU's student, employee, and ISU-coordinated community volunteers allows businesses and organizations to grow, increasing their output and impacting the economy at large. Using the value per volunteer hour for Iowa,<sup>4</sup> the work of ISU student, employee, and ISU-coordinated community volunteers is equivalent to \$30.5 million in earnings.
- In terms of actual impact to the regional economy, ISU student, employee, and ISU-coordinated community volunteers generated an impact of **\$59.1 million** in added income in FY 2021-22.<sup>5</sup>
- Included in the hours above are the volunteer hours of ISU Extension and Outreach, which coordinates two large volunteer programs that benefit the state—the 4-H program and the Master Gardener program. Master Gardener volunteers

<sup>3</sup> To maintain an acceptable level of data reliability, this impact is limited to those companies that were created or supported by ISU after FY 2011-12 and are still active in Iowa in FY 2021-22. It is therefore conservative.

<sup>4</sup> Value per volunteer hour by state was provided by Independent Sector (see [https://independentsector.org/resource/vovt\\_details/](https://independentsector.org/resource/vovt_details/)).

<sup>5</sup> The impact of volunteerism is grossly undercounted because the number of volunteer hours was self-reported to ISU and only includes a small sample of ISU student and employee volunteers.

provide value by answering homeowner yard and garden questions, conducting community beautification projects, and growing fresh fruits and vegetables for local food pantries. Iowa 4-H volunteers serve as caring adults who create safe environments and provide meaningful, hands-on learning experiences for youth to develop life skills through club meetings, project learning, service projects, and community showcases. In FY 2021-22, 8,729 Master Gardeners and 4-H adults volunteers recorded 324,914 volunteer hours in Iowa.

### Alumni impact

- Over the years, students have studied at ISU and entered or re-entered the workforce with newly-acquired knowledge and skills. Today, tens of thousands of these former students are employed in Iowa.
- The net impact of ISU's former students currently employed in the state workforce amounted to **\$2.1 billion** in added income in FY 2021-22.

## Investment analysis

### Student perspective

- ISU's FY 2021-22 students paid a present value of **\$375.7 million** to cover the cost of tuition, fees, supplies, and interest on student loans. They also forwent **\$185.8 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 **\$2.8 billion** in increased earnings over their working lives. This translates to a return of **\$5.10** in higher future earnings for every dollar students invest in their education. Students' average annual rate of return is **14.6%**.

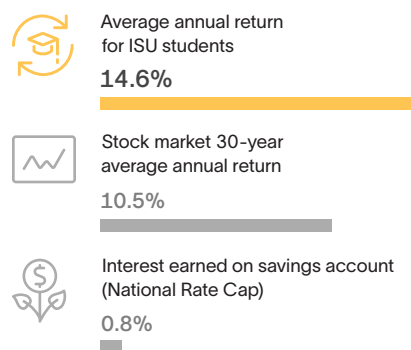
### Taxpayer perspective

- Taxpayers provided ISU with **\$298.4 million** of state funding in FY 2021-22. In return, they will benefit from added tax revenue stemming from students' higher lifetime earnings and increased business output, amounting to **\$484.2 million**. A reduced demand for government-funded services in Iowa will add another **\$79.7 million** in benefits to taxpayers.
- For every dollar of public money invested in ISU, taxpayers will receive **\$1.90** in return, over the course of students' working lives. The average annual rate of return for taxpayers is **3.3%**.

### Social perspective

- In FY 2021-22, people in Iowa invested **\$1.6 billion** to support ISU. In turn, the Iowa economy will grow by **\$5.7 billion**, over the course of students' working lives. Society will also benefit from **\$227.2 million** of public and private sector savings.
- For every dollar invested in ISU in FY 2021-22, people in Iowa will receive **\$3.80** in return, for as long as ISU's FY 2021-22 students remain active in the state workforce.

### Students see a high rate of return for their investment in ISU



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

