



UNIVERSITY OF
CENTRAL FLORIDA

Executive Summary

FEBRUARY 2024



The Economic Value of the University of Central Florida



THE UNIVERSITY OF CENTRAL FLORIDA (UCF) is a public research university invested in unleashing the potential within every individual, enriching the human experience through inclusion, discovery, and innovation, and propelling broad-based prosperity for the many communities it serves. UCF provides exceptional educational opportunities in various formats, including online and in-person. With more than 220 degree programs in 13 colleges, UCF's flexible learning models make it easy for students to explore interests, participate in internship experiences, and gain skills.

The university adds human capital trained by award-winning faculty to the state workforce. In its short history, UCF and its people have achieved recognition for innovation and providing access to top-tier degrees. For the sixth consecutive year, UCF has been recognized as a Top 20 "Most Innovative" University, and in 2024, a Top Public University and a Top 10 Best Online Bachelor's Programs in the nation, according to U.S. News & World Report. UCF provides students with the education, training, and skills they need to have fulfilling and prosperous careers.

From research in treating the debilitating disease osteoporosis to finding water on the moon to understand better where astronauts can live and work safely, UCF fosters creative thinking and innovation to solve humanity's biggest problems. The university produces groundbreaking research, foraging pathways for success that extend beyond the university, unleashing positive ripple effects benefiting the local community, the state, the nation, and the world.



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UCF influences both the lives of its students and the state economy. The university supports a variety of industries in Florida, serves state businesses, and benefits society as a whole in Florida from an expanded economy and improved quality of life. Additionally, the benefits created by UCF extend to the state and local government through increased tax revenues and public sector savings.

This study measures the economic impacts created by UCF on the business community and the benefits the university generates in return for the investments made by its key stakeholder groups—students, taxpayers, and society. The following two analyses are presented:

 **Economic impact analysis**

 **Investment analysis**

All results reflect employee, student, and financial data, provided by the university, for fiscal year (FY) 2021-22. Impacts on the Florida economy are reported under the economic impact analysis and are measured in terms of added income. The returns on investment to students, taxpayers, and society in Florida are reported under the investment analysis.



Economic impact analysis



UCF promotes economic growth in Florida through its direct expenditures and the resulting expenditures of visitors, students, and state businesses. The university serves as an employer and buyer of goods and services for its day-to-day, construction, and research operations. Numerous start-up companies have formed as a result of programs and knowledge at UCF. The university's reputation and activities attract visitors and students from outside Florida, whose expenditures benefit state vendors. In addition, UCF is a primary source of higher education to Florida residents and a supplier of trained workers to state industries, enhancing overall productivity in the state workforce.

Operations spending impact



UCF adds economic value to Florida as an employer of state residents and a large-scale buyer of goods and services. In FY 2021-22, payroll at UCF was \$629.3 million, much of which was spent in the state for groceries, mortgage and rent payments, dining out, and other household expenses. In addition, the university spent \$511.7 million on day-to-day expenses related to facilities, supplies, and professional services.¹

UCF's day-to-day operations spending added \$851.8 million in income to the state during the analysis year. This figure represents the university's payroll, the multiplier effects generated by the in-state spending of the university and its employees, and a downward adjustment to account for funding that the university received from state sources. The \$851.8 million in added income is equivalent to supporting 9,311 jobs in the state.

Construction spending impact



UCF invests in capital projects each year to maintain its facilities, create additional capacities, and meet its growing educational demands. While the amount varies from year to year, these quick infusions of income and jobs have a substantial impact on the state economy. In FY 2021-22, UCF's construction spending generated \$11.1 million in added income, which is equivalent to supporting 177 jobs.

Research spending impact



Research activities impact the economy by employing people and requiring the purchase of equipment and other supplies and services. Over the last



¹ Research employees and their payroll as well as non-pay expenses for research and construction are excluded from this impact as they are measured in the following impacts.



four years, UCF received 452 invention disclosures, filed 267 new patent applications, and produced 115 licenses.

In FY 2021-22, UCF spent \$129.2 million on payroll to support research activities. This, along with \$56.5 million in other research spending,² created a net total of \$238.2 million in added income for the state economy. This added income is equivalent to supporting 2,861 jobs.

UCF research developments

Fiscal year	Inventions	Patents	Licenses
2018-19	126	75	28
2019-20	117	69	28
2020-21	111	56	27
2021-22	98	67	32
Total	452	267	115

Source: UCF.

Start-up company impact



UCF creates an exceptional environment that fosters innovation and entrepreneurship evidenced by the number of start-up companies directly related to UCF in the state. Start-up companies are created specifically to license and commercialize UCF technology or knowledge. In FY 2021-22, UCF start-up companies added \$34.2 million in income to the Florida economy, which is equivalent to supporting 198 jobs.

