# **Executive summary**

The University of Akron (UA) creates value in a variety of ways. The university improves higher education delivery throughout the region and helps students increase their employability and potential. The university facilitates new research and company developments as well as draws visitors to the region, generating new dollars and opportunities for the UA Service Area.

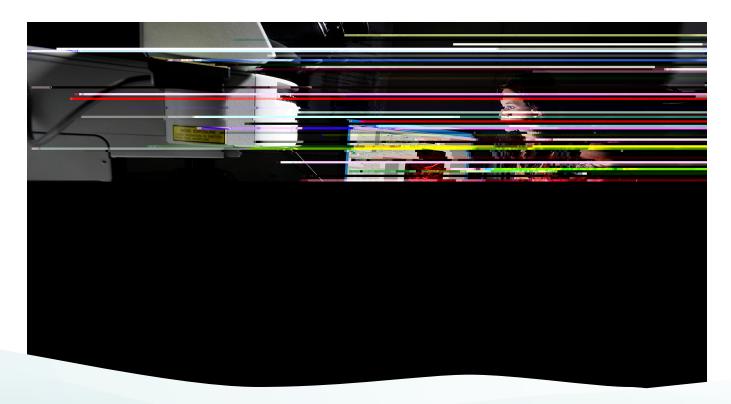
The value of UA influences both the lives of students and the regional economy. The university serves a range of industries in the UA Service Area, supports regional businesses, and benefits society as a whole in Ohio from an expanded economy and improved quality of life. The benefits created by UA even extend to the state and local government through increased tax revenues and public sector savings.

This study investigates the economic impacts created by UA on the business community and the benefits that the university generates in return for the investments made by its key stakeholder groups—students, taxpayers, and society. The region the university serves is defined as the UA

Service Area and consists of Cuyahoga, Medina, Portage, Stark, Summit, and Wayne Counties in Ohio. The following two analyses are presented:



All results reflect student and financial data for fiscal year (FY) 2016-17. Impacts on the regional business community are reported under the economic impact analysis. Results are measured in terms of added income. The returns on investment to students, taxpayers, and society are reported under the investment analysis. Both analyses are described more fully in the following sections.



# Economic impact analysis

income for the regional economy, this is inclusive of the \$21 million in payroll. This added income is equivalent to supporting 641 jobs.

#### START-UP AND SPIN-OFF COMPANY IMPACT

UA creates an exceptional environment that fosters innovation and entrepreneurship, evidenced by the number of UA start-up and spin-off companies created in the region. Start-up companies, created specifically to license and commercialize UA technology or knowledge, have a strong and clearly defined link to UA. Spin-off companies, created and fostered through university programs or faculty and alumni, have a clear but weaker link to UA.

In FY 2016-17, UA start-up and spin off companies added \$15.7 million in income to the UA Service Area economy, which is equivalent to supporting 102 jobs. Of this added income, \$15.5 million was due to the start-up companies, with the remainder due to spin-off companies.

#### STUDENT SPENDING IMPACT

Around 28% of students attending UA originated from outside the region in FY 2016-17, and some of these students relocated to the UA Service Area to attend UA. These students would not have come to the region if the university did not exist. In addition, a number of in-region students would have left the region for other educational opportunities if not for the existence of UA. While attending the university, these relocated and retained students spent \$106.9 million for everyday needs such as groceries, rent accommodation, and transportation. A significant

# Investment analysis

Investment analysis is the process of evaluating total costs and measuring these against total benefits to determine whether or not a proposed venture will be profitable. If benefits outweigh costs, then the investment is worthwhile and considered profitable.

UA received a total of \$453.7 million in FY 2016-17. Tuition and fees comprised 42% of total revenue, student aid from government sources comprised another 38%, and all other revenue comprised the remaining 19%. This study considers UA as an investment from the perspectives of those who provided these revenues - students, taxpayers, and society. The backdrop for the analysis is the entire Ohio economy.

