

# Analysis of the Economic Impact and Return on Investment of Education

## The Public Universities of Ohio

The Inter-University Council of Ohio's (IUC)<sup>1</sup> public universities create 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.



Ohio

### Economic impact analysis

In FY 2021-22, the public universities of Ohio added **\$68.9 billion** in income to the Ohio economy, a value approximately equal to **8.8%** of the state's total gross state product (GSP). Expressed in terms of jobs, the universities' impact supported **866,782 jobs**. For perspective, the activities of the universities and their students support **one out of every eight jobs** in Ohio.

### Operations spending impact

- The universities employed 70,188 full-time and part-time faculty and staff (excluding clinical and research employees). Payroll amounted to \$3.7 billion (excluding payroll from clinical and research employees), much of which was spent in the state for groceries, mortgage and rent payments, dining out, and other household

<sup>1</sup> The Inter-University Council of Ohio consists of the following 14 public universities in Ohio: Bowling Green State University, Central State University, Cleveland State University, Kent State University, Miami University, Northeast Ohio Medical University, The Ohio State University, Ohio University, Shawnee State University, University of Akron, University of Cincinnati, University of Toledo, Wright State University, and Youngstown State University.



expenses. The universities spent another \$2 billion on day-to-day expenses related to facilities, supplies, and professional services (excluding clinical and research expenditures).

- The net impact of the universities' operations spending added **\$4.1 billion** in income to the state economy in FY 2021-22.

### Construction spending impact

- The universities invest in construction each year to maintain facilities, create additional capacities, and meet growing educational demands, generating a short-term infusion of spending and jobs in the state economy.
- The net impact of the universities' construction spending in FY 2021-22 was **\$598 million** in added income for Ohio.

### Clinical spending impact

- The clinics and medical centers related to and affiliated with the universities provide hands-on learning and research environments for students and employ hundreds of workers.
- In FY 2021-22, the clinics and medical centers spent \$5.9 billion on clinical operations. These expenditures added a net impact of **\$6.9 billion** in added income to the state.

### Research spending impact

- Research activities at the universities impact the state economy by employing people and making purchases for equipment, supplies, and services. They also facilitate new knowledge creation in Ohio through inventions, patent applications, and licenses. In FY 2021-22, the universities spent \$858.4 million on payroll and \$1.1 billion on other expenses to support research activities.<sup>2</sup>
- The universities' research spending generated **\$1.9 billion** in added income for the Ohio economy in FY 2021-22.<sup>3</sup>

### Start-up and spin-off company impact

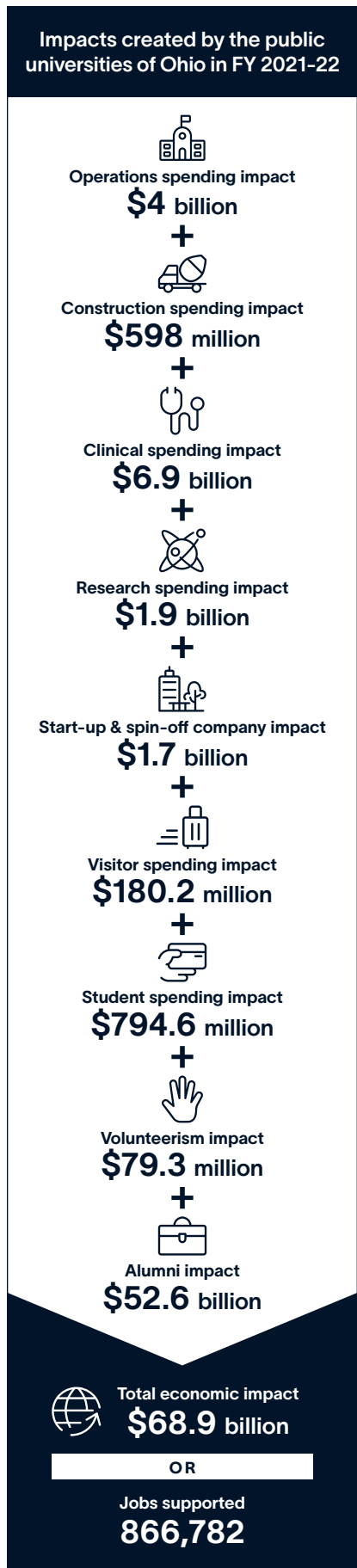
- The universities create an exceptional environment that fosters innovation and entrepreneurship, evidenced by the number of start-up and spin-off companies created as a result of the universities.
- In FY 2021-22, the universities' start-up and spin-off companies generated **\$1.7 billion** in added income for the Ohio economy.