Visitor spending impact



Tens of thousands of visitors from outside the state were attracted to UCF during the analysis year to attend commencement, sports events, and other activities sponsored by the university. While in the state, visitors spent money for lodging, food, transportation, and other personal expenses. The off-campus expenditures of the university's out-of-state visitors generated a net impact of \$11.4 million in added income for the state economy in FY 2021-22. This \$11.4 million in added income is equivalent to supporting 147 jobs.

Student spending impact



Around 9% of students attending UCF originated from outside the state in FY 2021-22, and most of these students relocated to Florida to attend UCF. These students may not have come to the state if the university did not exist. In addition, some in-state students, referred to as retained students, would have left Florida if not for the existence of UCF. While attending the university, these relocated and retained students spent money on groceries, accommodation, transportation, and other household

Impacts created by UCF in FY 2021-22



Operations spending impact
\$851.8 million

+



Construction spending impact
\$11.1 million

+



Research spending impact
\$238.2 million

+



Start-up company impact
\$34.2 million

+



Visitor spending impact
\$11.4 million

+



Student spending impact
\$253.0 million

+



Alumni impact
\$6.7 billion



Total economic impact
\$8.1 billion

OR

Jobs supported
91,933

² Excludes indirect costs because indirect costs are not necessarily spent during the analysis year.



expenses. This spending generated \$253.0 million in added income for the state economy in FY 2021-22, which supported 3,868 jobs in Florida.

Alumni impact



The education and training UCF provides for state residents has the greatest impact. Since the establishment of the university, students have studied at UCF and entered the state workforce with greater knowledge and new skills. Today, hundreds of thousands of former UCF students are employed in Florida.

According to Lightcast's Alumni Outcomes data, many of UCF's graduates are employed in the state workforce in industry sectors such as Professional & Technical Services; Health Care & Social Assistance; and Manufacturing, with their top occupations being chief executives, managers, software developers and software quality assurance analysts and testers, and first-line supervisors of office and administrative support workers.

As a result of their education from UCF, the students receive higher earnings and increase the productivity of the businesses that employ them. In FY 2021-22, UCF alumni generated \$6.7 billion in added income for the state economy, which is equivalent to supporting 75,371 jobs.

Total impact

UCF added \$8.1 billion in income to the Florida economy during the analysis year, equal to the sum of the operations, construction, and research spending impacts; the start-up company impact; the visitor and student spending impacts; and the alumni impact. For context, the \$8.1 billion impact is equal to approximately 0.6% of the total gross state product (GSP) of Florida. This contribution that the university provided on its own is nearly half as large as the entire Utilities industry in the state.

UCF's total impact can also be expressed in terms of jobs supported. The \$8.1 billion impact supported 91,933 state jobs, using the jobs-to-sales ratios specific to each industry in the state. In addition, the \$8.1 billion, or 91,933 supported jobs, stemmed from different industry sectors. For instance, among non-education industry sectors, the activities of UCF and its alumni in the Professional & Technical Services industry sector added \$910.7 million in income in FY 2021-22. If the university did not exist, these impacts would not have been generated in Florida.

UCF impacts by industry (added income)



UCF generates **\$8.1 billion** in total added income for Florida, equivalent to supporting **91,933 jobs**.



Investment analysis



An investment analysis evaluates the costs associated with a proposed venture against its expected benefits. The analysis presented here evaluates UCF as an investment from the perspectives of students, taxpayers, and society in Florida. As with the economic impact analysis, this analysis considers only FY 2021-22 activities.

Student perspective



In FY 2021-22, UCF served 82,426 credit and 8,670 non-credit students. In order to attend the university, the 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 they would have otherwise earned had they been working instead of attending college. The total investment made by UCF's students in FY 2021-22 amounted to a present value of \$717.8 million, equal to \$334.1 million in out-of-pocket expenses (including future principal and interest on student loans) and \$383.8 million in forgone time and money.

In return for their investment, UCF's students will receive a stream of higher future earnings that will continue to grow throughout their working lives. For example, the average UCF bachelor's degree graduate from FY 2021-22 will see annual earnings that are \$25,500 higher than a person with a high school diploma or equivalent working in Florida. Over a working lifetime, the benefits of a bachelor's degree over a high school diploma will amount to an undiscounted value of \$1.1 million in higher earnings per graduate. The present value of the cumulative higher future earnings that UCF's FY 2021-22 students will receive over their working careers is \$5.5 billion.

The students' benefit-cost ratio is 7.7. In other words, for every dollar students invest in UCF in the form of out-of-pocket expenses and forgone time and money, they will receive a cumulative value of \$7.70 in higher future earnings. Annually, the students' investment in UCF has an average annual internal rate of return of 23.4%, which is impressive compared to the U.S. stock market's 30-year average rate of return of 9.6%.