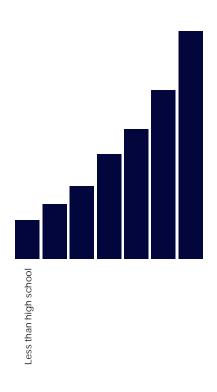
#### STUDENT PERSPECTIVE

In FY 2016-17, UA served 26,222 credit students and 189 non-credit students. In order to attend college, 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 that they would have otherwise earned had they been working instead of attending college. The total investment made by UA's students for FY 2016-17 amounted to a present value of \$395.8 million, equal to \$208 million in out-of-pocket expenses (including future principal and interest paid on student loans) plus \$187.8 million in forgone time and money.

In return for their investment, UA's students will receive a stream of higher future earnings that will continue to grow through their working lives. As shown in Figure 2, mean earnings levels at the midpoint of the average-aged worker's career increase as people achieve higher levels of education. For example, the average bachelor's degree completer from UA will see an increase in earnings of \$28,700 each year compared to someone with a high school diploma or equivalent working in Ohio. Over a working lifetime, this increase in earnings amounts to an undiscounted value of approximately \$1,262,800 in higher earnings.

The present value of the higher future earnings that UA's students will receive over their working careers is \$1.9 billion. Dividing this value by the \$395.8 million in present value student costs yields a benefit-cost ratio of 4.8. In other words, for every \$1 students invest in UA in the form of out-of-pocket expenses and forgone time and money, they receive a cumulative of \$4.80 in higher future earnings. The average annual rate of return for students is 13.8%. This is an impressive return, especially when compared to the 30-year average 10.1% return to the U.S. stock market (Figure 3).

FIGURE 2: Higher earnings by education level at career midpoint in Ohio



#### TAXPAYER PERSPECTIVE

UA generates more in tax revenue than it takes. These benefits to taxpayers consist primarily of taxes that the state and local government will collect from the added revenue created in the state. As UA students earn more, they will make higher tax payments. Employers will also make higher tax payments as they increase their output and purchase more supplies and services. By the end of the FY 2016-17 students' working careers, the state and local government will have collected a present value of \$934.4 million in added taxes.

Benefits to taxpayers consist of the savings generated by the improved lifestyles of students and the proportionally reduced government expenditures. Education is statistically correlated with a variety of lifestyle changes that generate taxpayer savings across three main categories: 1) health, 2) crime, and 3) unemployment. Improved health habits lower the students' demand for national health care services. Students are also less likely to commit crimes, so the demand for law enforcement and criminal justice services is reduced (study references are available in the main report). Students are also more employable, so the demand for welfare and unemployment benefits, such as earnings assistance and welfare benefits, is reduced. For a list of study references to these statistical benefits, please contact

costs, and reduced criminal justice system expenditures. Unemployment savings include the reduced employer contributions towards unemployment claims. For a

### Conclusion

The results of this study demonstrate that UA creates value from multiple perspectives. The university benefits local businesses by increasing consumer spending in the region and supplying a steady flow of qualified, trained workers into the workforce. It enriches the lives of students by raising their lifetime earnings and helping them achieve their individual potential. It benefits state and local taxpayers through increased tax receipts across the state and a reduced demand for government-supported social services. Finally, it benefits society as a whole in Ohio by creating a more prosperous economy and generating a variety of savings through the improved lifestyles of students. This is a conservative study in part because, other than research spending, it does not take into account the many benefits generated through the various research activities at the university.

#### **ABOUT THE STUDY**

Data and assumptions used in the study are based on several sources, including the FY 2016-17 academic and financial reports from UA, industry and employment data from the U.S. Bureau of Labor Statistics and U.S. Census Bureau, outputs of Emsi'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 investment effectiveness and economic impact. For a full description of the data and approach used in the study, please contact UA for a copy of the main report.

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