### Visitor spending impact

- Out-of-state visitors attracted to Ohio for activities at the universities brought new dollars to the economy through their spending at hotels, restaurants, gas stations, and other state businesses.

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

<sup>3</sup> It should be noted that at the time of the analysis, some of the universities did not have FY 2021-22 research data available. FY 2020-21 research data was used as a proxy in those cases.



- Visitor spending added approximately **\$180.2 million** in income to the Ohio economy.

### Student spending impact

- Around 23% of students attending the universities originated from outside the state. Some of these students relocated to Ohio. In addition, some in-state students, referred to as retained students, would have left Ohio for other educational opportunities if not for the universities. 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 **\$794.6 million** in income to the Ohio economy. Of the \$794.6 million in impact to the Ohio economy, \$549.2 million was generated from out-of-state students.

### Volunteerism impact

- The work of the universities' student and employee volunteers allow businesses and organizations to grow, increasing their output and impacting the economy at large. The work of university student and employee volunteers is equivalent to \$33.7 million in earnings.<sup>4</sup>
- In terms of actual impact to the regional economy, volunteers generated an impact of **\$79.3 million** in added income in FY 2021-22.

### Alumni impact

- Over the years, students have studied at the universities and entered or re-entered the workforce with newly-acquired knowledge and skills. Today, hundreds of thousands of these former students are employed in Ohio.
- The net impact of former students currently employed in the state workforce amounted to **\$52.6 billion** in added income in FY 2021-22.



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

## Investment analysis

### Student perspective

- The universities' FY 2021-22 students paid a present value of **\$3.5 billion** to cover the cost of tuition, fees, supplies, and interest on student loans. They also forwent **\$2.6 billion** 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 **\$34.2 billion** in increased earnings over their working lives. This translates to a return of **\$5.60** in higher future earnings for every dollar students invest in their education. Students' average annual rate of return is **16.2%**.

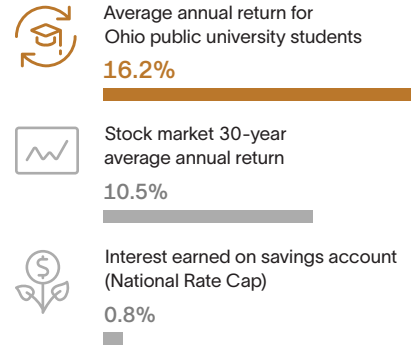
### Taxpayer perspective

- Taxpayers provided the universities with **\$2.2 billion** of 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 **\$8.4 billion**. A reduced demand for government-funded services in Ohio will add another **\$1.6 billion** in benefits to taxpayers.
- For every dollar of public money invested in the universities, taxpayers will receive **\$4.60** in return, over the course of students' working lives. The average annual rate of return for taxpayers is **12.7%**.

### Social perspective

- In FY 2021-22, Ohio invested **\$18 billion** to support the universities. In turn, the Ohio economy will grow by **\$127.1 billion**, over the course of students' working lives. Society will also benefit from **\$5.8 billion** of public and private sector savings.
- For every dollar invested in the universities in FY 2021-22, people in Ohio will receive **\$7.40** in return, for as long as the universities' FY 2021-22 students remain active in the state workforce.

### Students see a high rate of return for their investment in the public universities of Ohio



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

### For every \$1...