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



Average annual return for UCF students

23.4%



Stock market 30-year average annual return

9.6%

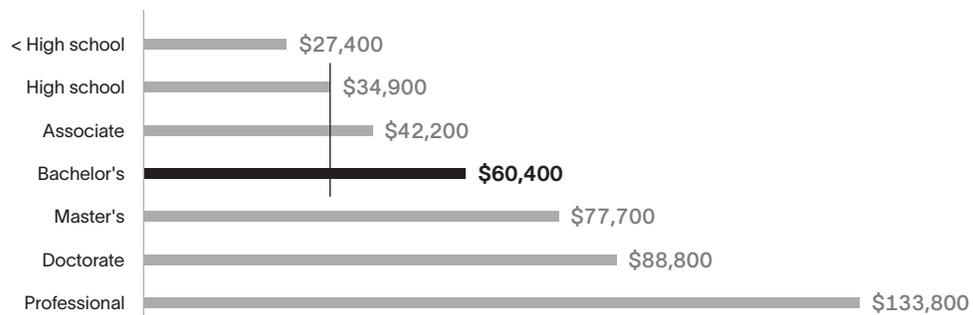


Interest earned on savings account (national deposit rate)

0.4%

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

The average bachelor's degree graduate from UCF will see an increase in earnings of **\$25,500** each year compared to a person with a high school diploma or equivalent working in Florida.



Source: Lightcast employment data and Alumni Outcomes data.



Taxpayer perspective



UCF generates more in tax revenue than it receives. 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 UCF students will earn more, they will make higher tax payments throughout their working lives. Students' employers will also make higher tax payments as they increase their output and purchases of goods and services. By the end of the FY 2021-22 students' working lives, the state and local government will have collected a present value of \$1.2 billion in added taxes.

Benefits to taxpayers will also consist of savings generated by the improved lifestyles of UCF students and the corresponding reduced government services. Education is statistically correlated with a variety of lifestyle changes. The education that UCF students receive will generate savings in three main categories: 1) health care, 2) justice system, and 3) income assistance. Improved health will lower students' demand for national health care services. In addition, costs related to the justice system will decrease. UCF students will be more employable, so their reduced demand for income assistance such as welfare and unemployment benefits will benefit taxpayers. For a list of study references, contact the university for a copy of the main report. Altogether, the present value of the benefits associated with an education from UCF will generate \$274.7 million in savings to state and local taxpayers.

Total taxpayer benefits amount to \$1.5 billion, the present value sum of the added tax revenue and public sector savings. Taxpayer costs are \$545.7 million, equal to the amount of state and local government funding UCF received in FY 2021-22. These benefits and costs yield a benefit-cost ratio of 2.7. This means that for every dollar of public money invested in UCF in FY 2021-22, taxpayers will receive a cumulative present value of \$2.70 over the course of the students' working lives. The average annual internal rate of return for taxpayers is 6.2%, which compares favorably to other long-term investments in the public sector.

For every dollar of public money invested in UCF, taxpayers will receive a cumulative value of **\$2.70** over the course of the students' working lives.

Social perspective



Society as a whole in Florida benefits from the presence of UCF in two major ways. Primarily, society benefits from an increased economic base in the state. This is attributed to the added income from students' increased lifetime earnings (added student income) and increased business output (added business income), which raise economic prosperity in Florida.

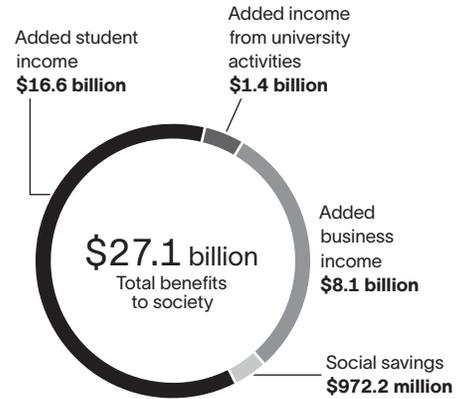
Benefits to society also consist of the savings generated by the improved lifestyles of UCF students. As discussed in the previous section, education is statistically correlated with a variety of lifestyle changes that generate social savings. Note that these costs are avoided by the consumers but are distinct from the costs avoided by the taxpayers

outlined above. Health care savings include avoided medical costs associated with smoking, alcohol dependence, obesity, drug abuse, and depression. Justice system savings include avoided costs to the government and society due to less judicial activity. Income assistance savings include reduced welfare and unemployment claims. For a list of study references, contact the university for a copy of the main report.

Altogether, the social benefits of UCF equal a present value of \$27.1 billion. These benefits include \$16.6 billion in added student income, \$8.1 billion in added business income, \$1.4 billion in added income from university activities, as well as \$972.2 million in social savings related to health, the justice system, and income assistance in Florida. People in Florida invested a present value total of \$1.8 billion in UCF in FY 2021-22. The cost includes all the university and student costs.

The benefit-cost ratio for society is 14.7, equal to the \$27.1 billion in benefits divided by the \$1.8 billion in costs. In other words, for every dollar invested in UCF, people in Florida will receive a cumulative value of \$14.70 in benefits. The benefits of this investment will occur for as long as UCF's FY 2021-22 students remain employed in the state workforce.

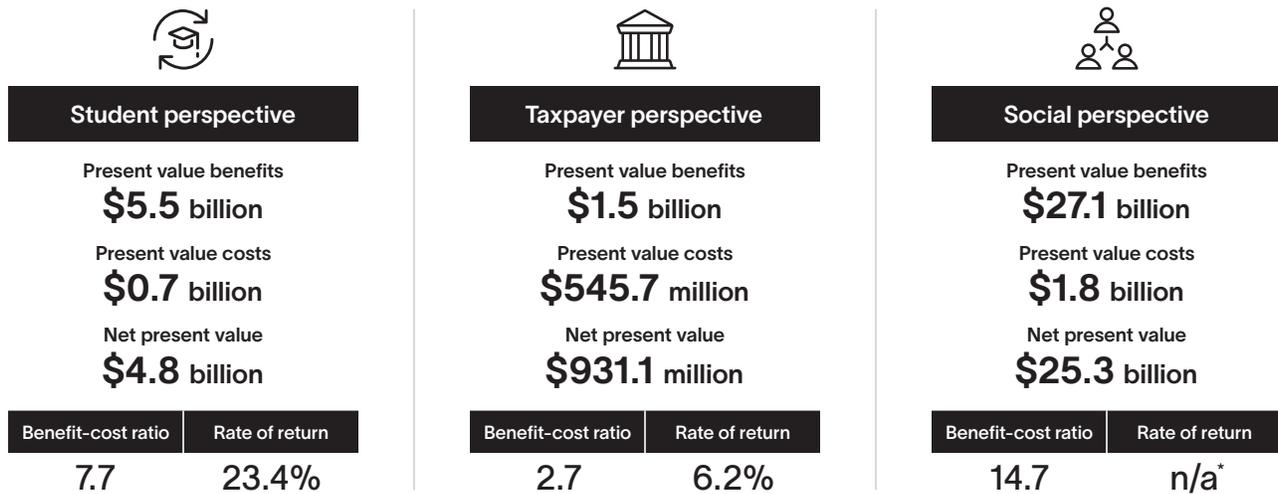
Social benefits in Florida from UCF



Source: Lightcast impact model.

Summary of investment analysis results

The results of the analysis demonstrate that UCF is a strong investment for all three major stakeholder groups—students, taxpayers, and society. As shown, students receive a great return for their investments in an education from UCF. At the same time, taxpayers' investment in UCF returns more to government budgets than it costs and creates a wide range of social benefits throughout Florida.



* The rate of return is not reported for the social perspective because the beneficiaries are not necessarily the same as the original investors.

Conclusion

The results of this study demonstrate that UCF creates value from multiple perspectives. The university benefits state businesses by increasing consumer spending in the state and supplying a steady flow of qualified, trained workers to the workforce. UCF enriches the lives of students by raising their lifetime earnings and helping them achieve their individual potential. The university benefits state and local taxpayers through increased tax receipts and a reduced demand for government-supported social services. Finally, UCF benefits society as a whole in Florida by creating a more prosperous economy and generating a variety of savings through the improved lifestyles of students.



About the study

Data and assumptions used in the study are based on several sources, including the FY 2021-22 academic and financial reports from UCF, UCF alumni records matched to Lightcast's Alumni Outcomes database, industry and employment data from the U.S. Bureau of Labor Statistics and U.S. Census Bureau, outputs of Lightcast'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 economic impact and investment effectiveness. For a full description of the data and approach used in the study, please contact the university for a copy of the main report.

The results of this study demonstrate that UCF creates value from **multiple perspectives.**



Lightcast provides colleges and universities with labor market data that help create better outcomes for students, businesses, and communities. Our data, which cover more than 99% of the U.S. workforce, are compiled from a wide variety of government sources, job postings, and online profiles and résumés. Hundreds of institutions use Lightcast to align programs with regional needs, drive enrollment, connect students with in-demand careers, track their alumni's employment outcomes, and demonstrate their institution's economic impact on their region. Visit lightcast.io/solutions/education to learn more or connect with us.

